PUASAR032

Learner Guide Instructions

<u>Who is this document for?</u>
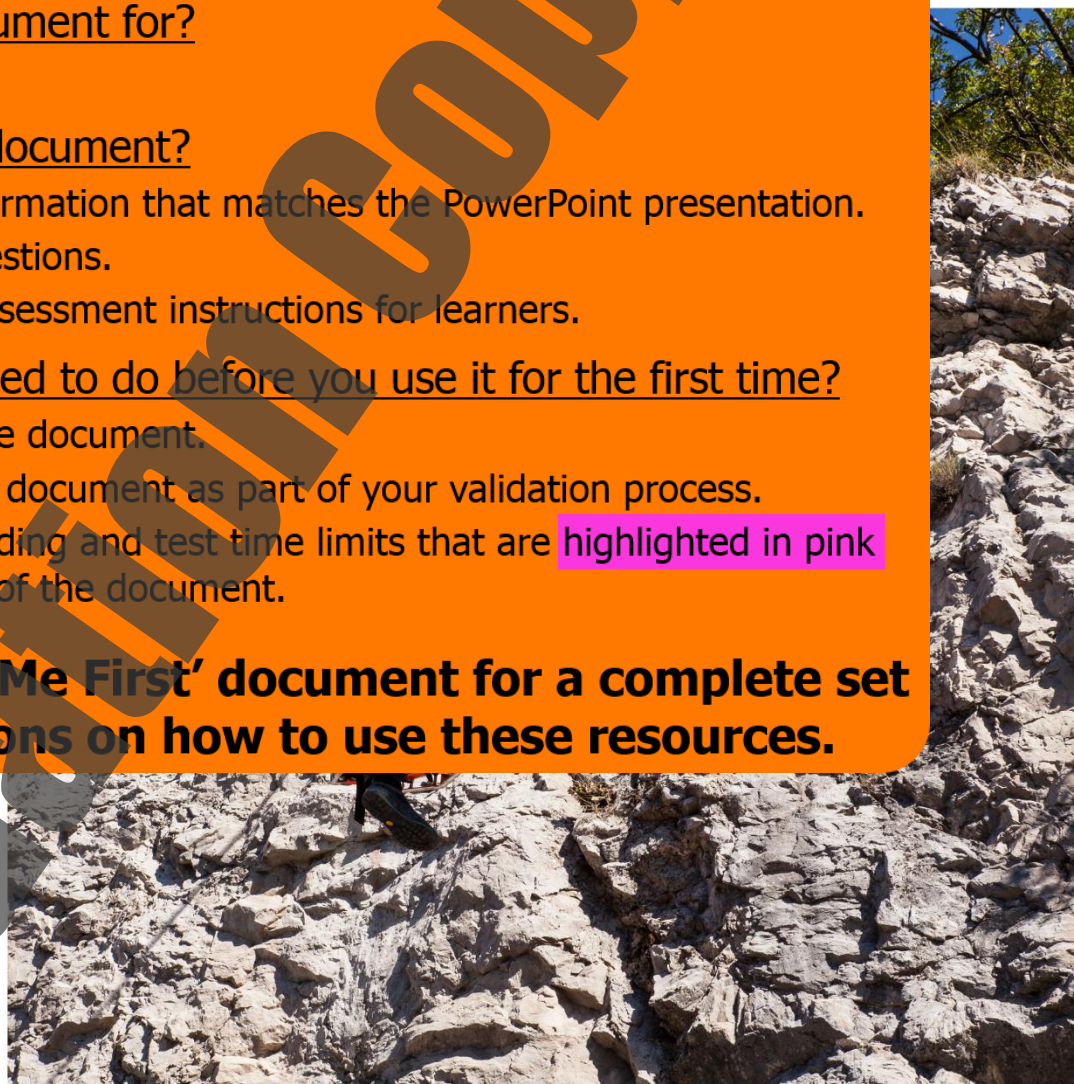
The learner.

<u>What is in this document?</u>

- Course information that matches the PowerPoint presentation.
- Review questions.
- Practical assessment instructions for learners.

<u>What do you need to do before you use it for the first time?</u>

1. Rebrand the document.
2. Review the document as part of your validation process.
3. Set the reading and test time limits that are highlighted in pink at the end of the document.

See the 'Read Me First' document for a complete set of instructions on how to use these resources.

LEARNER GUIDE

PUASAR032 Undertake Vertical Rescue

Learner Name:	
Learner ID:	
Learner Contact Number:	
Learner Email Address:	
Date Training Commenced:	

This Book Contains:

☐ Course Information.
☐ Review Questions.
☐ Practical Assessment overview and Instructions.

Table of Contents

1.1 Introduction

These training materials are based on the National Unit of Competency **PUASAR032 Undertake Vertical Rescue**.

You will learn about:

◆ Preparing for and responding to vertical rescue.

◆ Assessing and managing vertical rescue.

◆ Establishing a vertical rescue system.

◆ Performing vertical rescue.

◆ Removing casualties.

◆ Terminating vertical rescue operations.

It is essential that the prerequisite units listed below are obtained prior to the issuance of this unit:

◆ PUASAR022 Participate in a Rescue Operation.
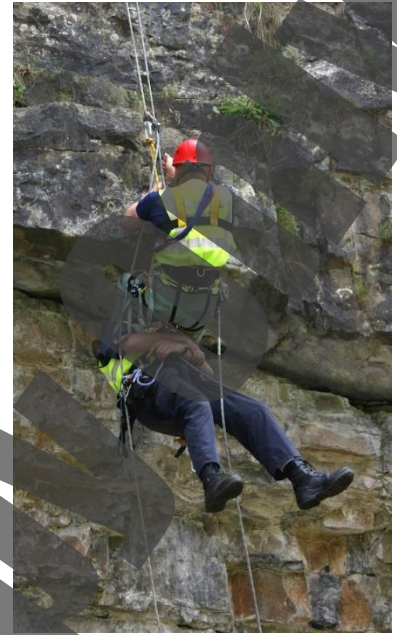
1.1.1 What is a Vertical Rescue Situation?

A vertical rescue situation occurs when the persons involved require urgent emergency assistance to be saved or retrieved from heights or depths involving the use of vertical rescue systems and equipment.

Due to the complexity of the emergency rescue operation and the hazardous environment, selection of rescue personnel with the appropriate skills and experience is of utmost importance.

Vertical rescue is a hazardous and often stressful operation. It involves working under extreme physical and psychological pressure, handling strong emotions such as fear or anxiety and facing dangerous and at times tragic circumstances.

It can also be extremely rewarding as rescuers can take great pride in saving lives and returning trapped or lost people to loved ones.

Anyone involved in vertical rescue should be fully trained and competent in all aspects of the tasks involved.

1.2 Receive Task and Rescue Information

Once it has become known that a person or persons require a vertical rescue, information will be collected and communicated to the relevant emergency and rescue services in order for a rescue operation to be prepared for and carried out.

1.2.1 Rescue Information

There is certain information that will be gathered and communicated to the rescue team based on the emergency situation as a priority.

To prevent danger to both the rescue team and the casualty/s when trying to carry out a vertical rescue, it is important to know what has happened and where casualties are located.

This operational rescue information may be obtained through a variety of sources. They have been grouped into 3 (three) main categories: people, systems and documentation.

Examples of these sources may include:

Source	Examples
People	◆ Personnel on the scene. ◆ Members of the public (witnesses). ◆ Other rescue organisations.
Systems	◆ Global Positioning Systems (GPS). ◆ Vehicle tracking systems. ◆ Navigational systems.
Documentation	◆ Maps. ◆ Field reports.

Information gathered via these sources may include:

Type of Information	Description
Casualty Details	The number of people requiring rescue, their injury status and any other important information such as whether you are dealing with children.
Event Details	What event or circumstance has led to the vertical rescue being required and the magnitude or severity of the event.
The Type of Environment and Location	The type of environment such as cliff faces, high-rise buildings, mine shafts, silos, towers, wells and caves. Also, the approximate location of the casualty/s if known.
Weather Conditions on Site	Weather conditions such as wind, rain or extremes of heat or cold and accurate forecasts. This allows you to consider additional control measures for the safety of the rescue team.
Other Agencies in Attendance	Details of other emergency personnel or services that may be in attendance.
More Information on the Nature of the Incident and Hazards	Any updated information regarding the incident, immediate hazards or ongoing risks.

1.2.2 Operational Plan

Once all relevant operational information has been collected it will need to be analysed in order to determine as much information related to the current rescue as possible.

This will help to identify:

- The size of the rescue team and areas of expertise required.

- The equipment they will need to use.

- The hazard controls required.

- The first aid/emergency services required to deal with any casualties.

It is important to have an adequate operational plan in place before attempting a rescue.

This will help make sure that all information has been gathered and that everyone involved in the rescue knows exactly what needs to be done, when to implement actions, and what possible changes in circumstances may occur.

An operational plan may also include information relating to:

◆ Aims and objectives of the rescue.

◆ Number and condition of casualties.

◆ Potential operating area.

◆ Rescue strategies and techniques appropriate to the situation.

◆ Priority of tasks.

◆ Equipment required to perform the rescue.

◆ Resources available to the rescue team.

◆ Possible tactics to implement strategies.

◆ Other agencies whose involvement may be required such as emergency services.

◆ Command, control and co-ordination arrangements.

◆ Resources required including their availability.

◆ Time constraints.

◆ Reconnaissance techniques.

◆ Terrain and environmental information.

◆ Access and egress routes.

◆ Weather forecasts.

◆ Variables (e.g. weather, casualty status).

◆ Emergency rendezvous points.

◆ Hazards and hazard controls.

◆ Limitations of strategies and equipment.

◆ Contingencies and alternatives to deal with changing circumstances.

◆ Monitoring and evaluative procedures.

◆ Reporting requirements.

1.2.3 Emergency Management and Interagency Arrangements

In Australia we have a clear line in emergency management and interagency arrangements. The levels of interagency arrangements are as follows:

◆ Local level individual organisations.

◆ Local Level Emergency Management Committees (LEMC).

◆ Regional committees.

◆ District Emergency Management Committees (DEMC).

◆ State level committees.

◆ State Emergency Management Committees (SEMC).

Any interagency difficulties are solved through the appropriate level of the committee. These committees will have representatives for each emergency first response agency and often have support agency representation as well.

Generally, interagency arrangements are simple with clearly defined roles and responsibilities. Each organisation will have detailed procedures for interagency arrangements. You will need to know and understand these arrangements to function correctly within the emergency management and response field.
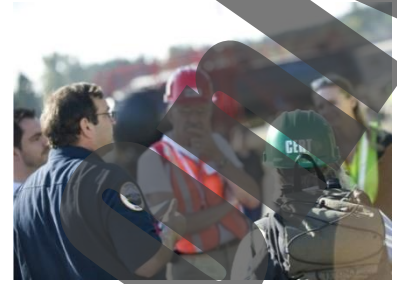
1.2.3.1 Control, Command, and Coordination Arrangements

Everyone involved in the rescue operation will need to understand what is required of them in order to ensure that the chain of command is clear and that work within and across multiple agencies can occur without confusion.

The following terms describe the key elements of multi-agency tactical and operational management:

◆ Control - Operates horizontally across agencies to provide the overall direction of response activities in an emergency.

◆ Command – Relates to a single agency, operating vertically within the agency to provide internal direction of personnel and resources.

◆ Coordination - The bringing together of agencies, government and resources to ensure efficient and effective management response and recovery from emergencies.

Any control, command and coordination arrangements will be determined during the planning stages of the rescue operation and communicated to you during the operational briefing.

1.2.4 Rescue Team

The composition of the rescue team will be dependent on a number of factors including:

◆ The type of vertical rescue being performed.

◆ The degree of difficulty and level of risk.

◆ Environmental conditions such as weather and hazards.

◆ Availability of rescue personnel and persons with appropriate expertise.

◆ The equipment required to be used.

The personnel involved in a rescue may include a combination of in-field rescue personnel, support crews, volunteer and associated personnel.

The composition of the rescue team and the role and responsibilities of all personnel will be communicated during the task briefing.

1.2.4.1 Roles and Responsibilities of Rescue Personnel

Each job role will have responsibilities that they need to understand and be able to perform as required. A vertical rescue team may include the following roles:

Role	Description
Incident Controller or Team Leader	Responsible for providing leadership and direction to the in-field emergency team. The team leader is the person responsible for the overall operation of the team. They are the person who will have the final say on how a task is completed and by whom and will allocate people, resources and equipment as necessary.
Deputy Incident Controller or Deputy Team Leader	Responsible for providing deputy leadership and direction to the in-field emergency team. This is the person who assumes all the responsibilities of team leader if the team leader is unavailable. The deputy team leader should also provide leadership and mentoring of other team members. The deputy team leader in some organisations will also provide the peer support officer role. The deputy will regularly keep an eye on issues such as morale, personnel/workers performance and team politics, allowing the team leader to focus on incident responses.
Emergency Team Members	The team comprised of personnel participating in accessing the vertical rescue, and rescuing casualties.
Communications Officers	The person who is responsible for communications movement from the team to the parent organisation. In some organisations this role is becoming less defined as technology advances, while in other organisations the role has evolved with the technology to become even more specialised. The communications officer will play a large part in coordination of team members by relaying orders and information from one person or team to another.
Medical and First Aid Personnel	Responsible for providing emergency medical care and first aid. Most organisations require that all members have first aid training, but on some teams one or two people will be designated as first aid officers. This allows other team members to focus on the incident while the first aid officers focus on any wounded casualties. Often the first aid officer will have additional training in peer support services.

Your rescue team may also include other roles such as:

◆ Safety Officer.

◆ Technical experts.

◆ Media liaison officer.

◆ Other roles as determined by organisational requirements.

There is a chain of command and it is expected that you will follow it, regardless of whether you are a paid staff member or a volunteer.

Changes in conditions and operational procedures will need to be communicated to all personnel/workers including other organisations involved in the rescue.

If you are leading the team, ensure each member of the team is aware of their responsibilities and how they will be notified if their responsibilities change.

Teamwork within any emergency response team is essential to the safe and smooth completion of tasks. This is best done by clearly defining the team roles.

1.2.4.2 Skills, Strengths and Attributes

The following skills, strengths and attributes are essential for any personnel carrying out a vertical rescue operation:

◆ The ability to work in a team, communicate effectively with others and follow instructions.

◆ Experience and training.

◆ Confidence working in dangerous or stressful situations.

◆ Knowledge of rescue equipment and procedures.

◆ The ability to deal with unpleasant and tragic situations (e.g. injuries, death).

◆ Self-discipline and common sense.

◆ Dependability.

◆ Leadership.

◆ Physical fitness.

◆ The ability to deal with fear (e.g. fear of heights).

◆ The ability to take the initiative if necessary.

◆ The ability to respond to changing circumstances.

◆ The ability to instil confidence in others through a professional attitude.

◆ Observational, recording and reporting skills.

Vertical rescuers should be comfortable working at heights or in open or confined spaces. A strong phobia with heights or open/confined spaces could be disastrous to anyone involved in a rescue.

However, rescuers should not become complacent or lose a healthy appreciation for the risks and stresses involved with conducting vertical rescue.

1.2.4.3 Training for Rescue Personnel

Specific training is required for all persons who form part of the rescue team and associated operations.

This may include training in:

◆ Vertical rescue.

◆ Confined space rescue.

◆ Rope management procedures.

◆ First Aid and CPR.

◆ Fire fighting.

◆ Use of PPE and specialist equipment.

This type of rescue requires personnel to be competent in using specialist equipment in high risk environments and may require one or more certificates of competency to be regularly renewed at a set frequency. Training for this type of specific hazardous rescue generally includes participation in practical activities to simulate an emergency rescue situation.

First aid, resuscitation and the use of defibrillators are all common requirements for vertical rescue personnel.

Organisations will also have a range of safe working procedures and policies which staff will need to be trained in before they perform activities. This may include standards for establishing and monitoring safety zones, establishing barriers and perimeter access controls, signalling, radio communication, record keeping, dealing with the media and managing bystanders.

Training requirements will often be detailed in the organisation's training matrix, personal development plans, position descriptions and work procedures.

1.2.5 Task Briefings

A task and rescue operation briefing is an essential process to prepare personnel for the rescue, particularly where there are multiple teams and complex rescue operations to be performed.

It ensures that all personnel involved understand the objective of the operation, all known details, and their roles and responsibilities for the duration of the rescue operation.

A task briefing may also provide guidance in determining the most appropriate equipment to be used and the specific procedures to be followed.

As part of the rescue team, you will be required to attend task briefings, and contribute as required.

If it is a part of your role to conduct the briefing, you should:

1. Ensure the relevant personnel have been notified and are present.

2. Select a meeting time to suit the urgency of the communication, other activities occurring and the type of vertical rescue.

3. Select a suitable location (e.g. protected, private) and/or ensure suitable communication is in place.

4. Minimise distractions.

5. Prepare supporting materials to provide visual displays or as handout materials e.g., Maps, schematics, lists and photographs.

Volunteer organisations may use pagers and telephone calls to assemble rescue team members, while an organisation that has full time staff members may use internal radio communications to notify of an incident and communicate task information.

You will need to determine how your organisation provides rescue task information to team members in accordance with your rescue and emergency procedures.

1.2.5.1 Receive Further Details Enroute
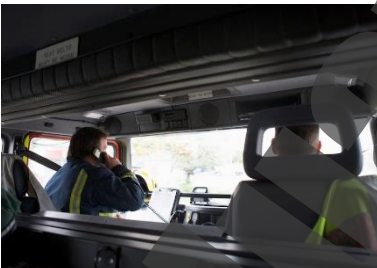
You may receive further details and instructions once you are enroute to the scene of the incident. This information is usually forwarded on from the emergency response teams already on site.

The team communications officer or team captain should be receiving these details and updates and sharing them with the rest of the team.

Updating the rescue team with any changes to the rescue site or operation will improve the chances of a safe and successful rescue operation.

Review Questions

1. Who might be a source of information regarding what has happened and where casualties are located? ☐

2. When will any control, command, and coordination arrangements be communicated to you? ☐

3. Who in the vertical rescue team will have the final say on how a task is completed and be responsible for allocating people, resources, and equipment? ☐

4. Why is a task and rescue operation briefing an essential process? ☐

1.3 Work Safely

Vertical rescue operations are activities that present hazards to all persons participating in the rescue, including those requiring rescue and the rescue team.

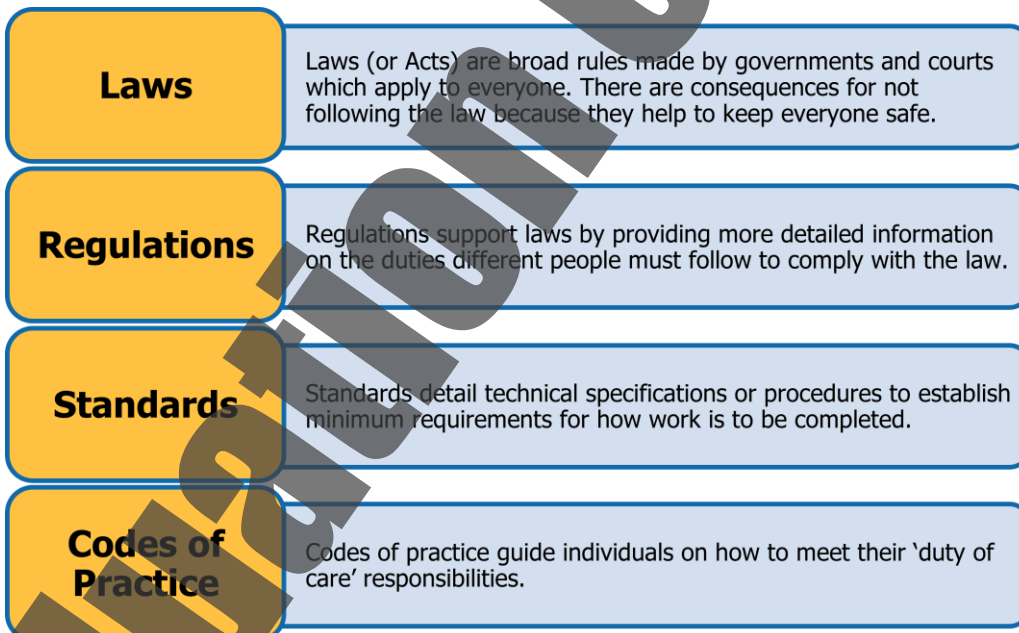Legislation provides the framework for ensuring safety is maintained throughout the rescue operation.

1.3.1 Health and Safety Rules

Legal requirements for vertical rescue relate to Federal and State/Territory legislation and regulations.

Legislation is passed by Parliament and sets out legal requirements that must be followed in the performance of all types of work, including rescue operations.

Work health and safety legislation is comprised of and supported by the following:

Laws	Laws (or Acts) are broad rules made by governments and courts which apply to everyone. There are consequences for not following the law because they help to keep everyone safe.
Regulations	Regulations support laws by providing more detailed information on the duties different people must follow to comply with the law.
Standards	Standards detail technical specifications or procedures to establish minimum requirements for how work is to be completed.
Codes of Practice	Codes of practice guide individuals on how to meet their 'duty of care' responsibilities.

State or territory legislation and regulations include Occupational Health & Safety/Work Health & Safety (OHS/WHS) requirements that will affect the way all operations are conducted.

The aim of the legislation is to ensure the safety of everyone involved in the rescue operation including both emergency organisation employees and volunteers.

Each jurisdiction has its own WHS regulator to provide enforcement and advice on the application of the WHS laws.

1.3.2 Organisational Policies and Procedures

It is important that you identify, access, understand and follow all policies, procedures and WHS requirements relevant to your organisation and the rescue operations you will be involved in. This is to ensure the safety of everyone involved in the vertical rescue operation, as well as the safe operation of vertical rescue equipment.

Organisational policies and procedures relating to vertical emergency management and rescue may include information relating to:

- Roles and responsibilities – Defining emergency roles such as emergency coordinator, members of the emergency team, standby persons, first aiders and communications controllers.

- Vertical access systems – Procedures for safe vertical access.

- Atmospheric monitoring – How and when to conduct atmospheric monitoring.

- Access control – How to control entry to and exit from the location.

- Equipment procedures - Such as equipment maintenance and inspections and how to use and store equipment.

All organisational policies and procedures should be regularly reviewed to ensure they remain relevant and comply with the latest legislative requirements.

1.3.3 Common Safety Procedures

While organisational procedures for vertical rescue activities will vary, some of the common safety procedures include:

- All rescue operations should be carried out under the control of a team leader.

- All personnel/workers must remain alert at all times for orders given and changing circumstances.

- Never stand on rope. Be very careful when stepping over rope while it is suspending a load.

- All loose items such as knives and spectacles should be secured to prevent them falling on people below.

- Spare slings should be carried on the safety harness or hung diagonally under one arm. **DO NOT** hang spare slings around your neck.

- All personnel/workers should use agreed calls to communicate during operations.

- An operational log should be kept throughout the rescue.

- All Personal Protective Equipment (PPE) and rescue equipment should be fitted and used correctly throughout rescue operations.