

# NSW STATE ROAD CRASH RESCUE CHALLENGE

STRONGER TOGETHER



# RESCUE SKILLS CHALLENGE RULES

(6 Rescue operators)

NSW State Rescue Skills Challenge Rule 6 operators 2025 V1.5



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Original Issue:

March 2021

Document Owner: Firefighter Championships Association

Current Version: V1.5 EXEC OFFICER 24/3/2025

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Review By: Tim Fox. (23 March 2025)

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## 1. Objective / Core Competency Skills

To assess various rescue skills of a team of 6 rescue operators.

**Core Skills** – Rescue Skills (Knots, Combi Tool, Petrol Hydraulic Pump, Battery Combi Tool, Forced Door Entry, Stokes Litter, Spine Board, Halligan Tool, Lifting Airbags, Patient packaging).

## 2. Equipment

There is no equipment from Teams for this event other than that which is set up on the track for use in the scenario.

Full issued duty wear PPE (by each agency) is required for this event (Boots, Helmets, Gloves, Eye protection) Level of protection depending on agency requirements.

All PPE to be worn for entire event.

Equipment supplied for scenario. (FCA / FRNSW)

- Combi Tool (Hydraulic)
- Combi Tool (Battery pack)- Additional (spare batteries and rapid charging)
- Dual hoses with quick connects.
- Portable petrol hydraulic supply pump- (10L Jerry Can ULP)
- Halligan Tool and Holmatro Forcible Entry Tool T1
- Hammer and wedges (4)
- Stokes Litter
- Spine board
- 4 Straps
- 4 Blankets
- GP line for knots 4 x 3m (min length)
- Kernmantle rope for knots 4 x 3m (min length)
- Resettable Entry Door Prop x 2
- 30 Barriers
- 100mm water pipe length 4x3m
- 3x3 Gazebo
- HD Zip Ties 100
- 50x25 wet soaked hardwood 80 x 300mm
- 2 stop watches (FCA)
- 4 clip boards with scoring sheets (FCA)
- Copy of rules laminated (FCA)
- 4 RESCUE assessors (FCA)
- 1 Chief Track Judge (FCA)

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- Damaged car as an event prop (will not be cut)
- 20 Ton Airbag kit for lifting
- Air Cylinders x 12
- Manikin x 1
- 4 large concrete paving blocks (38.5 Kg each)
- 2 H Beams 2m x (125x90)

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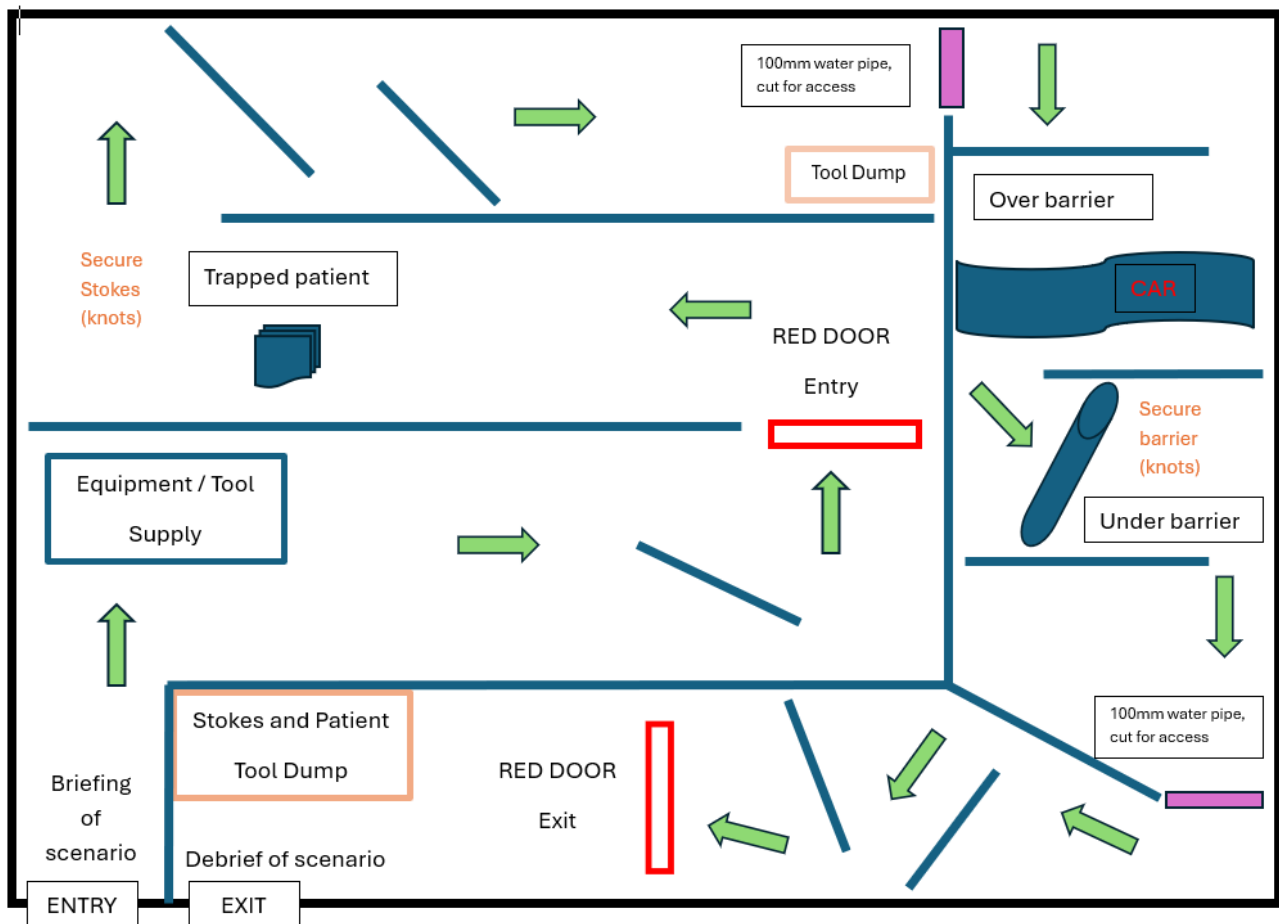
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### 3. Layout of Track



The track is set up with 10 areas with the different rescue operations to be completed:

- Briefing on scenario
- Familiarise with equipment
- Entry through a entry door prop (Halligan tool)
- Find trapped manikin, retrieve using a spine board and air bags, secure patient, package into stoke Litter, secure stokes for transport / hauling with knots
- Combi Tool to water pipe (Access)
- Proceed through confined space (over car under barrier, secure barrier with knots)
- Combi Tool to water pipe (Access)
- Stokes Litter (Carry stokes litter through slalom).
- Exit through a entry door prop (Door entry tool)
- Debrief

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## 4. Running of Event

### a. Pre-Operational Check

This is **not** assessed. Teams will have the opportunity to check and be familiar with all equipment that they have available to use in the event. They can talk and discuss while checking equipment for operational use. Equipment must be left with in the designated tool dump area.

This section of the event is to be completed prior to the commencement of the event on the track and will be supervised by Rescue trainers.

Once the equipment has been checked, all items are then deemed to be operational. If while using tools as part of the event a tool doesn't operate correctly due to the condition it was left after inspection, it is said to be operational and no option for a re-run will be granted.

NB Tools cannot be preconnected to power source until the event commences.

### b. Track Evolution Safety

During the on-track evolution, judges will call "safety stop" whenever a competitor is working in an unsafe manner, such as not using eye protection, not operating Combi with safety, running in slalom or other "at risk" activities that may be observed.

On the start signal all six competitors will start on the start line and proceed to the First evolution.

### c. Knots

Teams will be required to tie knots at different stages of the event. No team member can tie more than one knot during the event. No competitor will move onto the next evolution until all sequence of that evolution including any knots are completed. Knots will be assessed on the completion of the evolutions and debriefed at the finish.

There are 2 Life Knots and 2 General knots assessed in this challenge.

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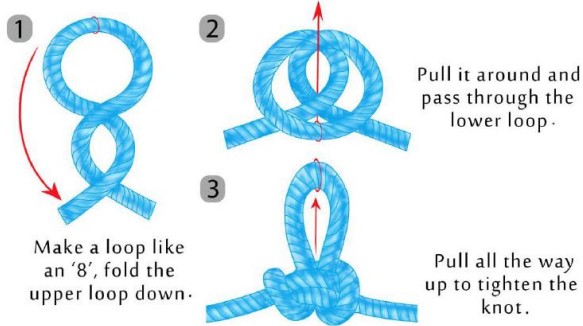
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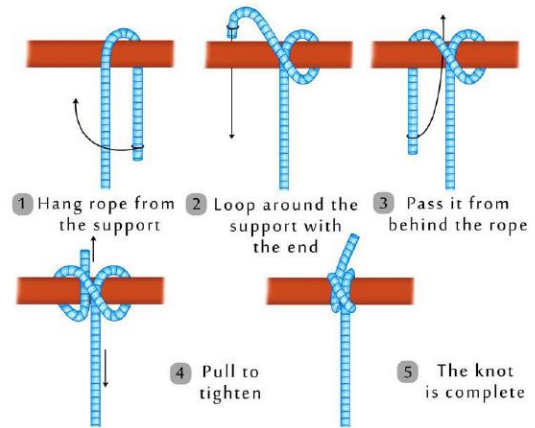
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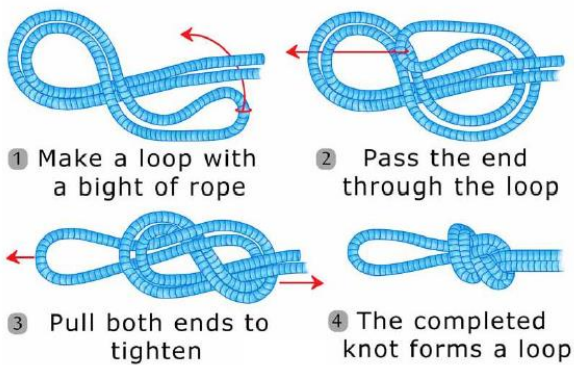
### 1. Alpine Butterfly Loop



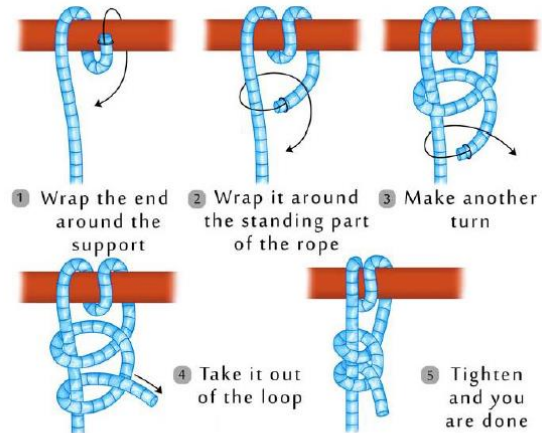
### 2. Clove Hitch



### 3. Figure 8 – Loop



### 4. Round Turn and Two Half Hitches



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#### **d. Combi Tool -Petrol Hydraulic Pump**

Teams will be required to collect all equipment from the Tool Dump and carry equipment to the task location and assemble ready for safe use. One member will operate the hydraulic pump and another member will operate the Combi tool.

Pump operator will start pump and on command from tool operator of “power on” or “power off”, open or close the hydraulic valve from the pump to tool hydraulics. On command of power off, the pump operator will close hydraulic valve, then stop pump engine using stop button on pump motor. There will be 2 cuts required for this evolution, a higher and lower pipe.

The second member of the Combi tool crew will take hold of the Combi tool. Once the operator has control of the tool “power on” command is given.

The tool operator will proceed to fully open jaws (Denoted by sound of pressure relief valve), then in the closing mode, cut marked section of pipe. The pipe designates a barrier that cannot be passed until removed from the pathway.

The tool operator will then close jaws so daylight may be seen through gap but not greater than 5mm (gauge provided)

Equipment may remain connected after use, as long it is in the designated Tool Dump area.

NB only 1 evolution of cuts (2) can be achieved by either tool (Hydraulic / Battery)  
The aim is to simulated tool failure.

#### **e. Combi Tool - Battery**

The tool operator will proceed to fully open jaws (Denoted by sound of pressure relief valve), then in the closing mode, cut marked section of pipe. The pipe designates a barrier that cannot be passed until removed from the pathway.

The tool operator will then close jaws so daylight may be seen through gap but not greater than 5mm (gauge provided)

Equipment may remain connected after use, as long it is in the designated area.

The Battery Combi cannot be conducted by either of the Combi Tool Hydraulic operators.

NB only 1 evolution of cuts (2) can be achieved by either tool (Hydraulic / Battery)  
The aim is to simulated tool failure.

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## f. Stokes Litter & Patient Packaging

### Patient Packaging (Team of six)

The other members (not involved in Combi) will proceed direct to the stokes litter and patient once access past the doorway has been made. Members from the Combi can assist with patient packaging once they have completed their required evolution.

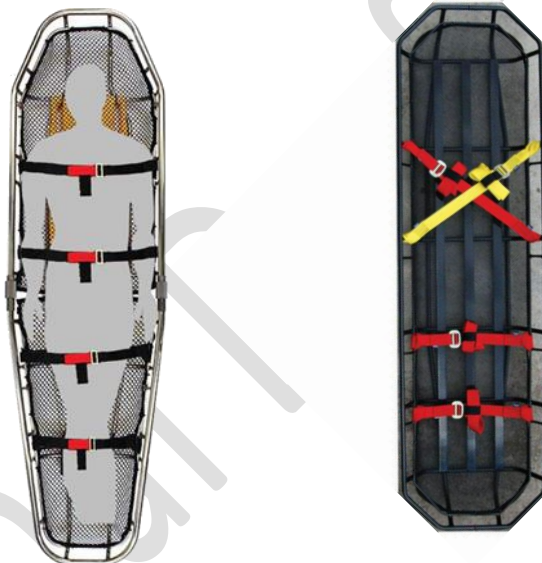
NB a Manikin will be used for this scenario.

Members will proceed to package the patient, place on a spine board, with a head support (Blanket) and secure with strops provided within the stokes litter.

Patient to be loaded onto the spine board and placed in the stokes litter. (NB there is no scoring on medical approach, only the packaging of the patient.) (Spine board to remain with patient and stokes litter)

Packaging must secure the patients shoulders, hips and feet, including enough support to ensure the patient cannot move or slide within the litter.

Straps are to be connected in 4 locations as per either diagram.



**NB this is a Manikin patient scenario, so safety and security is still paramount.**

### FRNSW Supplied Stokes and spine board 4 straps (Non vertical rescue scenario)

Once 6 members of the team are at the stokes litter, they will lift the stokes (Command of “Prepare to Lift...Lift”), then proceed through the slalom course, place down on the mark (Command of “Stop – Prepare to lower – Lower”) whereupon one member will proceed to the finish line and strike the bar to stop their time.

Running is not permitted. No barrier can be knocked over (safety stop).

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### **g. Retrieving Manikin from an entrapped situation.**

The purpose of this sequence is to retrieve an entrapped patient from under a heavy weight. The use of the Airbag kit is required to remove the patient with the spine board and securing within stokes litter.

All equipment such as bags, cylinders and packing blocks will be supplied at the start equipment dump point.

Spine board must be used as part of the retrieval process.

### **h. Confined space evolution**

The purpose of this sequence is to manoeuvre the stokes with patient over an obstacle within a confined space and then will be required to manoeuvre under an obstacle after securely bracing and securing the obstacle.

The barrier for passing under will need to be secured at ether end using the appropriate knots for that barrier. Once the obstacle is secured the area will be deemed safe to proceed under the barrier.

### **Weighting of Time**

Every Team will commence with 100 points

Points will be deducted as per penalties 2, 5, 10 points.

Weighting of overall time will be added to the points at the completion of the event.

Team with the highest aggregate points will gain 50 points and reduced by 2 points for second and onwards.

Fastest time            50 points

Second fastest        48 points

Third fastest          46 points

Four fastest            44 points

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Slowest team           8 points (minimal points allowing for 22 teams)

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## Penalties (negative points)

<b>Penalties – Rescue Event</b>		
<b><i>Cordage Section</i></b>		
1)	Life knots tied incorrectly	10
2)	Life knots packed incorrectly	5
3)	General knots tied incorrectly	5
4)	General knots packed incorrectly	5
5)	Selecting the incorrect knot for the scenario per knot/scenrio	5
<b><i>Combi Tool Section Petrol Pump</i></b>		
6)	Operator not in control of tool when giving command for power on	2
7)	Not fully opening the Combi jaws prior to cutting	10
8)	Not returning the combi tool jaws to the park position (the gap being daylight through jaws & not more than thickness of off cut piece of steel) Daylight and 5mm	10
9	Not turning off the hydraulic valve before stopping the pump	5
10)	Not returning equipment to designated area (Leave gear in a safe marked area before leaving task)	10
<b><i>Combi Tool Battery</i></b>		
11)	Not operating tool using handgrip and Deadman's handle.	10
12)	Not fully opening the Combi jaws prior to cutting	10
13)	Not returning the combi tool jaws to the park position (the gap being daylight through jaws & not more than thickness of off cut piece of steel) Daylight and 5mm	10
<b><i>Stokes Litter Section</i></b>		
14)	Not Use spine board for patient packaging	30
15)	Any competitor straddling the stokes litter	5
16)	Not giving the correct commands (Prepare to lift – Lift)	5
17)	Knocking over any of the posts (including bumping barriers) <b>(EACH)</b>	5
18)	Not giving the correct commands (Stop – Prepare to lower – Lower)	10
19)	Not placing the stokes litter in the designated area (across finish line and placed with commands	10
20)	Running while carrying Stokes Litter	10
21)	Not wearing PPE for entire event.	10
<b><i>Patient Packaging</i></b>		
22)	Head not supported with a blanket or similar provided	10
23)	Feet not secured together	10
24)	No stop support at feet used, to ensure patient will not slide within the litter (blanket or similar)	10

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25)	3 points of support straps <b>not</b> used (shoulder, hips, lower legs)	10
<b>Air Bag lift</b>		
26)	Not using Air Bag to lift weight clear of manikin	30
27)	Abuse of equipment	10
28)	Not using spine board to retrieve manikin	10
<b>Confined space- Under and over with stokes</b>		
29)	Loosing control of stokes over barrier	20
30)	Not secure barrier for under sequence	10
31)	Entry gained without use of supplied tool	10

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