

# 2018 FLORIDA HAZ-MAT TEAM COMPETITION RULES

Revised 1/2/18 - Changes are Highlighted



Date of Competition
Tuesday January 16, 2018 – 8:30 a.m. (Briefing)
(8:00 to 8:30 check-in)

The Plaza Resort Convention Center - Granada I 600 N. Atlantic Avenue • Daytona Beach, Florida

Awards announced at FLHMR Team Party
Wednesday Evening January 17, 2018
7:00 PM - 9:00 PM
Sloppy Joes Restaurant, Daytona Beach



#### **IMPORTANT COMPETITION DATES and TIMES**

<u>Team Registration</u> January 1, 2018 5:00 p.m.

<u>Deadline</u> www.flhazmatsymposium.org

Competition Date: Tuesday January 16, 2018

<u>Competition Location</u>: The Plaza Resort and Spa

600 North Atlantic Blvd. Daytona Beach, FL Room : Granada I

Competition Hours: Tuesday January 16, 2018

9:00 a.m. - 1400

Team Check-in: Tuesday January 16, 2018

8:00 - 8:30 a.m.

Plaza Hotel Granada I

Mandatory Tuesday January 16, 2018 - 8:30 a.m.

Rules & Safety Briefing: Plaza Hotel Granada I

All teams must be signed-in

Drawing for start times will occur during briefing

<u>Award Ceremony</u>: Wednesday Evening January 17, 2018

7:00 - 9:00 p.m.

Sloppy Joe's Restaurant

250 N Atlantic Ave #220, Daytona Beach, FL

### **REGISTER YOUR COMPETITION TEAM HERE**



#### INTRODUCTION

The fifth annual Florida Hazardous Materials Team Competition is being sponsored by the Florida State Emergency Response Commission, the Florida Hazardous Materials Symposium and various vendors to the emergency response community including:









The standards utilized for the development of this competition have been drawn from: a) the current SERC training standard, b) the Florida 160 hr HazMat Technician training program, c) Standard NFPA 472

The competition for 2018 will be comprised of seven scored and/or timed stations. Each station shall be 15 to 20 minutes in duration with travel time between stations.

|         | Station Number and Name                   | Time   | Grading                             |
|---------|---|--------|-------------------------------------|
|         | 1 A & B – Initial Assessment & Sampling   | 40 min | Scored as a team                    |
| Hazard  | 2 – Field Screening                       | 20 min | Individual scores totaled to team   |
| Haz     | 3 – Product Hazard Analysis               | 20 min | Individual scores totaled to team   |
|         | 4 – Brief the IC                          | 20 min | Individual scores totaled to team   |
|         | 5 – PPE Dress-out (PPE Applicability)     | 20 min | Individual scores totaled to team   |
| Control | <mark>6</mark> – Leak Control Situation 1 | 20 min | Team scored – Technique & Time      |
| ပိ      | 7 – Leak Control Situation 2              | 20 min | Team scored – Technique & Time      |
| Leak    | 8 – Leak Control Situation 3 (Relay)      | 20 min | Team scored – Technique & Time      |
|         | 9 – Best Game Score & Rehab               | 20 min | Not included in competition scoring |

#### **TEAM MAKE-UP**

**This is a maximum 14 teams.** An organization may field more than one team <u>unless</u> more than 12 teams register. If more than 12 teams register, then multiple teams from a single organization will not be permitted. Those organizations that registered more than one team will be contacted to reduce the number of teams.



All competition teams shall be comprised of three primary team members and one (1) optional alternate. The alternate may only be used if one of the primary team members becomes physically incapable of continuing the competition. Otherwise, mid-competition substitution with the alternate is not permitted. The alternate may travel with the team however, except for dress-out, may not coach or assist the primary members during the competition. Any coaching or assistance by the alternate member may lead to team disqualification

All team members must be a hazmat technician assigned to a hazardous materials team from a local, state or federal government agency or industry.

#### **AWARDS**

| AWARD   |
|---|
| 1 <sup>st</sup> Place                                 |
| 2 <sup>nd</sup> Place                                 |
| 3 <sup>rd</sup> Place                                 |
| Individual Best – Hazard Analysis (Stations 2, 3 & 4) |
| Individual Best Leak Control – (Stations 6,7 & 8)     |
| Best Game Score – (Station 9)                         |

#### <u>SAFETY</u>

The competition shall be managed using a Incident Action Plan (IAP) including a designated Safety Officer. As with any incident, the Safety Officer shall have the authority to suspend, alter or terminate any activity deemed to be a safety risk to participants or competition staff.

#### CHECK-IN AND PROCESSING

Check-in begins at 0800 and all teams must be checked in by no later than 0830 hrs Tuesday January 16, 2018. Check-in will occur at the Plaza Hotel Room Granada I.

Requirements at check in:

- Organization photo identification for each team member from an established private sector or governmental hazmat team.
- Any organization specific equipment brought for use as allowed for in Station 1 or 5. (See station 1 and 4 rules for special considerations)



- Any personal dress-out equipment that is allowed for the leak control stations must be enclosed in gear bags or cases capable of being secured (sealed).
- Cell phones, web enabled devices and other forms of external communication <u>are not</u> <u>permitted in the competition area including staging area located in Granada I.</u>
  Failure to follow this rule shall constitute grounds for team disqualification.

#### Check-in activities:

- Team member identities will be verified with organization issued photo I.D., registered and issued participant number.
- All agency specific detection equipment shall be evaluated for compliance with the requirements of the special consideration statements found in the station descriptions.
- Air monitoring equipment for use by teams at station 1 shall be checked in, tagged and secured. This equipment will be moved to Station 1. The equipment will be made available to all teams for use during Station 1. This equipment can be picked up only after the last competition team completes the station.
- Any personal dress-out supplies or equipment permitted for use in station 4 (except SCBA and face pieces) must be contained in a gear bag or case which is sealable with a tag. This tag must remain intact until the team reaches the dress-out area at Station 4. The seal shall be removed only by the competition staff assigned to the dress-out area.
- Filling for SCBA will be available onsite until 0830. No SCBA cylinders will be filled after the start of the safety briefing. Minimum 45 minute SCBAs are highly recommended.

#### After check-in:

- All team members will be held in the staging area in room Granada I. All registered team members must be in the staging area by no later than 0830 hrs.
- Any late team members not in the staging area by 0830 hrs shall be disqualified from participation.
- Competition pre-entry and safety briefing will be conducted starting at 0830 hrs.
- There will be a drawing for team start times. The number of start intervals will be determined based upon the number of teams registered. Two teams will be started every 20 minutes beginning at 0900 hrs. Start points will be Stations 1 and 4.
- All team members must remain in the staging area until they enter their first competition station.
- Teams are encouraged to bring snacks or drinks.
- No communication devices of any kind (voice, text, web) will be permitted in the staging or competition area. Exception: In-suit communications systems bought by teams for use in leak control activities and have been secured in sealed gear bags. These devices <u>must</u> remain sealed and off in the gear bag or container until they are donned in station 4.



- Any communication by competition participants with persons or information sources outside the competition area shall disqualify the full team from competition.
- Any travel by competition participants to areas outside the secured area must be escorted by competition staff. IF you are unsure, ask any competition staff member.

#### TIME TABLE - 14 TEAMS

|                 |  | Team<br>1 | Team<br>2         | Team<br>3         | <mark>Team</mark><br>4 | <mark>Team</mark><br>5 | <mark>Team</mark><br>6 | <mark>Team</mark><br>7 | <mark>Team</mark><br>8 | Team<br>9         | Team<br>10        | <mark>Team</mark><br>11 | Team<br>12        | Team<br>13        | <mark>Team</mark><br>14 |
|-----------------|--|-----------|-------------------|-------------------|------------------------|------------------------|------------------------|------------------------|------------------------|-------------------|-------------------|-------------------------|-------------------|-------------------|-------------------------|
| 1A              | Initial Assessment & Sampling (Part A) | 0900      | 1040              | 0920              | 1100                   | 0940                   | 1120                   | 1000                   | 1140                   | 1020              | 1200              | 1040                    | 1220              | 1100              | 1240                    |
| <mark>1B</mark> | Initial Assessment & Sampling (Part B) | 0920      | 1100              | 0940              | 1120                   | 1000                   | 1140                   | 1020                   | 1200                   | 1040              | 1220              | 1100                    | 1240              | 1120              | <mark>1300</mark>       |
| 2               | Field Screening                        | 0940      | 1120              | 1000              | 1140                   | 1020                   | 1200                   | 1040                   | 1220                   | 1100              | 1240              | 1120                    | 1300              | <b>1140</b>       | <mark>1320</mark>       |
| 3               | Product Hazard<br>Analysis             | 1000      | 1140              | 1020              | 1200                   | 1040                   | 1220                   | 1100                   | 1240                   | 1120              | 1300              | 1140                    | 1320              | 1200              | 1340                    |
| 4               | Brief The IC                           | 1020      | <mark>1200</mark> | <mark>1040</mark> | 1220                   | 1100                   | <mark>1240</mark>      | 1120                   | <mark>1300</mark>      | <mark>1140</mark> | <mark>1320</mark> | <mark>1200</mark>       | <mark>1340</mark> | <mark>1220</mark> | <mark>1400</mark>       |
| 5               | PPE Eval & Dressout                    | 1040      | 0900              | 1100              | 0920                   | 1120                   | 0940                   | 1140                   | 1000                   | 1200              | 1020              | 1220                    | 1040              | <mark>1240</mark> | 1100                    |
| 6               | Leak Control 1                         | 1100      | 0920              | <mark>1120</mark> | 0940                   | 1140                   | 1000                   | 1200                   | 1020                   | 1220              | 1040              | <mark>1240</mark>       | 1100              | 1300              | <mark>1120</mark>       |
| 7               | Leak Control 2                         | 1120      | <mark>0940</mark> | <mark>1140</mark> | 1000                   | 1200                   | 1020                   | 1220                   | 1040                   | <mark>1240</mark> | 1100              | 1300                    | 1120              | <mark>1320</mark> | <mark>1140</mark>       |
| 8               | Leak Control 3                         | 1140      | 1000              | 1200              | 1020                   | 1220                   | 1040                   | 1240                   | 1100                   | 1300              | 1120              | 1320                    | 1140              | <b>1340</b>       | 1200                    |
| 9               | Best Score / Rehab                     | 1200      | 1020              | 1220              | 1040                   | 1240                   | 1100                   | 1300                   | 1120                   | 1320              | 1140              | 1340                    | 1200              | 1400              | 1220                    |

(Start Times in Green)

#### AFTER THE COMPETITION

Depending upon the number of participating teams, the competition will complete by no later than 1400 hrs.

Competition staff shall compile scoring and times to determine the winners in the areas previously discussed.

Awards shall be made during the Florida Hazardous Materials Symposium Team Party on Wednesday evening January 17, 2018 starting at 7:00 P.M. at Sloppy Joe's Restaurant in Daytona Beach Ocean Walk across from the convention center.



### **REGISTER YOUR COMPETITION TEAM HERE**

Registration will close at 5:00 p.m. January 1, 2018 Questions can be directed to Douglas Wolfe at Response Technologies at: dwolfe@responsetechnologies.com

Additional Information Concerning the Symposium and HazMat Team Competition can be found at: www.flhazmatsymposium.org



#### STATION DESCRIPTION 2018

| STATION:                          | Initia            | l Risk Assess | ment and Sampling | STATIO  | ON No.: | 1          |  |
|-----------------------------------|-------------------|---------------|-------------------|---------|---------|------------|--|
| ALOTTED TIME: 40 min Individual A |                   |               |                   | ctivity | X Tean  | n Activity |  |
|                                   | STATION OBJECTIVE |               |                   |         |         |            |  |

The three person team will be presented with a scenario where they have been called upon to assist law enforcement with a potential hazardous materials situation. They will be expected to conduct an initial entry to identify potential IDLH situations and to obtain photographic information to assess for a potential sampling mission. The team will select appropriate detection equipment for the initial entry. They will then approach the simulation using the detection devices they selected and, based upon their interpretation, indicate appropriate safety actions to be taken. In addition, they will photograph the situation and exit the area. Once outside, they will consult with a law enforcement roll player who will instruct them as to a sample target. Given various assortment of sampling supplies, they will select appropriate supplies necessary to properly gather of a representative sample. They will then re-enter the area an collect a sample using a three person team.

#### **CONDITION**

The technician will be briefed on the situation by the evaluator who is role playing as a "Law Enforcement Forensic Specialist" with limited hazmat experience. The technician will be provided access to a table of common detection equipment. Based upon the scenario, the technician shall select instruments that would be appropriate for the situation. The instruments available will include the following:

pH paper or test strips and deionized water

4 Gas detectors - Ventis®, MSA Altair® / 5 Gas detectors - Multirae Pro, ISD Mx6

Single PID unit - MiniRae, Single FID unit MicroFID, Combination PID/FID TVA 1000B

Radiological Survey - CDV kit, Ludlum 2261-2RK Kit, Thermo Radeye, FLIR PRD

Photographic equipment

#### (Team specific detection equipment not listed above may be utilized in accordance with the special considerations listed below)

This assessment will be conducted in an enclosed simulation area while wearing PP/SCBA facepiece (provided by the team) and Vapor Protective Garment (Level A) HALF SUIT provided by the competition management for the purpose of limiting visibility and dexterity. During the initial entry, the technician will be asked questions by the evaluator and expected to provide appropriate responses based upon meter readings obtained from the atmospheric samples provided.

The technician shall assume that they have been tasked with conducting a recon using air monitoring equipment necessary to identify IDLH conditions, photograph the site and exit. They will then be instructed to gather a sample of a target and given the opportunity to select from supplies necessary to properly obtain a representative sample



#### **TEAMS MUST PROVIDE THE FOLLOWING**

- Positive pressure SCBA facepeice for each team member
- Air monitoring equipment will be provided. However, agencies wishing to bring their own equipment should read "Special Considerations" below.

#### SPECIAL CONSIDERATIONS

It is understood that teams may use comparable equipment that is not listed above. Teams may bring their units for the purpose of the competition. If this option is selected, the following actions must be followed:

- 1) Equipment to be used must be tagged or clearly marked as to the ownership organization.
- 2) Equipment and associated manufacturer operating manuals must be checked in at time of team check-in and left with the competition management team. Equipment will be secured after they have been evaluated for proper operation.
- 3) Equipment will be placed in the station and made available to all teams during the competition.
- 4) Equipment shall be picked-up <u>after all teams</u> have completed the competition.

Advanced coordination is recommended (although not required) by calling Response Technologies at 941–371–7849 or by email at info@responsetechnologies.com prior to the competition date.

#### **SCORING CONSIDERATIONS**

The team shall be evaluated as a team based upon, equipment selection, interpretation, recommended safety actions, team work and proper sample gathering techniques.



#### STATION DESCRIPTION 2018

| STATION:             | Field | <b>Chemical So</b> | STATION No.:      | 2             |          |
|----------------------|-------|--------------------|-------------------|---------------|----------|
| ALOTTED TIME: 20 min |       |                    | X Individual Ac   | tivity _ Team | Activity |
|                      |       |                    | STATION ORIECTIVE |               |          |

Given an unidentified, potentially hazardous material (solid or liquid), the technician, working independently, shall conduct field screening activities using basic supplies in order to determine the potential hazards of the material.

#### **CONDITION**

There will be three work spaces, one for each member of the team. There will be one evaluator for each work space.

Each technician shall be provided equipment and supplies commonly utilized for basic field hazard screening analysis procedures. These items shall include:

- Watch dishes & test tubes
- Handling materials (e.g. pipettes, spatulas, tweezers, etc)
- Test strips/kits (pH, oxidizer, fluoride, M8(C8), protein screen, cobalt chloride)
- CGI/PID & Radiological Survey Meter
- De-ionized water
- Hydrochloric acid
- Florida Department of Health Sample Submission form

Each technician will be provided a solid or liquid sample in over-pack containers and bagged with labels that will represent an unidentified substance that was obtained by a sampling team. Scenario information shall be provided concerning the hypothetical scenario that suggests that, based upon down range detection efforts, that there does not appear to be an airborne IDHL hazard at the scene. A screening process should be utilized to detect the volatility and potential overall flammability, reactivity and radioactivity of the materials.

Documentation of the screening process should follow their organization's policy and procedures and should include written documentation of each step taken in the analysis process as well as the technician's final interpretation. The technician will also complete a Florida LRN submission form to send the sample to the appropriate laboratory for further analysis.

The overall performance objective of the technician is to <u>classify potential hazards</u> of the material.

#### **SCORING CONSIDERATIONS**

Scoring shall be based upon safety of procedures, appropriate application of test methods (i.e. proper test for material and situation) and correct identification of the hazards presented by the material within the allotted time frame. The individual scores of each team member shall be added together for an overall team score.

#### **STATION DESCRIPTION 2018**

| STATION:   Container and Product Anal |      |        | nalysi | is        | STATION  | No.: | 3            |
|---------------------------------------|------|--------|--------|-----------|----------|------|--------------|
| ALOTTED T                             | IME: | 20 min | _X_    | Individua | Activity | Τε   | eam Activity |
|                                       |      |        |        |           |          |      |              |

#### STATION OBJECTIVE

Using a written scenario, the technician will assume the role of "Technical Specialist – Hazardous Materials" and will be tasked with evaluating the collected data and developing a product hazard analysis for a material.

#### **CONDITION**

This station shall be set up with 3 computer work stations with various electronic and printed chemical reference sources. Each team member will be provided a printed workbook.

The member will evaluate the written scenario and shall properly identify the type of container(s) by name and, if appropriate, specification number. They will identify container characteristics including potential construction materials, nominal capacities and operating pressures. The member will also analyze product hazards necessary to make initial recommendations concerning responder and public safety considerations.

All questions in the workbook will require written responses rather than multiple choice questions.

The participant will be provided with the following references.

**Printed:** NIOSH Pocket Guide, Condensed Chemical Dictionary, Chris Manuals

Databases: WISER, CAMEO Chemicals, Electronic NIOSH Pocket Guide, ERDSS (Chemical Companion)

The team members shall take their completed workbooks to the next station.

#### **SPECIAL CONSIDERATIONS**

No additional resources will be permitted other than those listed above. All electronic databases will be local only and no internet resources will be allowed or accessible.

#### **GRADING CONSIDERATIONS**

Each participant is graded and that grade is combined into a three-person team grade and included in the Risk Assessment area of the competition.

#### STATION DESCRIPTION 2018

| STATION: Brief the I.C. | STATION No.:                   | 4       |
|-------------------------|--------------------------------|---------|
| ALOTTED TIME: 5 min     | X Individual Activity _ Team A | ctivity |

#### **STATION OBJECTIVE**

Evaluate the technicians' understanding of the product hazards and risk assessment findings and their ability to communicate actionable, summative information to an incident commander that may not be fully familiar with the hazard analysis and risk assessment process.

#### **CONDITION**

After completing Station 3, the technician shall meet with an evaluator role playing as the "Incident Commander" and will brief the I.C. concerning the hazards and risks associated with the scenario for which the conducted a hazard analysis.

The members shall be able to use notes from their workbook used at stations 3.

The briefing should include:

- 1) Key findings concerning the container and potential container impacts
- 2) Hazards of the product involved
- 3) Risks to responders and the public
- 4) Recommendation for public protective actions
- 5) Recommendations for continued responder protective actions

#### **SPECIAL CONSIDERATIONS**

The team of three technicians must not communicate with each other in any manner or they will be disqualified in the station. The order in which the technicians will provide their briefing will be determined by the draw of straws.

#### **SCORING CONSIDERATIONS**

Each scenario shall be evaluated against the same elements regardless of situation. Each of the team members shall be evaluated individually and their individual scores shall be compiled into a team score for the station.



#### STATION DESCRIPTION 2018

| STATION:             | PPE D | Press-out Station |              | STATIO  | N No.: | 5          |
|----------------------|-------|-------------------|--------------|---------|--------|------------|
| ALOTTED TIME: 20 min |       |                   | Individual A | ctivity | X Tea  | m Activity |
| STATION OBJECTIVE    |       |                   |              |         |        |            |

This station is a preparatory station for the three leak control stations which follow.

#### CONDITION

Teams of three will be provided a covered dress-out area, drinking water and support personnel. If the team has an optional 4th member, that member may assist in this station. Prior to dressing out, the support personnel will obtain pre-entry vitals and will provide a pre-entry briefing. A level A training garment will be provided.

Each team member will be provided with the name of a hazardous material, a copy of the NIOSH pocket guide information for that material and a sample chemical compatibility for a hypothetical Level A garment. Each team member will evaluate the appropriateness of the garment for the materials and provide a simple "Appropriate" or "Not Appropriate" for that garment. The garment approval/disapproval process is completed at this time and has NO FURTHER application to the dressout process.

The team of three will dress to the waist in vapor protective ensembles (Level A) and be prepared to go on air when instructed. The station controller role playing as the Entry Supervisor, shall brief the three person team on their entry objectives.

They will be instructed to complete three sequential leak control evolutions each lasting up to 15 minutes. If leak control is not completed in 15 minutes, the evaluator at the leak station will instruct the team to stop and move to the next objective. It is highly recommended that teams utilize a minimum of 45 minute SCBA.

During this competition and for competition purposes only, team members will be allowed to continue with low pressure alarms functioning until any one team member reaches 500 psi. At 500 psi the evaluator at the station will pull the individual team member and allow the other team members to continue. If a second team member reaches 500 psi, all remaining members will exit the leak control area.

#### **SPECIAL CONSIDERATIONS**

The team is required to provide their own agency's SCBA and face pieces. Air filling capabilities will be preset onsite up until the start of the competition. Once the competition has started, no SCBAs will be filled. Over boots will be available and single use level A training garments will be provided by Kappler®.

Any team supplied equipment must be logged in at time of competition check-in and, with the exception of SCBA's & facepieces, must be sealed in equipment bags and must remain sealed until arrival at the dress-out location.

Additional items will be limited to communication systems, anti-fogging solution, personal over



boots, helmets, and hand lights. These items must should be enclosed in gear bags and must be checked in and sealed by competition staff at the time of team check-in. These bags may be carried by the team members but shall not be opened in at any time until they arrive at dress-out. Failure to follow this rule will result in team disqualification.

#### **SCORING CONSIDERATIONS**

Scoring will be based upon the garment applicability assessment. Each individual score shall be combined for a team score.

#### STATION DESCRIPTION 2018

| STATION: Pres | lo.: 6 | STATION No.:  |                   |
|---------------|--------|---------------|-------------------|
| ALOTTED TIME: | 15 min | Team Activity | l Activity X Team |

#### **STATION OBJECTIVE**

A team of 3 technicians shall demonstrate the ability to stop a simulated pressurized leak. The team will determine the type and location of the leak. Based upon the leak type and location, the team shall take appropriate action to reduce the risk and apply appropriate Chlorine A, B or C kit components.

#### CONDITION

During pre-entry briefing (in dressout), the team shall be advised of the leak control activities that are to be conducted. Station 5 shall involve either the chlorine 150 lb cylinder or 1 ton chlorine tank or a rail car dome in an area room. The tank type shall be selected immediately prior to the start of the competition. They will not be advised of the location or cause of the leak. (Note: Standard Chlorine A and B & C kits shall be provided)

The team will be taken to the start line which will be 25 feet from and out of view of the subject container. Timing will start immediately upon the 1<sup>st</sup> team member crossing the start line.

Simulant smoke and poor lighting conditions will challenge leak control operations. The team shall assess the tank and determine the point of leak. They will take appropriate actions to control the leak using the standard Chlorine A, B or C Kit. If leak control is not completed in 15 minutes, the station evaluator will instruct the team to stop and move to the next objective. Timing shall stop at 15 minutes or when the last team member crosses the line to the next station, whichever occurs first.

#### **SPECIAL CONSIDERATIONS**

Allowable leak control equipment shall be only those items contained within the standard Chlorine A, B and C Kits, hand lights and in-suit communications **provided by the team** will be permitted. No other team specific leak control or hand tools may be used.

Any team supplied equipment must be logged in at time of competition check-in and sealed equipment bags must remain sealed until arrival at the dress-out location.

#### **SCORING CONSIDERATIONS**

Scoring shall be based upon technique and time.

Technique considerations shall include: a) proper container damage assessment to determination of type and leak point, b) reduction of leak to least possible risk, c) selection of appropriate leak control techniques, d) use of appropriate tools, e) minimization of contamination, f) protection of PPE to minimize potential damage/failure, g) teamwork and communications, and h) successful leak control.

Time shall be based upon: The first team member to cross the start line and the last team member to cross finish line to the next station.

#### **STATION DESCRIPTION 2018**

| STATION: DOT  | 406 Leak Cor | STATION No.:          | 7           |      |
|---------------|--------------|-----------------------|-------------|------|
| ALOTTED TIME: | 15 min       | _ Individual Activity | X Team Acti | vity |

#### **STATION OBJECTIVE**

A team of 3 technicians shall demonstrate the ability to stop a simulated leak from a DOT Multi-Tactic Leak Simulator<sup>TM</sup> using various leak control devices commonly available to response teams. Scoring shall be based upon technique of leak control actions and time.

#### **CONDITION**

After completion of the previous station the team shall immediately approach, assess and engage in leak control using provided devices. Timing will start immediately upon the 1<sup>st</sup> team member crossing the start.

Possible leaks: Manhole leak, manhole vent leak, manhole clamp ring leak, vapor recovery leak, tank side wall breach, piping breach, internal valve leak failure.

Teams will be provided with a selection of possible leak control equipment. The team will need to assess the leak characteristics, select the appropriate leak control equipment and apply the equipment to control the leak.

Available equipment: Edwards and Cromwell<sup>TM</sup> AE or A-1 kits, assorted pipe plugs, LidLoc® and Western® dome clamps, air bag leak control systems, ladder patch kits, assorted clamps and hand tools.

Timing shall stop at 15 minutes or when the last team member crosses the line to the next station. If leak control is not completed in 15 minutes, the station evaluator will instruct the team to stop and move to the next objective.

#### **SPECIAL CONSIDERATIONS**

Tools and leak control materials shall be provided. Teams may use their own hand lights and insuit communications. No other team specific leak control or hand tools may be used.

#### **GRADING CONSIDERATIONS**

Scoring shall be based upon technique, time to achieve leak control. Technique considerations shall include: a) assessment to determine best approach, b) selection of appropriate leak control tools and techniques, d) use of appropriate tools, e) minimization of contamination, f) protection of PPE to minimize potential damage/failure, g) teamwork and communication, and h) successful leak control.

Time shall be based upon: The first team member to cross the start line and the last team member to cross the final finish line.



#### STATION DESCRIPTION 2018

| STATION: Pipe Leak Control Relay |  |                 |      |        | ΓΙΟΝ No.: | 8 |  |
|----------------------------------|--|-----------------|------|--------|-----------|---|--|
| ALOTTED TIME: 15 min             |  | Individual Acti | vity | X Team | Activity  |   |  |
| CTATION OR ISCTIVE               |  |                 |      |        |           |   |  |

#### STATION OBJECTIVE

A team of 3 technicians shall demonstrate the ability to stop various simulated leaks from a pipe leak simulation prop using assorted control devices found in Edwards and Cromwell AE and A1 kits. This will be a team relay.

#### CONDITION

After completion of the previous station, team members will proceed to a location which obstructs their view of the leak objectives. At this "staging" position they shall be shown the tools available for leak control activities.

Each team member will in-turn be allowed to assess the leaks. They will quickly recon the leaks, select the most appropriate leak to attack, assess the needed tools, return to a tool staging area and select the tools necessary for control of their leak. That member will then control the leak to the extent feasible and return to the staging area and tag off to the next team member. This will be repeated until all three leaks have been controlled.

Timing starts when the first team member crosses the line leaving the tool staging area. Timing shall stop when the last team member crosses the line to the staging area and indicates that they are finished or at 15 minutes, whichever occurs first. If all three leaks are not completed in 15 minutes, the station evaluator will instruct the team to stop and move to the next objective.

#### **SPECIAL CONSIDERATIONS**

Tools and leak control materials shall be provided. The team shall also be provided with necessary wrenches and hand tools. Teams may use their own hand lights and in-suit communications. No other team specific leak control or hand tools may be used.

#### **SCORING CONSIDERATIONS**

Scoring shall be based upon technique and time to achieve control of all leaks to the maximum point feasible.

Technique considerations shall include: a) assessment to determine best approach, b) selection of appropriate leak control tools and techniques, d) use of appropriate tools, e) minimization of contamination, f) protection of PPE to minimize potential damage/failure, g) teamwork and communication, and h) successful leak control.

Time shall be based upon: The first team member to cross the start line and the last team member to cross the final finish line and indicating to the evaluator that the team has completed.

#### **STATION DESCRIPTION 2018**

| STATION:  | Best | Score |          | STATION       | No.:   | 9            |
|-----------|------|-------|----------|---------------|--------|--------------|
| ALOTTED T | IME: |       | X Indivi | dual Activity | _X_ Te | eam Activity |

#### **STATION OBJECTIVE**

Given a challenging environment each team member will, within a specified amount of time, each team member shall achieve the highest score possible for the common objective. With the exception of tie breaking, the scoring of this station **DOES NOT** calculate into the overall team competition scoring but will be used for additional award considerations.

#### **CONDITION**

All three team members shall be placed in a sensory deprived environment. There will be a commonly encountered competitive game in the environment. Each team member shall work for a specified amount of time to achieve the highest score possible.

#### **SPECIAL CONSIDERATIONS**

None, it is just for fun!

#### **GRADING CONSIDERATIONS**

Grading shall be based entirely upon the scoring of the encountered game.