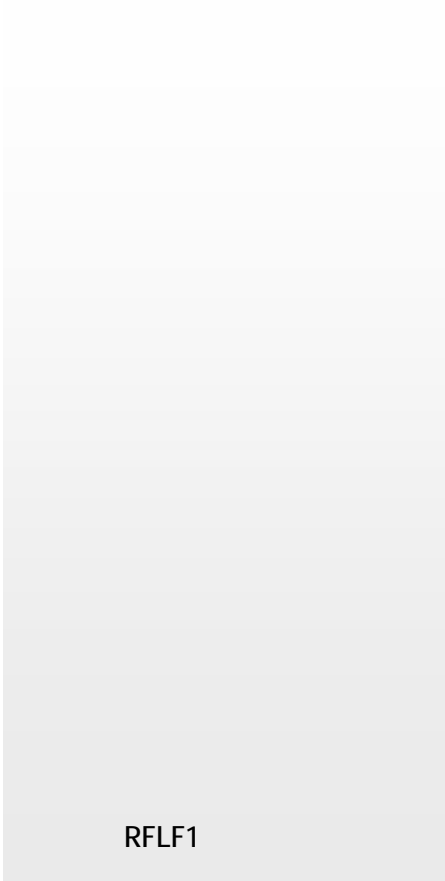




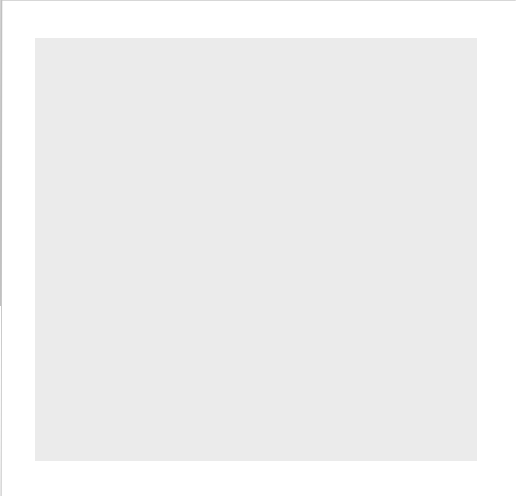
Rural Firefighting

Study Guide

# Lead a Vegetation Fire Crew



RFLF1



**FRITO**  
Fire & Rescue Services ITO



## **Status of this Document**

This document is issued by the National Rural Fire Authority.

### **What This Means**

It is written to comply with:

- other National Training material
- National Rural Fire Authority best practice
- Forest and Rural Fires Act 1977
- Fire Service Act 1975
- Health and Safety and other relevant legislation
- New Zealand Qualifications Authority requirements
- Fire and Rescue Services Industry Training Organisation (FRSITO) requirements.

The document, its content and specified processes are not to be altered, except through National Rural Fire Authority processes.

### **Recommendations for Change**

National Rural Fire Authority encourages and welcomes feedback on all its products and processes to ensure currency and continuous improvement.

Recommendations for changes to this material should be sent to National Rural Fire Authority.

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## Study Guide Introduction

### Overview

Welcome to Lead a Vegetation Fire Crew. This course is made up of this study guide and practical training session including assessment.

During the course you will learn about:

- your responsibilities as crew leader
- a crew leader's role in safety
- mobilisation, including readiness, response and observation before and during a fire
- leading a crew at the fireground
- the administrative duties required of a crew leader.

Read through this study guide before your practical training date. This will ensure that you are familiar with the subject and can highlight any questions for the training session.

### Course Objectives

After studying this material, you should be able to demonstrate knowledge of:

- your responsibilities as crew leader
- your role in safety
- how to mobilise, including readiness, response and observation of the fire and your crew
- leadership at the fireground.

This course provides evidence towards achievement of unit standard 3291 (version 4) Lead a vegetation fire crew.

### Theory

There are four sections in this course. Once you have completed all four sections make notes of any questions you want to ask during the practical training.

### Assessment and Evidence

Because each trainee's practical experience differs, you will need to check with an approved assessor and discuss the requirements for you to achieve the unit standard. This could include attestation of previous practical experience and/or practical assessment.

A properly maintained work record will support your portfolio of evidence for assessment against unit standards. You'll need to maintain a record of relevant work experience, together with an evaluation of tasks completed at an incident by the relevant supervisor.

**Practical Training and Theory and Practical Assessment**

A practical training session is made up of three parts:

1. The instructor explains the key responsibilities of leading a fire crew
2. Participants lead a crew
3. Crew carries out allocated task.

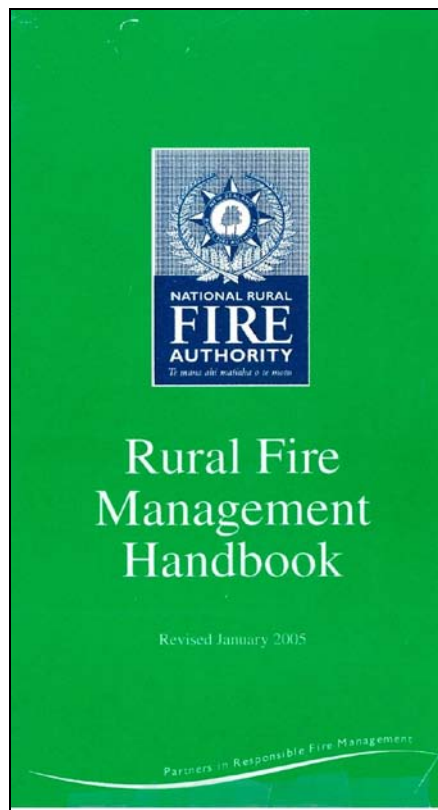
There is also a theory assessment that supports the practical assessment. This is usually completed at the same time as the practical assessment and training session. This will be given to you by the assessor for the course. You will need to have an approved assessor assess you against the practical and theory assessment to be awarded this unit standard.

## Rural Fire Management Handbook

The Rural Fire Management Handbook is a key management tool on the fireground.

The Handbook contains information including:

- safety
- initial attack
- incident management
- operational guidelines
- fire behaviour
- fire investigation.



## **Health and Safety**

All personnel involved with fire control activities must be aware of their organisation's policy and individual responsibilities regarding the Health and Safety in Employment Act.

Crew leaders and firefighters must be aware of the hazards associated with the tasks undertaken in relation to the risk/s of injury and must take action to avoid the likelihood of injury to themselves and others.

## **Fire Plan**

Fire plans are required under legislation (the Forest and Rural Fires Act 1977 and the Forest and Rural Fires Regulations 2005). They set out the procedures to meet the Rural Fire Authority's obligations in forest and rural areas (4Rs).with respect to:

- Reduction
- Readiness
- Response and
- Recovery



## Section 1: Responsibilities and Tasks

### Crew Leader – What role are we talking about?

The move from crew member to crew leader is the first step into a leadership role.

As a crew leader, you **assign** tasks and **manage** crew members as directed by operations management personnel - sector supervisor, division commander, operations manager or the incident controller.

As crew leader your main responsibility is your crew members until the incident is declared out, or until you have been relieved. This also includes your crew members returning home after the fire.

#### Leadership

##### **Know your own strengths and weaknesses**

Successful leaders know their own capabilities and limitations by constantly reviewing personal performance and by seeking the honest opinion of associates.

Self improvement can be achieved by:

- studying the reasons for success or failure of other leaders
- learning communication skills
- setting definite goals and working to attain them.

##### **Accept Responsibility**

In the absence of specific directions crew leaders are prepared to take the initiatives and actions they believe appropriate.

Crew leaders accept all opportunities for command, and perform every task to the best of their ability. They accept fair criticism, and responsibility for their decisions.

Leaders must accept responsibility for the actions of their subordinates.

The many influencing factors of the fire environment on a vegetation fire can make the situation very variable. This variance in fire behaviour, the various potential values at risk, the variety of resources required to contain and suppress a fire and the potential hazards to firefighters makes it impossible to produce a standard format for all rural fire suppression responses.

A key aspect of leadership is taking the time to think ahead.

The responsibilities and tasks for a crew leader are listed in Section 4.3.3 of your Rural Fire Management Handbook, under Ground Operations.

## Work as a Team

Team work and co-operation is the key to success in firefighting and it must be developed in training. Each member of the crew will perform better when the crew shares goals and achievements.

Work as a team and employ them up to their level of capability.

To create and maintain team spirit:

- use up-to-date training programmes
- make training as relevant and realistic as possible
- ensure each crew member knows the operation and use of appropriate equipment
- make each member know the importance of their role in the success of the crew
- set challenging tasks, but within the crew's ability
- use the full capabilities of the crew, but do not hesitate to request assistance.

## Command Structure

---

### Crew Leader

The crew leader is in charge of a team of firefighters (3–7 firefighters.)

A fire fighting crew's activities may include one or more of:

- fire engine operations
- pump and hose line operations
- hand line cutting
- heavy machinery support
- aircraft filling/ loading support
- burning out operations
- tree felling operations.

The crew leader is **accountable** to a sector supervisor, operations manager or incident controller – depending on the size of the incident.

A crew leader is **responsible** for directing a crew as soon as they are assigned responsibility of crew leader.

This responsibility could include:

- reporting work progress, resource status and other important information to the next senior position in place for the incident
- maintaining work records for assigned personnel and equipment, and most importantly
- ensuring the safety, health and welfare of the crew.

## Firefighter

A firefighter is accountable to the crew leader and responsible for:

- carrying out the firefighting tasks assigned by the crew leader
- looking after their own personal safety, health and welfare, and that of the other members of the crew.

## Structure

Every incident requires a management structure to ensure that control is carried out in a manner appropriate to the scale and complexity of the incident.

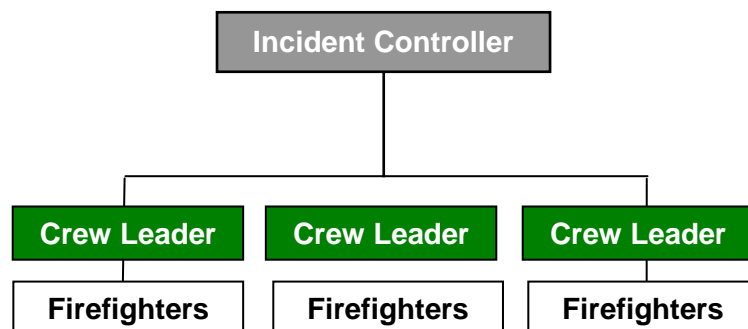
An incident command structure identifies the responsibilities and accountability of all personnel involved in management and support of an incident.

Establishing an appropriate incident command or management structure is a basic requirement for a successful fire suppression operation.

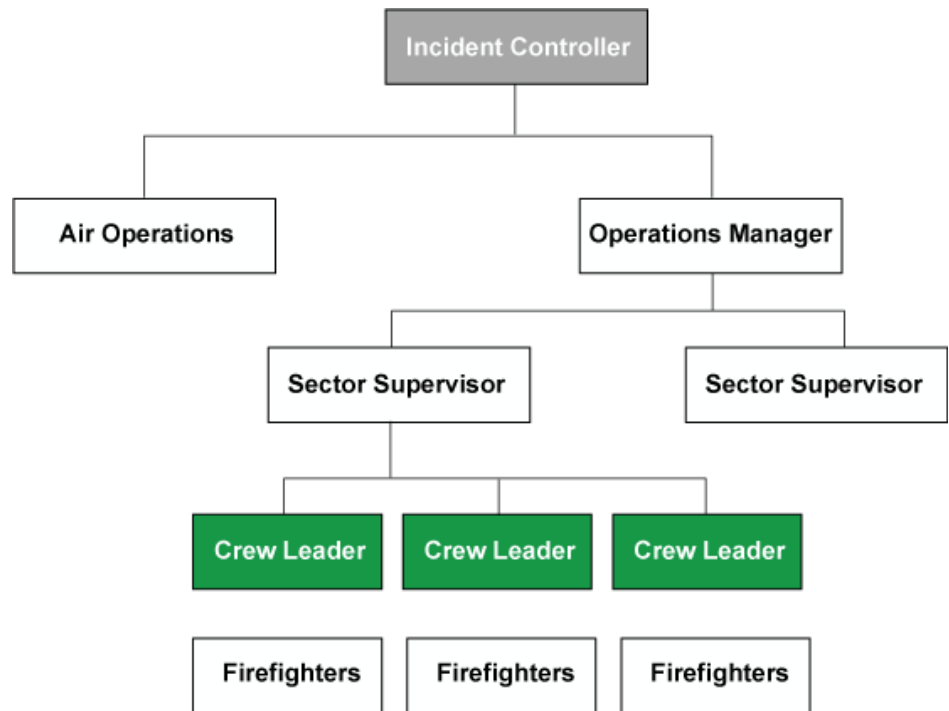
A small fire with up to three crews needs a simple management structure.

A major fire requires a large number of crews and resources to contain and control. This needs a much more complex management structure and allocation of responsibilities.

## Example of Medium Size Incident



**Example of Large Incident**



The management structure above requires a designated Incident Controller. Crew leaders may report directly to the Incident Controller (as illustrated above) or the situation may require sector supervisors with crew leaders then reporting to a Sector Supervisor.

Management is most effective when an Incident Controller has no more than five crew leaders reporting to them and each crew has no more than seven firefighters in it.

Ensure that you refer to the Rural Fire Management Handbook for details of the command structures.

**Flexible Structure**

The size of the fire management structure put in place needs to be flexible and adaptable. As with crews and resources, management personnel may need to be re-assigned or stood down, without creating interference in the smooth running of the operation.

As the fire changes in size or complexity the management system must also change to cope with the changing situation.

## Section 2: Safety

### The Crew Leader's Role in Safety

#### Leadership

The **crew leader** is responsible for the safe, efficient and effective deployment of personnel and equipment under their supervision.

#### Risk Management

There are numerous hazards associated with vegetation fire suppression, some of which can only be identified once a crew reaches a specific site.

To minimise the potential for harm to the crew the crew leader is responsible for:

- evaluating the situation
- identifying any hazards
- assessing any risks to personnel and equipment
- introducing safety measures
- taking action to minimise the risk.

When the potential hazards are identified and the risk assessment process is carried out, the operational tasks can proceed.

If the risk assessment is not thoroughly carried out and continually revised, the potential for a disaster to occur increases.

Risk assessment consists of hazard and risk identification, minimisation, and isolation.

There are five Risk Management steps. As you read through these think about how you would apply it to a specific site and set of tasks.

**Step1**  
**Situation Awareness**

- who's in charge
- gather information
- identify hazards
- local factors
- current and potential fire behaviour
- communications
- weather forecast
- note the terrain assigned to your crew
- tactical instructions.

**Step 2**  
**Hazard Assessment**

- estimate potential fire behaviour hazards
- identify tactical hazards
- watch out situations
- look up/look down/look around indicators
- what other safety hazards exist?

**Step 3**  
**Hazard Control**

- Fire Orders, LACES, Anchor Point – MANDATORY
- what other controls are necessary?
- continually re-evaluate.

**Step 4**  
**Decision Point**

**Controls**

*Are controls in place for identified hazards?*

- NO – Reassess situation

**Tactics**

*Are selected tactics based on expected fire behaviour?*

- NO – Reassess situation

**Instructions**

*Have instructions been given and understood?*

- NO – Reassess situation
- YES – Initiate action.

**Step 5**  
**Evaluate**

- do the crew members' skills match the tasks?
- is the situation changing?
- are the strategy and tactics working?
- are you regularly checking your crew members for fatigue or stress?

## Safety Responsibility

The following briefly describes the responsibility for safety at all levels in the management structure.

- The **Incident Controller** has overall responsibility of an incident and must make appropriate strategic decisions based on fire environment, weather forecasts, knowledge of the fire behaviour and resources available so as not to deploy people into potentially dangerous situations.
- **Crew Leaders** have the responsibility within their divisional or sector assignments to:
  - deploy crews and machinery at the local level to ensure the safety of both
  - keep the Incident Controller informed of any developments likely to be of value in re-assessing the situation.
  - **meeting these responsibilities requires regular assessment of site hazards.**
- **Crew members** have responsibility for their own personal safety and that of co-workers – this includes avoiding any action or lack of action that would jeopardise their own or others safety.

## Safety Points

As crew leader and when supervising personnel at vegetation fires the safety of the crew is your first priority. To do this you must:

- account for all personnel under your supervision at all times
- provide crew names to the Incident Control Point (ICP); use T-cards or your organisations' equivalent process
- ensure all firefighters are correctly dressed in the required protective clothing (PPE)
- receive a briefing and instructions
- arrange food, water and rest periods for the crew as necessary
- take immediate action to avoid any likelihood of accident or injury
- watch for any signs of fatigue or heat stress on the firefighters
- exercise control over your crew at all times.

## For Safe and Effective Firefighting

To ensure that you and the crew that you are leading are safe:

- ensure that you work from a safe anchor point and maintain a safe escape route at all times
- ensure that no person becomes separated from the crew
- ensure that each crew maintains contact with the Incident Controller and other adjacent crews
- ensure that there is no unnecessary shouting or fooling around as this may lead to a call for help to go unnoticed
- encourage self-pacing of work effort. Some people will have a different level of work output than others. Firefighters are not in competition with each other. They need to be working as a team to control the fire. For example the **step-up** technique in building the fireline encourages self-pacing.

## Dangerous Situations

You must be familiar with the **10 Standard Safety Orders** and **LACES** and know what dangerous situations to watch out for!

The 10 Standard Safety Orders **and** LACES are all listed in The Rural Fire Management Handbook and on the latest version of your pink card.

Remember to:

- keep the pink card in your top pocket for easy reference at all times
- use the pink card as a checklist – note those relevant to the current situation and what you need to do
- ensure each of your crew members has a copy of the pink card and knows these safety rules.






## DANGEROUS SITUATIONS TO WATCH OUT FOR!

1. Fire size is unknown
2. Unfamiliar territory
3. No escape route
4. Don't know local weather
5. No communications
6. Instructions are not clear
7. Getting hotter
8. Wind changes speed and or direction
9. Spot fires occurring
10. Uphill or downwind of a fire
11. On a steep slope
12. In rugged terrain
13. Can't see the fire
14. In unburnt vegetation
15. Walking through hot ashes
16. Working alone
17. Getting tired
18. Near powerlines
19. Working with machinery
20. Working with aircraft

Always remember your **L.A.C.E.S.**

**L**ookouts   **A**wareness or Anchor Points   **C**ommunication   **E**scape routes   **S**afety zones



## 10 STANDARD FIREFIGHTING ORDERS

1. Keep informed on fire weather conditions and forecasts.
2. Know what your fire is doing at all times.
3. Base all actions on current and expected behaviour of the fire.
4. Identify escape routes and safety zones, and make them known.
5. Post lookouts when there is possible danger.
6. Be alert. Keep calm. Think clearly. Act decisively.
7. Maintain prompt communication with your crew/s, your supervisor, and adjoining crew/s.
8. Give clear instructions and ensure they are understood.
9. Maintain control of your crew/s at all times.
10. Fight fire aggressively, having provided for safety first.

Always remember your **L.A.C.E.S.**

**L**ookouts   **A**wareness or Anchor Points   **C**ommunication   **E**scape routes   **S**afety zones

### First Aid

1. As Crew Leader you will carry a first aid kit to provide initial treatment.
2. Consider evacuation from the fire line for safety reasons and for further treatment.
3. As Crew Leader, you can support an efficient emergency evacuation if you think through what may be needed in the event of an emergency.



## Section 3: Mobilisation

### Report of a Fire

From the very start of a rural fire call, the gathering, relaying and receiving of correct information is vital for effective fire control.

Important messages and directions can be incomplete, distorted or misunderstood unless simple common terms of reference and reporting procedures are used.

Receiving as much information as possible from the first report of a fire helps the crew leader to respond to the correct location.

The initial information that is helpful may include:

- the nature of the incident and what is burning?
- where is it? (address / rapid number and/or cross reference cross roads)
- where/ what is the best route/ access?
- who to report to? What radio channel?
- where is the Incident Control Point or Assembly Area?
- what is the level of urgency (i.e. first response or next shift)?

### Crew Dispatch

Before the crew can become involved at the fire scene the crew leader must:

1. Confirm the situation
2. Assemble the personnel and equipment required
3. Travel to the fireground.

## 1. Confirm the Situation

Check with the Rural Fire Authority's Communications Centre, Fire Force Controller or Incident Controller for:

- urgency of response - is this an initial response or a relief crew turnout
- what is required - equipment, personnel
- task priorities
- where and who to report to
- expected time of arrival.

More details may be required regarding:

### (a) Resources available

- firefighters and backup personnel
- equipment
- transport
- communications.

### (b) Location of fire

- destination - fire or assembly area
- route - multiple means of transportation
- access - on-road or off-road.

## 2. Assemble Personnel and Equipment

As crew leader you need to assemble the crew for a briefing before anyone leaves for the fire. This includes ensuring all resources are gathered in preparation for taking to the fire. You may also need to arrange for any other support personnel or equipment that may be required.

Consider:

- are the personnel and equipment appropriate for the expected task?
- the means of transportation for the personnel and equipment?
- the means of communication en-route to the fire and on the fireground?
- the backup resources required?

## Your Kit

The following is a suggested list of useful items in a crew leader's kit:

- Rural Fire Authority (Reponse) Fire Plan
- organisation specific forms (e.g. T-cards)
- Rural Fire Management Handbook
- checklist of information about the fire prior to leaving for the fire
- radio frequencies and phone numbers
- radio with batteries
- belt weather kit (kestrel)
- marking tape/paint
- first aid kit
- notebook and pens.

### **The safety of the crew members is your prime responsibility.**

This includes the actions of individual crew when responding to their station or assembly point, and their return travel back home.

Ensure all crew members do not allow the urgency of the situation to over-ride safe and sensible driving behaviour.

## 3. Travel to the Fire Ground

### **Safety of the crew and of other road users is paramount.**

The objective is to arrive at the incident without causing another incident. It's better to take a little longer, than not make it at all.

To ensure safety of crew and other road users, use these checklists:

#### 1. By Road

- Responding to a fire is NOT an excuse for speeding or breaking any transport law – ensure the vehicle is road worthy, obey the road rules and most importantly, drive to the conditions.
- When flashing lights / sirens are fitted, use only to warn others of your presence on the road – DRIVE DEFENSIVELY.
- Select a driver who is familiar with the vehicle and the road conditions.
- Take extra care if the driver is not familiar with the vehicle or the roads.
- Make sure that the driver is up to the task especially after a long shift prior to or at the fire – if necessary, requesting a relief driver.

DRIVER FATIGUE can adversely affect a person's ability to safely operate a vehicle

## 2. Aircraft / boat

- Act only as and when directed by the person in control of the craft.
- Brief crew on the required procedures and safety measures before embarking.
- Control the crew as a group or split into smaller groups under deputies.

### Gather Information

Request your crew to use the travelling time to gather further information on the fire.

Consider what you and the crew know about the area:

- specific hazards
- knowledge of the fuel
- previous fires and any problems encountered
- availability of access roads/tracks
- location of large water supplies
- communications performance.

### **How is this fire likely to behave? Keep current information on:**

- the fire environment – topography, fuels, and weather
- weather forecast
- time of day influence
- awareness of current available Fire Weather Index data.

### **What does the smoke column indicate?**

- size, height, colour (fire intensity)
- direction and shape (stable or unstable atmosphere.)

### **Closer to the fire area, look out for:**

- alternative access
- other water supplies
- aircraft landing area(s)
- hazards to aircraft – e.g. power lines etc
- barriers to fire spread.

On arrival at the incident, advise the Incident Controller, at the briefing, of relevant information collected.

## Observation and Scene Preservation for Fire Investigation

### En route to a Fire

As crew leader, you and your crew are responsible to gather observations on the way to a fire, as well as preserve the area of fire origin from damage (for example water/ vehicle) as much as possible.

You need to note the description of people and details of vehicles coming from the fire area.

Include:

- time and location of the observation
- direction of travel
- vehicle details - model, colour, registration number, special features etc
- identification details - race, hair colour, gender, build, clothing, special feature etc.

### At the Fire

Make certain your crew takes the following steps to **identify** and **protect** the possible area of origin of the fire.

**Ensure your crew:**

- watch out for evidence of how the fire may have started
- consider where the likely area of fire origin may be and protect this area
- minimise the area of origin and do not handle any items of evidence.

The most likely place to find clues to help determine the fire cause is at the base of the fire.

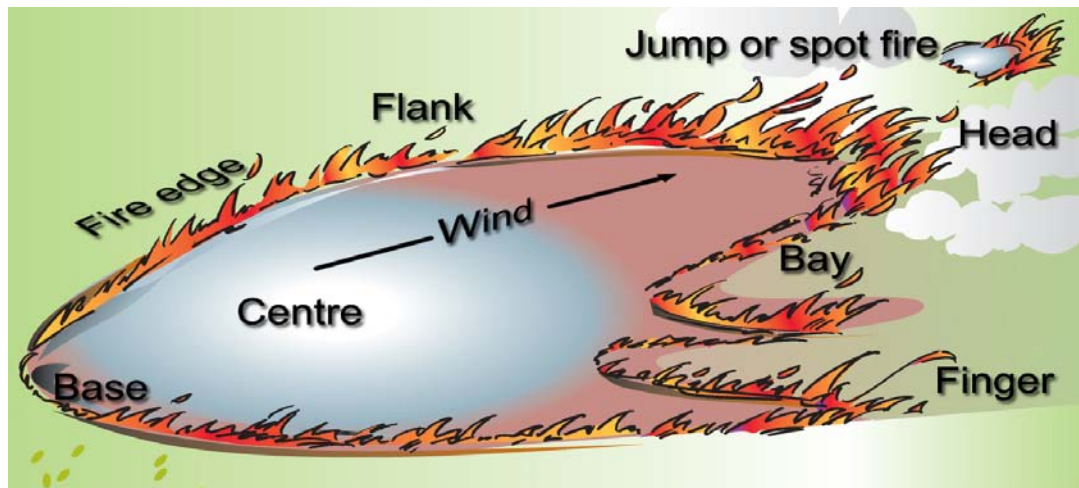


Figure 3.1 – Fire origin and progress

**Suppression crews must proceed with caution while entering the base of the fire to avoid disturbing this area or any likely evidence.**

Be sure to:

- record and protect this area for later investigation purposes.
- note and protect any activity/item that may enable identification of the likely cause of the fire.
- record and protect everything that may relate to the cause of the fire.



## Section 4: At the Fire Ground

### Arriving at the Fire Ground

On arriving at the fireground without CIMS in place

On arriving at the fireground as crew leader you must:

- assess the situation
- brief the crew
- carry out the assignment (refer back to Risk Management in Section 2 of this Study Guide).

On arriving at the fireground with CIMS in place

Responsibilities	Tasks
<p><b>1. Check in at the Assembly Area and / or Staging Area</b></p>	<p><b>Provide:</b></p> <ul style="list-style-type: none"> <li>• the names of all personnel - complete checkin/out form; T-card for your crew where appropriate</li> <li>• a list of equipment you're contributing - complete T-card for your equipment (where appropriate).</li> </ul>
<p><b>Under no circumstances does a crew proceed and commence firefighting without checking in.</b></p>	
<p><b>2. Receive clearly defined instructions</b></p> <p><b>Make sure you know...</b></p>	<ul style="list-style-type: none"> <li>• the designated task and a brief of the incident action plan</li> <li>• who you are responsible to and the command structure</li> <li>• the communications plan and radio channel allocations for the incident</li> <li>• what and who you are responsible for (i.e. personnel, equipment, sector, etc); complete checkin/out form; T-card for your crew/equipment (or similar)</li> <li>• additional and support resources available</li> <li>• where you have to go.</li> </ul>
<p><b>3. Brief the crew including all accompanying personnel</b></p>	<ul style="list-style-type: none"> <li>• assign responsibilities, tasks and equipment.</li> </ul>
<p><b>4. Carry out the</b></p>	<ul style="list-style-type: none"> <li>• maintain communication and progress reports</li> </ul>

	<p><b>assignment</b></p>	<p>through the chain of command.</p> <ul style="list-style-type: none"> <li>• maintain records of inputs to the fire - maintain your personal fire log</li> <li>• supervise the crew</li> <li>• ensure appropriate safety measures are in place and known to the crew</li> <li>• provide regular Situation Reports (SitReps).</li> </ul>
<p>On leaving the fireground</p>	<p><b>5. If applicable, brief the crew leader taking over</b> <b>Ensure that...</b></p>	<ul style="list-style-type: none"> <li>• personnel + equipment used is accounted for</li> <li>• crew + equipment is <b>logged off</b></li> <li>• all documentation that is required is completed including checkin/out forms; T-cards; Daily Time Records.</li> </ul>

## Situation Report

Situation Reports (SitReps) to the Incident Controller or Incident Control Point should include as much information as possible.

For example:

- name of the person making the report
- location of fire – with map references
- area involved – approx. hectares and / or perimeter length
- fuel burning – grasslands / scrub / forest
- topography – steep / rolling / flat
- weather – wind speed and direction, local factors
- fire behaviour – rate of speed, flame height, spot fires occurring
- fire status – not under control / under control
- resources at fire – own / other
- values at risk – natural, buildings, vehicles
- access – mode of transport, directions, references
- additional resources required.

## Supervision

The crew leader is responsible for the effective, efficient and safe deployment of personnel and equipment.

When the job is done well damage to life and property is minimised. If it is done badly, the opposite may occur.

**Crew supervision** should follow this sequence:

- analyse the situation
- plan the suppression tasks
- brief the crew
- allocate the tasks
- monitor crew progress
- report progress.

The safety and effectiveness of the crew's actions should be continually reviewed (refer to Risk Management in Section two of this Study Guide). If the situation changes the plan may have to be reviewed.

### 1. Analyse the Situation

The principles of situation analysis are the same whether the crew leader is responsible for all the fire or just a part of the perimeter. The aim is to identify realistic objectives.

Consider:

- extent of fire
- resources available
- weather
- topography
- fuels
- assets threatened
- time and distance considerations
- communications
- safety and escape plans.

**Plan the best course of action:**

- to the fire (including worst fire behaviour)
- for you and your crew (best options/ worst options).

## 2. Plan Suppression Tasks

List the actions that need to be taken. Your plan must be detailed enough to ensure that everyone knows the intention.

On arrival at the scene:

- estimate probable spread and fire behaviour
- estimate the time needed to establish a fireline
- decide where to attack the fire.

## 3. Brief the Crew

A crew briefing is to ensure everyone knows:

- what the situation is
- what needs to be done
- what problems may be met
- LACES
- how to communicate
- escape routes.

The best laid plans will fail if they are not effectively communicated to those who are to put them into practice.

The main points for a briefing should include:

- background information – type of terrain, extent of the fire, how and where the crew fits into the firefighting effort
- tasks – outline the work to be done by the crew
- responsibility for personal safety of fellow team members and equipment
- resources available – communication, equipment, water supply
- factors to consider – topography, vegetation cover, weather, access and escape routes
- questions – answer any questions from crew members.

**General points** in giving a briefing include:

- speak loudly enough for all to hear
- be specific
- be confident.

## 4. Allocate the Tasks

### 1. List the jobs to be done

An example is constructing a fireline with hand tools. The jobs would include:

- clear ground vegetation with hand tools
- create a strip down to bare earth
- remove all flammable material from the fireline
- patrol the fireline to be sure fire does not cross it.

### 2. Establish the experience of the crew

It is most important to match job to capabilities. This is not difficult if the crew leader works with the crew.

If the capabilities of the crew members are not known it is important to find out about their training and experience before allocating tasks.

Ask each crew member about:

- training they have had in rural firefighting
- experience in rural firefighting
- their local knowledge.

Untrained people may have to be stood down, although pairing off with an experienced crew member could be considered if people are not put at risk.

### 3. Allocate tasks to people

To achieve this successfully:

- set reasonable work loads
- match skills with tasks
- match physical ability with tasks
- match experience to expected hazards
- place less experienced people to work with experienced crew members.

#### 4. Distribute the necessary tools

Distribute the tools and equipment crew members needed for the tasks which have been allocated to each member.

Each person should check the tool allocated to be sure it is complete and operative.

Take care to avoid damage or injury when handling and carrying tools.

#### 5. Monitor Crew Progress

A **checklist** for good supervision is:

- does each person know what their job is?
- is the crew working together as a team?
- have the abilities of each crew member been fully utilised?
- have work deficiencies been corrected?
- have sources of friction and trouble been eliminated or controlled?
- have crew members' suggestions been considered?

The Standard Fire Fighting Orders can help the crew leader in his/her supervisory role.

They are:

##### 1. Fire Behaviour

- keep informed of weather conditions and forecasts
- know what the fire is doing at all times
- base all actions current and expected fire behaviour.

##### 2. Safety

- have escape routes for everyone and make them known
- post lookouts when there is possible danger
- be alert, keep clam, think clearly, act decisively.

##### 3. Operational Control

- maintain prompt communications with the crew and the Incident Controller
- give clear instructions and be sure they are understood
- maintain control of personnel at all times.

#### 4. Ultimate Goal

- fight fire aggressively, but provide for safety first.

## 6. Report Progress

A fire crew is just one part of the fireground organisation at a large fire. The crew leader cannot be aware of the total fire management situation.

As part of the management team the crew leader must report accurately on the fire situation and crew performance in the area for which he/she is responsible. Reports from the crew leader enable the Incident Controller, Sector Supervisor, and Operations Manager to build a complete picture of the fire, the fire suppression effort and progress.

### Who to Report to

A crew leader reports to the Sector Supervisor or Operations Manager or Incident Controller depending on the size of the fireground organisation.

### What to Report

A **progress report** should include:

- identity and position of the crew
- fire status
- suppression progress
- any control problems
- conditions of crew and equipment
- additional resources required.

Other information may be relevant, depending upon the situation.

Additional reports may be required when a potential hazard exists in a neighbouring sector.

### How often to Report

When a situation is stable, a report every thirty minutes is all that is required. This ensures the crew is not forgotten and provides a check that all is well.

Changes to the situation in the sector must be reported. More frequent reports will be required when the situation is changing.

### Understanding Replies

Seek clarification if:

- instructions are unclear or not understood
- resources at hand are inadequate for the task
- the task cannot be achieved safely.

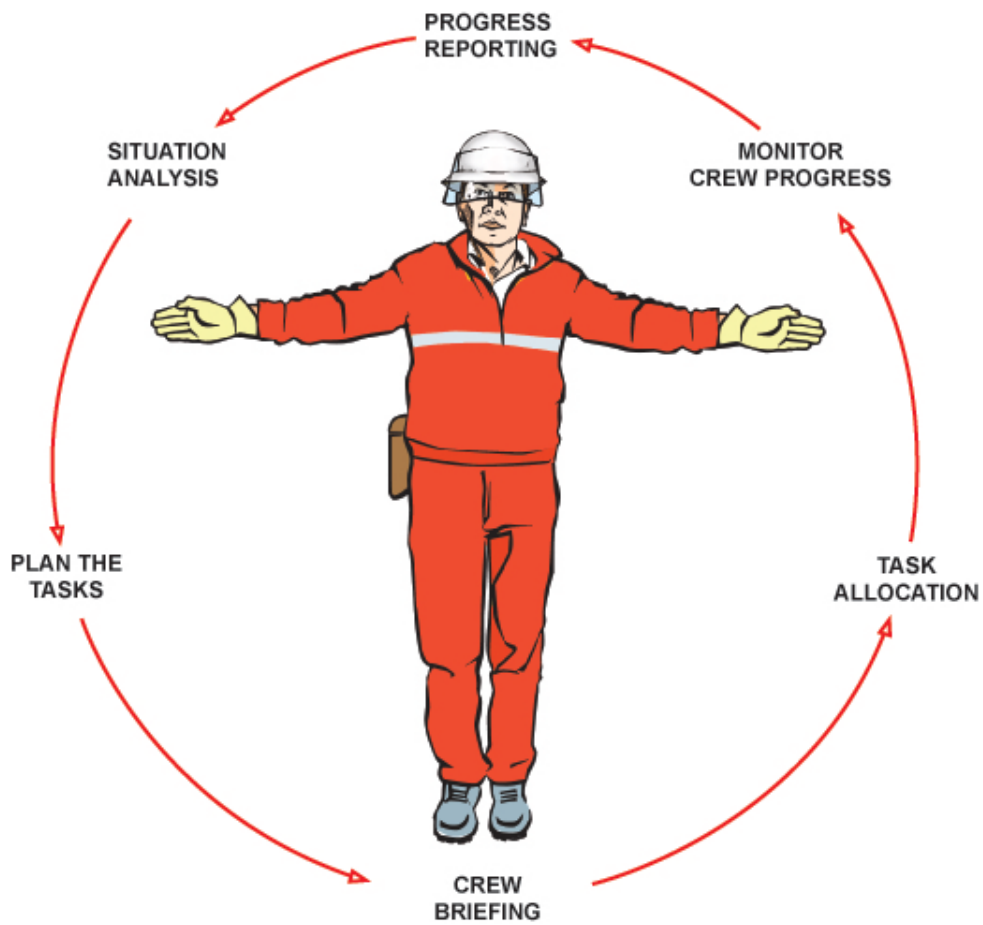


### Safety Note:

Any hazard or difficulty should be reported so that the Incident Controller is aware of the situation.

### Supervision Circuit

This diagram illustrates the Supervision Circuit which should be used until the fire is out.





## De-mobilisation

At the conclusion of your shift you may be required to recover all of your resources before leaving.

As a Crew Leader you need to consider:

- all personnel are accounted for
- all equipment is accounted for
- if necessary the site recommissioned
- conduct a debrief to your Incident Controller, Operational Manager or Section Supervisor
- all administration is completed as required.

## Administration

Firefighters use administrative information to account for fireline activities which require the retention of details:

- maintain records of personnel present - timesheets, competency assessments etc
- record details on any injuries and/or accidents and/or damage to equipment
- maintain records of contracted resources and their time in use.

What is required varies with the nature, size and complexity of the incident and by organisational requirements, but normally includes:

### **1. Timesheets – Daily Time Records (DTRs)**

- personnel
- equipment and machinery - hours, ownership.

### **2. Accident Reports**

- personnel
- equipment.

### 3. Resource Monitoring

- vehicles - kms, hrs
- aircraft - hours, loads, ownership
- damage details
- fuel
- retardant
- suppression
- T cards, if applicable.

#### Administrative Information

Administrative information is used to:

- account for fire suppression activities
- record personnel present at the fire
- provide details on accidents, injuries, and damage
- calculate payments for use of resources - hourly usage/hire rate.

#### Checkin/out, T- cards and Daily Time records

This is an example of a completed T-card

PERSONNEL / STAFF		CONTACT DETAILS		
Name: Alley P. Position: I.C.		Mobile Phone: (025) 291-3003		
Home Agency: Department of Conservation		Land Line: (07) 348 3610		
Incident Location: Okere Falls		Radio Call Sign: Lake 1		
Arrival - Time/Date: 6:00 20/9/02		Special Medical Conditions:		
Depart - Time/Date: 18:00 20/9/02		Incident Location: Okere Falls		
NOTES: One Flat deck Toyota (2WD) 29 4980		Date: 20/9/02	Time On: 6:00	Time Off: 18:00
		Incident Location:	Date:	Time On:
			Time On:	Time Off:
		Incident Location:	Date:	Time On:
			Time On:	Time Off:

The crew leader is responsible for recording key details relating to personnel and equipment under his/her supervision. This may include:

- names of all personnel in the crew
- hours worked by each person
- accidents and or injuries
- equipment in use/time used
- damage to equipment
- property damaged by fire or suppression actions
- up-dating training records for competent work completed.

### Daily Time Records

1. Incident Name		2. Date		<b>DAILY TIME RECORD</b>			
3. Resource Description:							
4. Company / Organisation:							
5. Personnel / Crew:							
Name	Travel to Incident		Incident Ground		Travel from Incident		
	Start	Finish	Start	Finish	Start	Finish	
Allowance Type							
6. Resources and Equipment Used: <input checked="" type="checkbox"/>							
Vehicle Registration: <input type="text"/>				Km Travelled Today: <input type="text"/>			
<input type="checkbox"/> LPHV Pump Kit		<input type="checkbox"/> Hand tools		<input type="checkbox"/> Monsoon Kit			
<input type="checkbox"/> HPLV Pump Kit		<input type="checkbox"/> MPHV Pump Kit		<input type="checkbox"/> HPHV Pump Kit			
<input type="text"/> Number of Forestry Hose Packs			<input type="text"/> Lengths of instantaneous hose				
<input type="text"/> Number of Radio's			Other Supplies:				
Equipment Owned by:							
Other Equipment / Notes:							
7. Approved by: Position: Signature: Date:							
<b>THIS COPY TO INCIDENT FINANCE</b>							

When contractors are being used and equipment is hired the following records are needed in addition to the above:

- names of contracting companies
- name of operator or driver
- type of equipment hired
- time the equipment is in use
- time the equipment is on standby
- fuel supplied and by whom.

## Terminology

Terminology used in these guidelines is in accordance with the Rural Fire Management Glossary of Terms issued by the NRFA. Understanding the following key terms are vital to doing the job well.

<b>Briefing</b>	A general overview of an operation (CIMS).
<b>Changeover</b>	The orderly replacement of personnel (as in CIMS definition).
<b>Check-in</b>	The process whereby resources first report to an incident (CIMS).
<b>CIMS</b>	Coordinated Incident Management System. A structure to systematically manage emergency incidents.
<b>Command</b>	The internal direction of members and resources of an agency (or organisation) in the performance of that agency's role and tasks. Command relates to single agencies and operates vertically within an agency.
<b>Control</b>	The overall direction of response activities in an emergency situation. Control relates to situations and can operate at either the single agency level or horizontally across (multiple) agencies. Authority for control is established in legislation or by agreement and carries with it the responsibility for tasking and coordinating other agencies.
<b>Control Line</b>	Any line, including the fire-line, natural fire-breaks, and/or retardant lines, from which the fire is being fought. For example, a fire may be fought from a creek, road, fire-break or from a series of fire-breaks connected by fire-lines. The total endeavour is a control line.
<b>Co-ordination</b>	The bringing together of agencies and resources to ensure a consistent and effective response to an incident.
<b>Debriefing</b>	A critical examination of an operation done to evaluate actions for documentation and future improvements.
<b>Demobilization</b>	The orderly release of resources no longer required at an incident.
<b>Fire Ground</b>	Any area of land, vegetation, or property where the fire is burning, or has burnt, or is threatening (to burn).
<b>Fireline</b>	That portion of the fire perimeter upon which resources are deployed and are actively engaged in fire suppression action.
<b>Handover</b>	The passing of control of an incident from one person or organisation to another.

<b>IAP</b>	Incident Action Plan: A statement of objectives, strategies, and critical functions to be taken at an incident.
<b>ICP</b>	Incident Control Point: The location where the Incident Controller provides overall direction of response activities.
<b>Initial Attack</b>	The action taken to halt the spread or potential spread of a fire by the first fire fighting force/s to arrive at the fire.
<b>Logistics</b>	The provision of facilities, services, and materials in accordance with the Incident Action Plan.
<b>Objective</b>	A statement of what is to be achieved.
<b>Operations</b>	The direction, supervision, and implementation of tactics in accordance with the Incident Action Plan.
<b>Planning/ Intelligence</b>	The collection, evaluation, and dissemination of information related to the incident and the preparation and documentation of the Incident Action Plan.
<b>Safe Forward Point</b>	A safe location near the incident from which the forward operations can be supported (CIMS).
<b>Sector</b>	A portion of a fire perimeter (or incident) (CIMS).
<b>Situation Report</b>	A brief of an incident, usually given at regular intervals (CIMS). Sometimes called SitRep.
<b>Span of Control</b>	A concept that relates to the number of groups or individuals controlled by one person. The ratio of 1:5 is desirable, but should not exceed a ratio of 1:7.
<b>Staging Area (SA)</b>	A designated location where resources are gathered prior to deployment (CIMS).
<b>Strategy</b>	A statement detailing how an objective is to be achieved.
<b>T-cards</b>	T-cards are a manual, incident resource management system for safe, effective and efficient resource tracking.
<b>Tactics</b>	Specific actions or tasks to implement incident strategies.
<b>Task</b>	A job given to a team or individual.