

# NORTH AMERICAN VEHICLE RESCUE ASSOCIATION



## Extrication Challenge Rules

# Contents

- 1 Mission Statement**
- 2 Introduction**
- 3 Code of Conduct**
- 4 Criteria for Competition Participation**
- 5 Participation in the Learning Symposium and Workshop**
- 6 The Challenge Event Objectives**
- 7 The Benchmarks**
- 8 The Challenge**
- 9 Registration**
- 10 The Rules**
- 11 Injury**
- 12 Scenario Selection**
- 13 Extrication Tools and Equipment List**
- 14 Team Presentation at Challenge**
- 15 Breakdown of Scenario**
- 16 Disqualification**
- 17 Health and Safety**
- 18 Timing**
- 19 Assessing and Scoring**
- 20 Awards**

***“Prepare today.....Succeed tomorrow”***

## 1.0 Mission Statement

- 1.1 To help emergency rescue personnel come together to stimulate and develop high levels in the areas of vehicle extrication, through the established systems of Incident Control, Safety, Extrication, Pre-Hospital Emergency Care, and proficient use of equipment.

## 2.0 Introduction

- 2.1 The goal of the **North American Vehicle Rescue Association Vehicle Extrication Challenge** is to bring together teams of emergency rescue personnel to a single venue where they can be challenged to demonstrate their skills in realistic rescue scenarios in a quality-controlled training and learning environment.

- 2.2 The vehicle extrication challenge is designed to meet the following goals:

- Create realistic vehicle extrication scenarios that emergency response crews maybe called to attend.
- Create an environment where:
  - Teams have the opportunity to demonstrate a range of techniques and options to extricate casualties.
  - Team performance can be analyzed over a series of vehicle extrication scenarios.
  - Learning and education in all facets of vehicle extrication is promoted.
  - Participants will leave being able to perform more competently at vehicle extrication scenes, exercising acceptable techniques in vehicle extrication and casualty treatment.

- 2.3 Emergency service teams from around North America, together with visiting teams from other International Rescue organizations, will gather at a single venue for this three-, or four-day event. The Challenge will consist of:

**An EDUCATIONAL DAY – Certified instructor classes and vendor demonstrations will be carried out for teams and individuals. Each participant will receive the set Continuing Educational Unit (CEUs) or Train-the-Trainer credits for attending each class and having signed documentation confirming attendance.**

**The EXTRICATION CHALLENGE - All participating teams will use their professional skills and abilities in the extrication of a trapped casualty, or casualties, from a severely damaged vehicle or vehicles.**

- 2.4 What the participating emergency service personnel observe and learn during this challenge will go back with them to their own services where some person may directly benefit from this new-found knowledge. Thus, knowledge and practices learned can cascade across the services.
- 2.5 The emphasis in the **Extrication Challenge** is on developing and promoting **Best Safe Practice** and **Safe Systems of Work**. The real challenge is not primarily to win, but to safely and effectively use what is learned at these events in real vehicle accident incidents that we attend.
- 2.6 Even though the '**Challenge**' is presented as a competition, it is far more than that. It is a learning platform, matching talents and skills through structured assessment. Encouraging participants to make hard and critical examination of themselves and their own rescue practices, their techniques and their knowledge of the tools they have available to them. It should always be a rescue practitioner's aim to study the current philosophies of approach to whatever the incident, search out new developments and innovate with new ideas.
- 2.7 Although one team will be adjudged the best team overall in each event, and the performance of team members and individuals will be recognised. In truth the real winners will be the future victims of motor vehicle accident incidents.

### **3.0 Code of Conduct**

- 3.1 It is incumbent upon each individual involved in the management or participation within NAVRA to apply the principles of fairness and dignity to all people at all times. NAVRA will not condone inappropriate behavior nor discrimination and will act swiftly to prevent it. Each individual is accountable for their actions.
- 3.2 All assessors, officials and NAVRA members are professional / experienced rescuers or managers of rescue organizations and seek to deliver a fair and unbiased event. An appropriate degree of reciprocated professional respect is expected from all participants.
- 3.3 Fair play and good sportsmanship is expected of all participants and their teams during their evolutions and as spectators.
- 3.4 All participants are requested to respect the equipment of other teams, the equipment provided by the event management and the facilities provided at the challenge venue and accommodation.
- 3.5 Participants whose general health may give cause for concern, who may be under the influence of alcohol or any other substance during the challenge or any associated workshops, lectures etc. will be expelled and barred from further entry.

- 3.6 During the event, Participants are not to canvass any assessor, official or NAVRA members.
- 3.7 Assessors, officials, pit crews and NAVRA members will declare any interest in a particular team to the NAVRA Head Assessor.
- 3.8 All participants are reminded that they are not only representatives of their own Department, Service or Organization but also that they represent the Emergency Services as a whole and are to conduct themselves accordingly.
- 3.9 Full protective clothing shall be worn in the pit and service areas and this should not be relaxed during 'preparation and make up' as hazards still exist, and relaxation can lead to complacency and the potential for injury.

#### **4.0 Criteria for Competition Participation**

- 4.1 Participants must be competent within the field of road rescue/vehicle extrication and currently be members of an emergency service or formal emergency response team who provide road rescue/vehicle extrication services within the community.
- 4.2 Teams require authorization from their Department, service or organization.
- 4.3 The Executive Committee will base the decision for participation upon key criteria which may include, but not be limited to:
  - Where entry fees are submitted with application forms on a 'first come' basis.
  - The maximum number of teams the event can support.
  - A balance between participating states.
  - The introduction of new teams.
- 4.4 The decision of NAVRA will be final although every effort will be made to accommodate as many teams as possible.

#### **5.0 Participation in the Learning Symposium and Workshop**

- 5.1 The intent of NAVRA is to explore, develop and promote best practice in the delivery of integrated vehicle extrication services. To this end the challenge will include a learning symposium and/or a practical workshop during the challenge (Educational Day).
- 5.1 To ensure maximum learning opportunity by all participants, attendance at the symposium and participation in the workshop pit will allow participants to gain Continuing Educational Credits (CEU's) or Train-the-Trainer credits for educational sessions they attend and get signed acknowledgement.

## 6.0 The Challenge Event Objectives

- 6.1 To provide a forum whereby firefighters and rescuers of all disciplines meet and share knowledge, develop proficiencies, improve skills, stimulate ingenuity and promote safe working systems. All culminating in higher levels of safety, efficiency, and professionalism.
- 6.2 To facilitate and develop a practical educational platform for firefighters and rescue practitioners of all disciplines faced with the extreme demands of traumatic rescue incidents.

## 7.0 Benchmarks

- Develop a **Safety-First** attitude and approach amongst all rescuers.
- Emphasize patient/casualty, rescue personnel and scene safety.
- Encourage higher and more proficient levels of pre-hospital emergency care.
- Develop a broad spectrum of extrication principles and techniques.
- Develop and promote the systematic approach to Incident Command.
- Stimulate ingenuity in terms of skills, practices, and equipment to advance the **best safety-first** concept and enhance technical competence.
- Through co-operation, develop and promote an agreed code of best practice.

## 8.0 The Challenge

- 8.1 The **North American Vehicle Rescue Association Extrication Challenge** is primarily open to the participation of all North American Rescue Services and is also open to attendance by a limited number of international Fire & Rescue Service teams.
- 8.2 Participation in a NAVRA Rescue Challenge is by application alone. All applications must be submitted to the Secretary of NAVRA using the application forms in **Appendix 1** of this document.
- 8.3 At the **National Rescue Challenge**, the top two USA teams placed in the National Rescue Challenge will be nominated to go forward and represent the USA at the World Rescue Challenge. If there are vacant spaces for the World Rescue Challenge, NAVRA will propose the runners up as options to enter said event.
- 8.4 If any guest team excels and is declared to have placed in the top three positions, they will receive the award for the position they achieved, but they cannot be designated as representing NAVRA at the World Rescue Challenge.
- 8.5 The **EXTRICATION** Challenge will consist of at least two of the following:

- 1) A **'Complex'** evolution - teams will be allowed a maximum of **30 minutes**.
- 2) A **'Rapid'** evolution - teams will be allowed a maximum of **10 minutes**.
- 3) A **'Standard'** evolution - teams will be allowed a maximum of **20 minutes**.
- 4) A **'Standard Limited'** evolution (no hydraulic tools) - teams will be allowed a maximum of **20 minutes**.

8.6 Each team will be assessed by a panel of assessors using the **NAVRA** approved common criteria & marking scheme.

8.7 There may be other vehicles or staging props in the vicinity to act as obstacles.

8.8 The organizers will publish a list of the equipment that will be provided for use during the Challenge. (see **Section 13 for an example**). Teams may only bring a very limited selection of their own personal equipment with them, for example, hand tools and oxygen therapy equipment, etc. This may include any home-made equipment, but such equipment must first be approved safe by the organizers prior to any use in this event. The NAVRA Head Assessor/ Director of Operations will have the final say.

**NOTE: All competitors are responsible for providing their own full PPE, to include dust-masks, medical gloves, and eye protection.**

8.9 Any home-made equipment to be used in conjunction with power rescue tools must carry a 'Notice of Certification' approved by a body or individual person.

8.10 Teams may lend equipment to other teams ensuring any safety features are fully understood by the recipient.

8.11 Teams may use any of the tools listed in **the Tool List** published prior to each event.

8.12 Live casualty/casualties will be used in each scenario.

8.12.1 The North American Vehicle Rescue Association (NAVRA), along with the other partner members of the World Rescue Organisation (WRO), are among the few organisations to use live casualties in extrication & trauma challenges. These are all medically trained personnel who will have an input into the medical rescue assessment.

8.12.2 Teams will be expected to assess the casualties for injury and provide treatment consistent with the injuries they find and their skills. Specific consideration should be given to maintaining the dignity of the casualties in this public training environment

8.13 The following specific areas will be assessed:



<b>Incident Command and Control</b>	<b>(IC Assessor)</b>
<b>Physical Rescue and tool operation</b>	<b>(Technical Assessor)</b>
<b>Pre-Hospital emergency care</b>	<b>(Medic Assessor)</b>

## 9.0 Registration

- 9.1 Team application and registration for this challenge can only proceed on an official entry form, accompanied by the prescribed fee which will be determined by the Hosts in conjunction with NAVRA from year to year. As part of the process of registration, teams must confirm that all members of the team comply with the requirements of **Rule 4 - Criteria for Participation**.
- 9.2 Registration of arrival will take place prior to the challenge. Once the Challenge begins, late arriving teams will not be allowed to compete. (See timetable for further information).
- 9.4 Teams that are unable to participate in the challenge must notify the organizers in writing of their decision to withdraw, or they will be deemed to be a 'No show' and be disqualified.
- 9.5 The Registration for the Rescue Challenge will have a "Register by" date noted. All fees must be paid by the end of the Registration period. Fees will not be collected after that date as plans have to be made and the monies received allow the host to budget for the event.
- 9.5 Teams that withdraw less than 28 days before the first official day of the challenge will forfeit their entry fee.

## 10.0 The Rules

- 10.1 No team may participate without the written authorization of the Chief Officer or Chief Executive/Head of their organization
- 10.2 Workers' Compensation, Insurance etc. for the protection of the team members shall be the sole responsibility of the participants in the event. The host organization shall supply 3rd party liability insurance.
- 10.3 Each **Extrication Team** should consist of six (6) members of whom one must be designated the team leader/OIC and at least one as a medic/first aider. Teams are allowed up to two (2) alternates.
- 10.4 If, during a scenario, a team member is injured and has to withdraw, the team, if able, may continue until they complete the scenario or 'Time' is called. In addition, in the case of the medical competency, it is expected that team medics will be competent in the administration of emergency medical care and as such approved by their own organisation to do so.



- 10.5 Teams may switch a team member for an alternate, but this must be done before teams present themselves to the 'Registration' area prior to their run off time, and upon approval of the Head Assessor
- 10.6 If for any reason any teams are placed in the position where they are short of a competing member, a request may be submitted to the Head Assessor and NAVRA Liaison Officer requesting a substitute from another team, but the substitute cannot fill the role of Command or Lead Medic.
- 10.7 Only approved Emergency Service issued PPE shall be worn by all team members including the medic. In the event of a paramedic or advanced paramedic acting as team medic, he/she must also wear full protective clothing with no exposed skin on arms or neck and a suitable helmet with face shield, if so supplied.
- 10.8 Each extrication team will be assessed in 3 primary areas - ***Incident Command & Control, Physical Rescue & Tool Operation, Pre-hospital Emergency Care of Patient/Casualty***. The urgency in which the whole evolution was undertaken will also be considered as part of the assessment.
- 10.9 Live casualties will be used in the Challenge, within the vehicle, and marks will be awarded on 'Casualty Handling'. There may also be a radio fitted to the inside of the vehicle or attached to the casualty which enables the assessor to listen to the medic and casualty interaction.
- 10.10 Props may be positioned in pits to represent field objects, road furniture or other vehicles on the road.
- 10.11 Every effort will be made by the organizers and hosts to ensure the realism of these props. This means that if the object is intended to be fixed and immovable, it will be placed in the scenario in such a way as to make it immovable. Props that are deemed immovable are **not** to be moved or relocated by competing teams.
- 12.12 If the hosts Logistics Manager is unable to create an equitable scenario a simulated immovable object may be used. Clarification about the mobility of any prop can be sought from the Command Assessor at any stage during a scenario.
- 10.13 Patient assessment and packaging will be evaluated using established Pre-Hospital Emergency Care Guidelines and using the C-ABC and S protocols, with care and safety being of prime importance.  
C = Catastrophic Haemorrhage A = Airway Management, B = Breathing & Resuscitation, C = Circulation, S = Spinal Care.
- 10.14 The pit area will be off limits to all persons unless authorised by the organisers. Authorised persons will be admitted entry only by pass or other approved means.

10.15 A Safety Officer will supervise each evolution with the authority to halt any action deemed to be in breach of safe working practice (typically the IC Assessor). Such a breach shall not on the first occasion incur time penalties, however subsequent breaches may incur them. Continuous safety issues being addressed may result in a team being stopped from competing further in that scenario.

**Note: Where there are safety issues which continuously need to be addressed, this may result in a team being stopped from competing any further in that scenario.**

10.16 All participants must keep safety in mind at all times and only approved head, eye, hand, and foot protection shall be worn. Respiratory protection in the form of dust masks shall also be worn at the appropriate times, e.g. cutting windshields or glass.

10.17 Teams must present themselves to the 'Registration' area as per run-off timetable i.e. 30 minutes prior to their designated run off time.

**Note: Failure to do so may result in elimination of the Team.**

10.18 In the event of a 'No Show' by any registered team at their appointed time for equipment inspection, the organisers may disqualify them from that class.

10.19 The Head Assessor may substitute another team in the event of a team 'No Show'.

10.20 There will be a briefing of all participants and this will take place at the same venue or at a designated location prior to the start of the challenge.

**Note: While preferable that all team members should attend this briefing, it is mandatory that all the team leaders and medics attend.**

10.21 The Organizers will not be responsible for any damage or loss of any equipment as a result of participating in this event.

10.22 Each extrication pit area will have allocated to it three/four assessors, who will be under the direction of the Head Assessor. All scoring information will remain the property of the Organisation and shall remain confidential. (Shadow assessors may also be present).

10.23 Assessor teams will be formed for each challenge class (Rapid, Standard, Complex) with the designated lead being the Command Assessor. Each Assessing team will assess all teams attempting one class only; this ensures that each team demonstrates their skills before each of the Assessing teams. E.G. The Rapid Challenge Assessors will assess all of the Rapid Challenge events. The Standard Challenge Assessors will assess all of the Standard Challenge events.

10.22 Class descriptors:

Class	Team Objectives	Time	Complexity (Guidelines)
<p><b>Complex Rescue</b></p>	<p>To demonstrate a casualty-centered rescue with a high level of regard for safety of all personnel.</p> <p>The use of hydraulic rescue tools for access, release and removal of a <b>physically trapped casualty</b></p>	<p><b>30 minutes</b></p>	<p>Two live casualties (simulated entrapment), entrapped by vehicle/prop and/or injury.</p> <p>Some injuries treatable in the vehicle.</p> <p>Single or multiple vehicles plus props</p>
<p><b>Standard Rescue</b></p>	<p>To demonstrate a casualty-centered rescue with a high level of regard for safety of all personnel.</p> <p>To demonstrate the access, release and removal of a casualty using a variety of tools.</p>	<p><b>20 minutes</b></p>	<p>One live casualty (simulated entrapment) entrapped by prop or injury.</p> <p>Some injuries treatable at scene.</p> <p>Single or multiple vehicle plus props.</p>
<p><b>Standard Rescue (Limited)</b></p>	<p>To demonstrate a casualty-centered rescue with a high level of regard for safety of all personnel.</p> <p>To demonstrate the access, release and removal of a casualty using a variety of tools, but not hydraulic tools.</p>	<p><b>20 minutes</b></p>	<p>One live casualty (simulated entrapment) entrapped by prop or injury.</p> <p>Some injuries treatable at scene.</p> <p>Single or multiple vehicle.</p>
<p><b>Medical Emergency Rescue (Rapid)</b></p>	<p>To demonstrate a casualty-centered rescue with a high level of regard for safety of all personnel.</p> <p>To demonstrate the access, release and removal of a casualty trapped by injury, entrapment and/or limb entrapment and may be critically injured.</p>	<p><b>10 minutes</b></p>	<p>Single casualty conscious but then going unconscious and confined to vehicle or immediate impact area.</p> <p>Some injuries treatable at scene.</p> <p>Single or multiple vehicle plus props.</p>

## 11.0 Definition of phases of vehicle extrication rescue and effect on assessment

11.1 Extrication can be divided into three broad phases:

- Casualty access, medical intervention and space making
- Extrication options for release
- Casualty packaging and pathway

11.2 **Complex Rescue:** Sufficient space will need to be created for medical assessment and intervention, with the casualties' release/packaging reflective to their mechanism of injury. Teams are expected to triage the casualties and identify the medical priority for extrication. To achieve success teams should work within the full three phases of vehicle extrication rescue to affect a thorough release and removal of both casualties.

11.3 **Standard Rescue:** Teams are expected to assess the casualty and identify the correct pathway for extrication, whilst recognizing the capability of the tools available. To achieve success teams will need to work efficiently and manage all the resources at their disposal to complete extrication of all casualties within the available time frame.

11.4 **Rapid Rescue (Medical Emergency):** Teams are expected to recognise the immediate lifesaving needs of the casualty. To achieve success teams will need to demonstrate a balance between efficiency, safety and urgency to achieve the task within the prescribed time frame.

## 11.0 Injury

11.1 If, during the challenge, an accident or injury occurs to a team member, casualty, spectator or any other person, that affects the running of the scenario, the injury will be advised to the organizers and hosts as an authentic occurrence.

11.2 The NAVRA Head Assessor, Scenario Assessors or Safety Officer, will immediately instigate competent medical attention to the situation via the local provider or crew on standby at the site.

11.3 The delay or ceasing of that scenario will be at the discretion of the Assessors led by the Command Assessors in that pit. The Challenge Coordinator is to be advised immediately.

## 12.0 Scenario Selection

- 12.1 There will be a bank of scenarios controlled by NAVRA. The exact scenario delivered to each team in each class will remain confidential.
- 12.3 In the interests of overall transparency and fairness the process of each team's Scenario selection will be as follows:
- 12.4 All team Captain's must present themselves to registration first thing on the morning of the event, or when designated. On a first-come, first-served basis, the team Captain will select from two boxes [1 rapid, or 1 Standard or 1 Complex scenario]. These scenarios will be numbered/lettered and will correspond with a list of scenarios held by the NAVRA Logistics Lead who will be responsible for event scenarios set up. These will form the team's scenarios for the event.
- 12.5 It is important that **ALL** team Captains present themselves for this selection process, otherwise a random selection will be made on the team's behalf by the NAVRA Logistics Lead. Attendance at the Captain's meeting allows Team's questions to be answered and gives direct access to the Assessors and Pit Bosses.
- 12.6 On conclusion of the National Challenge, after the presentation of awards, each team will receive its score sheet as well as a brief scenario overview reflecting the scenario the team participated in.

## 13.0 Extrication Tools & Equipment List

- 13.1 A degree of flexibility in the availability of equipment has to be acknowledged due to the location of the event, sponsorship deals and availability. Therefore, a definitive list of available items will be finalised prior to the challenge commencing.
- 13.2 A generic list of equipment that will be available can be viewed below.
- 13.3 The hosts will arrange to provide a range of makes and models of rescue tools which will ensure as much as possible of the equipment listed in the organiser's recommended equipment list as provided for each pit. Teams may have access to hydraulic, electric and/or air operated equipment depending on the scenario class.
- 13.4 Every effort will be made by the hosts and the organisers to ensure that the preferred make of hydraulic tools is available for each team, but this is not guaranteed.
- 13.5 With reference to large tool allocation, teams will be limited to the following items for each of the classes:

- One large jaw operating cutting device (powered by either air, hydraulic or electric)
- One large spreading device (powered by either air, hydraulic or electric)
- One large ramming device (powered by either air, hydraulic or electric)
- One small ramming device (powered by either air, hydraulic or electric)
- A small cutting device e.g. pedal cutter (powered by either air, hydraulic or electric)
- 4 stabilization devices e.g. Tension Buttress, strut systems or similar devices

**NOTE: Any deviation from this rule will be at the discretion of the NAVRA Head Assessor and their decision will apply to all teams.**

13.6 Teams are expected to supply their own consumables (e.g. PPE, tapes, sprays, etc.). Hosts are asked to ensure they have sufficient stock to re-supply teams, but this should not be assumed by participating teams.

13.7 Teams may bring a limited amount of tools and/or equipment for use in any of the pits and should be available for all other teams to use from the first until the last scenario of the Challenge in all pits or in a specific pit. All of these items, including personal equipment belts and contents, must be scrutinized by Assessors at a time and place determined by the organizers/hosts, prior to the commencement of the WRC.

13.8 Items supplied in the tool area, which perform a similar function to equipment that teams introduce, will be removed. This is to ensure that teams bringing additional equipment do not gain a quantity advantage.

13.9 Engineering certification must be produced for any tool or piece of equipment brought by a team that is likely to bear load or be put under mechanical stress. The Assessors' decision on tool and equipment suitability will be final.

**Note: Teams wishing to introduce their own tools should speak to the Head Assessor at the team briefing to gain approval; approval cannot be given on the day of the challenge.**

13.10 The hosts local rules may apply in the prohibition of certain items of equipment and should this be the case all teams will be informed prior to the Challenge.

**Note: All team members should make themselves familiar with any tool that they may use at the Challenge. The organizers recommend that tools should only be used by people competent in their operation.**

13.11 The following is an example of an equipment list which will be made standard stowage for each extrication pit for the Challenge. All teams must use this equipment as required.

13.12 Teams may not provide their own equipment, other than approved personal small gear, i.e. hand tools, medical collar etc.

13.13 **Fire fighting**

DP Extinguisher [1]

**Small Gear**

Halligan tool [1]

Crow bar [1]

Ratchet strap (30' with snap hook) [4]

Glass punch [1]

Hand axe [1]

Duct tape [2]

Seat belt cutter [1]

Bolt croppers [1]

Traffic cones [4]

Bucket with absorbent material [1]

RAM support [1]

**Tool Kit**

Rubber mallet [1]

Screw driver slotted [3]

Screw driver posi-drive (star) [3]

Set of spanners [1]

Adjustable spanner [1]

Pliers [1]

Locking knife [1]

**Stability Equipment**

Blocks composite (3" thick) [6]

Blocks composite (2" thick) [6]

Blocks composite (1" thick) [6]

Step blocks wood/composite [6]

Wedges, composite (6" width) [6]

Wedges, composite (3" width) [6]

4 x 4 composite cribbing [8]

2 x 4 composite cribbing [8]

Short extension ladder (two section) [1] or Extrication Platform [1]

Hi-Lift First Responder Jack (60" & 48")

Stability system (or similar) chosen by teams [4]

Airbags with regulator & cylinder [2]



**Battery Power \***

Impact driver with socket set [1]  
Spare Batteries [2]  
Reciprocating saw [1]  
Long Spare Blade [2]  
Short Spare blade [2]  
Spare batteries [2]

**Electric Tools**

Reciprocating saw [1]  
Power Plant [1]  
100' Electrical Extension Cord [1]  
Long Saw Blade [1]  
Short Saw Blade [1]

**Hydraulic Tools**

Set chosen by teams (cutter, spreader, short Ram, long Ram, mini-cutter) [1]  
**Only one type of power source is allowed (battery or combustion)**  
20' 3/8" Grade 70 Rescue Chain with grab hooks [2]  
Chain Cluster [2]

**Pneumatic Tools**

Air Chisels set with regulator and 2 Air cylinder

**Moving Tools**

Floor Jack [1]  
Dollies (can be 4 ratcheting or 4 flat, or 2 & 2) [4]

**Protection Equipment**

Tear drop - hard protection [2]  
Airbags protection [2]  
Soft protection sheet [2 set]  
Salvage sheet [1]  
Tarp for equipment [1]  
Screen sheet [1]  
Sharps covers – Large [6]  
Sharps Covers – Medium [6]  
Sharps post covers [6]  
Packexe Smash or similar [1]  
Packexe Sharpwrap 8" or similar [1]  
Packexe Sharpwrap roller or similar [1]  
PVC tube, 10 cm sections to hold sharp edge protections [10]

**Medical Equipment**

Long spine board [1]  
Short spine board [1]

Medical collars [1]  
Resuscitator/ O2 therapy unit + O2 cylinder [1]  
Trauma, Blanket [1]  
Pelvic Sling [1]  
Trauma bag [1]  
Blanket [1]

- 13.14 If vendors are providing any power tools, the Brand and Model should be announced prior to the event.
- 13.15 \*Teams may exchange the power tool sets or reciprocating saws with the brand of their choice as long as the tool is of the same voltage rating or less.
- 13.16 Please note that all the above equipment will be stowed on pallets within the pit area. Teams will choose their hydraulic gear prior to being sequestered and this will then be transferred on a pallet to the pit or placed upon the Fire Apparatus.
- 13.17 Teams are responsible for providing their own dust masks, latex gloves, goggles and ear defenders as appropriate. [1 set]
- Note 1:** All of the above equipment will be provided by the event organizers.
- Note 2:** Teams may not use any additional trauma equipment to those items listed Above without the approval of the Lead Assessor.
- Note 3:** Teams may substitute trauma equipment items for their own equivalent items upon approval of the Lead Assessor.
- Note 4:** Team Medics may carry a pouch or small bag of medical equipment which Must be viewed and approved by the Head Assessor.
- 13.18 If teams want to use a tool which has not been included in the tool list for that event, the team has to get the approval of the Head Assessor for that tool to be included in the event. Once the tool has been approved, the tool must be made available to all competing teams, either in a specific pit or in each pit.
- 13.19 If the Lead Assessor approves any additional equipment/tool(s) introduced by a team, the tool(s)/equipment must be made available to all teams in all the pits or in one particular pit for the entire competition.
- 13.20 Teams may not use additional trauma equipment to those listed above without the permission of the Lead Assessor.
- 13.21 Teams may substitute trauma equipment items for their own equivalent items upon approval of the Lead Assessor

## 14.0 Team Presentation at Challenge

- 14.1 Teams will present themselves at a location nominated by the hosts, and specified during the Team briefing, at the time indicated on the timetable.
- 14.2 Once the team presents themselves, they are to remain there until they are escorted to the tool staging to commence their equipment inspection.
- 14.3 The team will have a set time as detailed on the timetable to stage all of their tools and equipment.
- 14.4 When the team has either completed equipment preparations or the time has expired, they will be taken to an isolation area out of sight of the pit to allow for the staging of their scenario.
- 14.5 Any items the team identifies as being missing or unserviceable are to be brought to the attention of the Pit/Logistics Manager before the team enters into isolation.
- 14.6 The Pit/Logistics Manager will be responsible for resolving the issue and communicating the outcome to the team while they are in isolation.
- 14.7 The team will be taken to the challenge pit once their scenario has been staged.

**Note: While in isolation, the use of mobile phones, pagers and digital cameras is prohibited by team members. Any teams found in violation of this rule will be disqualified.**

## 15.0 Breakdown of Scenario

- 15.1 At the conclusion of their scenario, each team must help in the breakdown of the tools and equipment and assist the pit team in reorganising items ready for the next scenario.
- 15.2 This may be varied at the discretion of the Hosts subject to the number of personnel in the pit crew available to break the scenario down.

## 16.0 Disqualification

- 16.1 Any team or team member that does not adhere to these rules or brings disrepute upon NAVRA may be disqualified.
- 16.2 Any matter concerning the possibility of a team disqualification or a matter bringing NAVRA into disrepute will be heard by a committee made up of the NAVRA Head Assessor and two other members from the organizing body. Any decision made by this group will be final.

- 16.3 Spectators or team supporters may encourage teams in the spirit of fair play; however, any “coaching”, including calling time remaining, from the spectators or team supporters will result in a “Freeze” being called, but the clock will continue to run.
- 16.4 The Command Assessor will give a warning to the offending person or persons. Any subsequent coaching call will result in time being called on the participating team.

## 17.0 Health and Safety

- 17.1 A risk assessment will be conducted prior to each evolution to ensure the safety of both participants and spectators. Dynamic risk assessments will occur throughout the evolution, not only by the team involved but also by the assessors and Safety Officer. Any unsafe or potentially unsafe practice will be stopped immediately and put right.
- 17.2 All activity within the Challenge site, i.e. Pit area, Service area, Vehicle storage and disposal area, Team and Tool preparation area falls under the control of the Event Coordinator who will liaise with the event Head Assessor who is responsible for the overall Health & Safety in these areas.
- 17.3 No Team will be allowed to commence their evolution without direct approval of the Event Coordinator, subject in all cases, to the following:
- (i) All Team members are properly attired in their approved personal protective equipment.
  - (ii) All non-proprietary equipment is accompanied by the relevant documentation.
  - (iii) The Event Coordinator has ‘cleared’ the scenario.
- 17.4 Should, in the opinion of any event official or Assessor, a potential or existing danger, or an unsafe condition be seen to exist or caused to exist, then that official or Assessor must immediately halt the assessment. Any activity carried out after this, other than to ensure safety, may be penalised at the discretion of the Head Assessor.
- 17.5 Should any member of a team participating notice an existing or potential danger, or an unsafe condition, to exist or be caused to exist, they must call a halt to any activity by shouting ‘**FOR REAL**’ or ‘**STILL**’, or a whistle is blown by the Assessor. ALL members of the team will immediately stop their actions. This command indicates that a safety problem exists. Time will be stopped until the safety issue is rectified. Once addressed the Command Assessor will give the instruction for the team to continue and the clock will re-commence.
- 17.6 If there are any other safety stoppages during the same evolution, the time will not stop and the team will have to rectify the situation while the clock continues to run.

- 17.7 The above safety calls can be made by any of the Assessors or Safety Officers. If the problem cannot be rectified, the NAVRA Head Assessor may disqualify the team or cancel the evolution.

**Note: Any activity carried out after the calling of 'FOR REAL' or 'STILL', except to make safe, may be penalized at the discretion of the Head Assessor.**

- 17.8 No team member will be permitted to commence moving, cutting or breaking any vehicle component without the casualty being suitably protected and other team members in direct proximity having their face visors in the down position, if so provided.
- 17.9 Should any item of the casualty's personal protective equipment be removed by a team member, for any reason, it must be replaced before work can recommence. Failure to do so may result in loss of points or possible disqualification.
- 17.10 Vehicle tires can only be deflated by valve or valve stem removal. The slashing or puncturing of tyres is prohibited.

## **18.0 Timing**

- 18.1 Assessors in each pit will be responsible for accurate timing of the scenario. The Command Assessor will call "time" or blow a whistle when time has elapsed. Alternatively, the Team Leader/OIC can call "time" before the available time has elapsed, when the casualty has been extricated and the Team Leader /OIC believes the team has completed the scenario.

## **19.0 Assessing and Scoring**

- 19.1 A panel of qualified Assessors will assess each team's performance. The parameters assessed are detailed in the Assessor's Guidelines and on the Challenge Assessment Sheets. These are based on best practice within NAVRA's agreed format following liaison and agreement from partner rescue organizations Technical Groups. To that end, teams are encouraged to strive for the standard of excellence described in all areas, especially extrication techniques coupled with casualty care and safety.
- 19.2 Teams should note that Assessors are briefed to assess a team's performance on what they see and hear, not what they expect to see and hear. With this in mind teams are urged not to 'play up' to the Assessors by giving a running commentary of what they might do under certain conditions, but to actually do what they would normally do if they encountered the same scenario on the road.
- 19.3 Each extrication team will be evaluated in the following areas by a panel of three/four assessors.

- (a) Incident Command and Control (Command)**
- (b) Physical Rescue and general extrication techniques (Technical)**
- (c) Pre-Hospital Medical care and Casualty Extrication (Medical – Interior and Exterior Assessors)**

- 19.4 The assessment sheets will remain the property of the NAVRA and will not be available for viewing or scrutiny by any unauthorised persons. Copies of all the assessment sheets in use will be provided to each accepted team prior to the event. Copies can also be sourced by visiting the NAVRA website [www.Navraus.org](http://www.Navraus.org).
- 19.5 Points awarded per sub-section will be totalled and each sub-section added together to give an overall score for that particular criteria.
- 19.6 Each Assessing Discipline score, for each scenario type ('Rapid', 'Standard' or 'Complex') will result in a ranking, i.e. the highest score within Command, will be ranked first, equating to 1 point.
- 19.7 A team's overall scenario type and/or NAVRA Extrication Challenge score will be the combined ranking points, i.e. where a team finishes first in Command (1 point), eighth in Technical (8 points) and fifth in Medical (5 points), their total team score for that scenario is 14 points. Should the same team score 12 points within the next scenario, their NAVRA Extrication Challenge score will be 26 points.
- 19.8 The 'Best Team' will be decided by the lowest combined ranking points across all categories.
- 19.9 Each score sheet will be compared in order to recognise the 'Best Individual' team member in each criteria, i.e. Command and Control, Technical Rescue, Pre-Hospital Emergency Care.
- 19.10 Following each scenario in each class, the Assessor Team managing that class will conduct a short debrief with each participating team and is designed to provide a learning opportunity for all involved. To that end teams are encouraged to have their manager or any other support person take notes or video the discussion, subject to approval by both the team leader and the Command Assessor.
- 19.11 It is important for the assessors to inform the teams of the areas where they scored half of the allowable points or less for sections with maximum score of 10 points or less and a quarter of the sections scoring above 10 points, so teams can know and learn which areas of their performance needs improving. Teams should not be surprised that they scored poorly in any area without their knowledge when the scores are handed out after the award ceremony.

19.12 A Head Assessor will be appointed to coordinate the Assessors and resolve any disputes. The Team leader of any team that has a grievance or dispute with the assessment must report such in writing to the Head Assessor within one hour of completing the debriefing session, following the scenario concerned on the day.

19.13 Recorded video or still photographs may be used to help settle such disputes.

19.14 Once all the evidence has been reviewed and all concerned parties have been allowed to make their presentations, a determination will be made.

19.15 This determination will be made by the Head Assessor and this determination shall be final.

19.16 Score sheets with Assessors comments will be available to each Team Manager after the Awards Presentations, or as soon as possible thereafter.

19.17 A 'Count Back' process will be undertaken to establish the final overall ranking.

19.18 The 'Count Back' process will be conducted as follows:

- The total scores for the all Assessing Disciplines and scenarios will be added together, the highest total score will be declared the winner,
- Where the above result is tied, the Command Assessing Discipline, with the highest ranking Incident Commander (IC) will dictate the winner, due to the IC's overall responsibility for the Health and Safety of the casualty(s) and emergency service responders, at any given incident.
- Should the above still result in a tie, the Medical Assessing Discipline will be compared.
- If still tied the Technical Discipline will be compared,
- Should there still be a tie the best complex team, then standard/limited team, then rapid team will be compared.

19.19 In the unlikely event every criterion above is tied the scenario and/or NAVRA Extrication Challenge will be declared a 'dead heat' and both teams will be awarded the same recognition.

## **20.0 Awards**

20.1 The North American Vehicle Rescue Association recognises the performances of the Team AND the individuals of every Team. The effort and dedication that has been put in by team members and supporters towards this Challenge over many weeks & months shows the value of just such an event as this.

20.2 Official awards will be made to the top placing teams at the post event meal and Award Ceremony.



- 20.3 Prizes will be presented in the following categories (this list does not preclude other categories being added):

**EXTRICATION**

Best Overall Team  
2<sup>nd</sup> Place Team  
3<sup>rd</sup> Place Team

Best IC  
Best Tech Team  
Best Medic

Best Team in the Rapid Scenario  
Best Team in the Standard Scenario  
Best Team in a Standard (Limited) Scenario  
Best Team in a Complex Scenario

International RTC Team Award

**21.0 NAVRA RECOGNITION AWARD**

- 21.1 Annually, following the National Challenge, the NAVRA Committee will select the recipient in recognition of an individual's or team's contribution/ services to rescue training and the 'Challenge Concept'

**22.0 Updating Documentation**

- 22.1 Each year following the National Rescue Challenge, the NAVRA Executive Board will establish a forum whereby teams and assessors can discuss and debate issues that have arisen or are arising and make suggestions and amendments on current techniques and standards.
- 22.2 This will then form the premise for a reference document, created by the assessors and members that can be used for acceptable practices and standards.
- 22.3 The day prior to each Rescue Challenge, designated assessors will attend a seminar to confirm the standards by which the event will be assessed, assure consistency in assessing and clarify/resolve any issues.

