

RNLI STANDARD OPERATING PROCEDURE



Rescues From Vehicles

Validation

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Objective

To ensure that the safest possible operations take place when rescuing persons from vehicles.

Reference Documentation

Flood Rescue manual
CoBT 16.1m
Flood Rescue check cards

Checklist

SOP communicated and understood by all?	<input checked="" type="checkbox"/>
Appropriate PPE identified /specified?	<input type="checkbox"/>
	<input type="checkbox"/>
	<input type="checkbox"/>
	<input type="checkbox"/>

Hazards

Finger entrapment	Glass
Undeployed airbags	Electric window and door lock failure/operation
Limb entrapment	Battery and electrics
Drowning	Vehicle contaminants
Siphon hazard	Buoyancy release once casualty evacuated
Sharp edges	Breaking lines

Health and Safety

 Caution	 Protective clothing must be worn				
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Vehicles in water present a significant risk to rescuers, whether the water is moving or not.

The lower door sill should be used as a guide to assess if a vehicle may be stable or not. If above the sill, assume it is unstable.

It is not possible to stipulate standard operational procedures for all rescues due to the high variance in vehicle type, buoyancy, hydrological effects and access. However, there are generic rules and considerations which should be followed.

- Is the vehicle stable? If not, consider stabilisation
- Are persons trapped inside the vehicle?
- Can doors or windows be opened?
- Is flow around the vehicle likely to move it?
- Is the flow rising or falling?
- Can other rescuers access the vehicle more safely?
- Vehicle body panels will be extremely slippery when wet

Stabilisation

- Attaching a line to a vehicle **MAY** reduce the possibility of it moving
- Stabilisation lines must be capable of securing a vehicle to be effective. **The capability of RNLI flood rescue rope equipment will be exceeded if the water depth is 50cm and flow is 10 knots or above**

The forces exerted on a vehicle by moving water can be substantial and cannot be quantified, with potential sudden loading possible should the wheels lose contact with the ground. Therefore any stabilisation applied MUST only be considered as an improvement to the situation, rather than a fully safe solution. The danger areas will still need to be treated as such.

Glass management

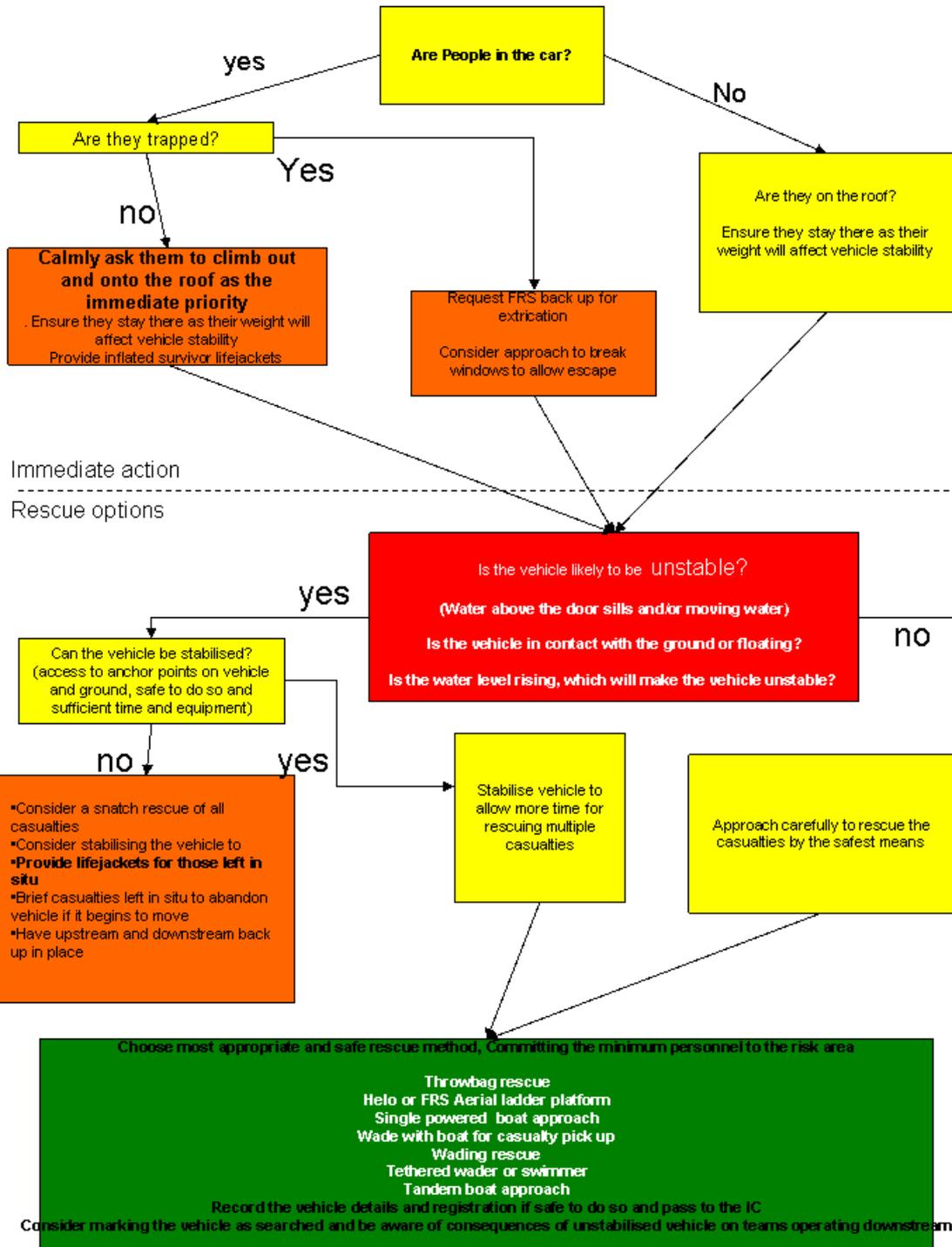
It may be necessary to break glass to effect a rescue, however the following must be observed:

- **Consider the effect of breaking glass on buoyancy (particularly in deep water). The vehicle might be 'sealed' and thus kept afloat by the air inside**
- **Only toughened glass can be broken; laminated glass (windscreens) cannot be broken or kicked out**
- **Eye protection must be worn**
- **Ensure the casualty is shielded and warned before breaking glass**
- **Only use the appropriate device to break glass. This must provide a concentrated pinpoint of pressure in one corner of a window**

Subsurface rescues

Whilst an emotive issue, the risks involved in attempting to rescue a casualty from a fully submerged vehicle are enormous along with very limited chances of success, and should not be attempted. Even to duck dive momentarily carries an enormous risk of entrapment and should not be attempted. There is no rule or guarantee that an air pocket may be maintained within the vehicle for a period of time. Such rescues should be left to specialist dive rescue teams.

For on-scene guidance, the flowchart below should be followed:



- **It should not be necessary for rescuers to enter the passenger cell during rescue operations. The risks presented to the rescuer are enormous, including un-deployed airbags which can kill, and physical entrapment**
- **Under no circumstances should rescuers enter a vehicle in water to collect the occupants' belongings, due to the significant risk posed by un-deployed airbags**