



Communications

S.O.P.s

(1999 Edition)



THE NEW SOUTH WALES GOVERNMENT

A NSW Rural Fire Service (RFS) Publication

For the use of
Firefighters
Captains
Group Captains
Fire Control Officers
Regional Co-ordinators
Assistant Commissioners
Commissioner
and deputies of all the above.

Suggested distribution:

All fire fighting vehicles – one copy
All Firecoms and bases – one copy

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S.O.P. #1

General Principles

1. Scope

- The Communications S.O.P.s recommend standardised communications for use throughout the NSW Rural Fire Service.
- The procedures reflect and support the system of incident control (ICS) used in the NSW Rural Fire Service (RFS). That is, the chain of communications matches the chain of command and control.
- They are compatible with the communications procedures used in most Australian and many overseas Fire Services.
- They can be used on any radio system, whether that system is a public UHF CB network, a private mobile radio (PMR) system or a trunked radio system such as the NSW Government Radio Network (GRN).
- They use plain language, not codes (except for discrete reporting of fatalities etc.), and use standard phrases to minimise air time for commonly made calls.

2. Procedures

- When called out to an incident, the first responding units call their local Firecom or Base when they leave their station/shed and when they arrive at the scene.
- Once at the scene, the senior local officer on the first responding unit establishes that unit as “(name of incident) Control” and retains Control unless/until another (usually more senior) officer arrives and assumes Control.
- If more units are needed, Control asks Firecom/Base to send more, and Firecom/Base tells Control what units are being sent. Control can ask Firecom/Base to:

- tell those units specifically what to do when they get to the incident, or
- tell them to report in person to Control when they arrive at the scene, or
- tell them to report to another unit at the scene or to a staging area.

If Control does not want any of the above to apply, then Firecom/Base will tell the units to call Control when approaching the scene for instructions.

- Any units called out as back up to units already at the scene are to call their local Firecom or Base when they depart their station/shed. Firecom/Base will tell them what Control wants them to do. Usually this will be to call Control (or another specified unit) as they approach the scene of the incident.

- A similar system is used for units going to an incident in another Rural Fire District, except that sometimes their “home” Firecom/Base may hand them over to the other District’s Firecom/Base while they are en-route.
- If Control hears a back-up unit call that they are approaching the scene, Control gives that unit instructions about where they are to go at the incident and what they are to do. Control advises Firecom/Base when all the back up units called out have arrived at the scene.
- All units at the scene communicate with their Control (or other supervising unit they have been told to communicate with) until they are released from the incident. Only Control talks back direct to the local Firecom/Base.
- At larger incidents the fireground may be divided into sectors and/or divisions, each with an officer in charge of that sector or division. In this case, units at the scene communicate with the unit in charge of the division or sector to which they have been assigned.
- The role of a Firecom or Base is not to control activities at the incident but to provide a communications service. That is, to take and give messages (during day to day operations) and, during large-scale operations, to design and implement a communications plan that matches the needs of the moment. (i.e. Allocate specific frequencies to various operations or activities, direct units from neighbouring areas to the right places and onto the right channels, etc.)
- At medium sized incidents, the officer in charge (Control) may have an aide to assist with communications, etc.
- At large incidents, the officer in charge (Control) may have an incident management team to assist him/her, and may use the facilities of a specially designed command vehicle (e.g. a command/communications bus) or the District Fire Communications Centre. In this case, communications officers may be assigned specifically to the incident, while others continue to provide communications for other RFS activities in the District.
- If units are not sure who to call at any time, they should call the local area Firecom or Base for guidance.
- Read-back procedures may be used to confirm that messages about hazardous situations have been received correctly.

3. Definitions

“Firecom” (Fire Communications Centre) is used as part of the callsign of the station controlling a Rural Fire District network.

“Base” is part of the callsign which may be used for any brigade or brigade group station providing communications services for RFS operations.

“Control” is used as part of the callsign of the person/unit in charge of all Rural Fire Service units at a particular incident.

S.O.P. #2

Allocation of Callsigns

1. Scope

This SOP outlines the callsigns to be used in RFS radio communications.

2. Procedures

- The callsign for a District fire communications centre consists of the name of the District followed by the word "Firecom".
- The callsign of any fixed radio station used for RFS operations, except the RFS District Firecom, consists of the name of the station followed by "Base".
- The callsign for a mobile (vehicle) unit consists of three parts:
 - The name of the brigade (or the group name for group vehicles),
 - The category number of the vehicle (see the definitions section below), or a suitable one word description (if no category number is applicable),
 - A distinguishing letter (e.g. Alpha, Bravo, etc.).
- The callsign for a senior officer's vehicle or a special vehicle may reflect the officer's title or the function of that special vehicle respectively.
- The callsign for a portable handheld radio shall include the brigade, group or District name (whichever is the most suitable) and the word "portable".
- Shortened versions of callsigns, which follow the above general procedures, may be used with the permission of the local Fire Control Officer. Do not use a person's name as a callsign.
- The callsign of the Incident Controller (the person in charge) of an incident consists of the name given to the incident followed by the word "Control".
- The callsigns of units with other specific Incident Control System (ICS) functions at a particular incident may be given ICS callsigns for the duration of the incident. These may include callsigns containing such ICS terms as "Operations", "Division", "Sector", "Staging Area", "Response Team", etc. plus an identifying number, letter or location name.

3. Definitions

Callsigns shall include the category number from those listed below which nearest matches the vehicle:

- | | |
|-------------------------------------|---------------------------------------|
| 1 – 4x4 heavy (eg. 3300 l.) tanker | 6 – 6x6 wheel drive tanker |
| 2 – 4x4 medium (eg. 2000 l.) tanker | 7 – 4 x 4 light (eg. 1100 l.) tanker |
| 3 – 4x2 heavy (eg. 3300 l.) tanker | 8 – 4 x 2 light (eg. 1100 l.) tanker |
| 4 – 4x2 medium (eg. 2000 l.) tanker | 9 – 4 x 4 striker/mop-up (eg. 500 l.) |
| 5 – Bulk water carrier | (For Cat 10 or 11, use "pumper") |

or a suitable one word description, such as "slip-on", "trailer", "carrier", "support", "canteen", "boat", etc.

S.O.P. #3

Standard Phraseology

1. Scope

This section outlines the standard phraseology for use in the RFS.

2. Procedures

- Keep all calls, short, sharp and to the point, and use the standard phrases defined in these SOPs for commonly made calls.
- When contacting another unit, give their callsign first, then give your callsign.
- Once communication is established, callsigns do not have to be included in each and every call, provided it is clear who is talking to who.
- Letters and numbers should be transmitted using the standard phonetic words given in RFS and national fire training material.
- Standard words, as listed in the definitions section below, should be used when appropriate.
- Codes should only be used to discretely report the condition of casualties when that may be overheard by casualties or their associates. In such cases, use the word “code” followed by the first letter of the word describing their condition (dead, injured, trapped or missing - e.g. dead = “code delta”).
- Any station may request a message to be read back (to ensure it has been received correctly) if it involves information about a hazardous situation.
- Colour codes (as listed in the definition section below) may be used to indicate the priority of a call.

3. Definitions

Standard Words

“Affirmative”	-	Yes, or that is correct.
“All stations”	-	General call to all stations on a network.
“Cancel”	-	Ignore my previous instruction or request.
“Clear”	-	This is the end of my transmission. No reply is expected.
“Clear to you”	-	This is the end of my transmission to you. I am now about to transmit to another station.
“Confirm”	-	Verify this statement.
“Correction”	-	That is incorrect, the correct message is.
“Disregard”	-	Ignore my previous statement or information.

“ETA”	-	Estimated time of arrival.
“ETD”	-	Estimated time of departure.
“Incident call”	-	I have a new fire or other incident to report to you; or to send your unit to (if from Base or Firecom).
“Go ahead”	-	Invitation to transmit or reply.
“Grid”	-	The numbers that follow are a map grid reference.
“I say again”	-	I am repeating my last transmission.
“Negative”	-	No, or that is not correct, or permission not granted.
“Nothing heard”	-	I have heard no reply to my transmission.
“Over”	-	My transmission is over. You may transmit a reply now.
“Read back”	-	Please repeat back to me all or part of the message I just gave you.
“Roger”	-	I have received and understood your last transmission.
“Say again”	-	Please repeat your last transmission or portion indicated.
“Sitrep”	-	I am about to transmit a situation report to you.
“Stand by”	-	I must pause. I will call you back when ready.
“Wilco”	-	Message received, understood and I will comply.

Colour (call priority) Codes

“Emergency”	-	Used only when a unit is in life threatening danger.
“Red”	-	Used to indicate urgent assistance is needed (but the unit is not in grave danger itself).
“Blue”	-	Used to indicate an operational (incident related) call.
“Yellow”	-	Used to indicate a general (non-incident related) call.

S.O.P. #4

Content of Calls

1. Scope

This SOP summarises the context and content of commonly made calls.

2. Procedures

(a) General

- Use plain language, (except for discrete reporting of casualties, etc.) and standard phrases in your calls whenever possible.
- When contacting another unit, give their callsign first, then give your callsign.
- Once communication is established, callsigns do not have to be included in each and every call, provided it is clear who is talking to who.
- When reporting an incident by radio – call the local Firecom or Base - give the location and type of incident, any action being taken, and whether any assistance is needed.
- Pass on any urgent safety warnings as soon as possible to the appropriate units.
- Read back messages if requested to do so.
- Report any congestion, interference or failure of any RFS radio facilities to your District Fire Communications Centre.
- If you need to make a call other than to units reporting to you or the unit you are reporting to, ask permission of the latter to make a “flank” call. (Permission is not necessary if the call involves an urgent safety matter.)
- Unless local procedures indicate otherwise, make a call to the local Firecom or Base in the following circumstances:
 - when opening up a radio listening watch
 - when departing your station or shed
 - when arriving at a destination
 - when any significant hazard is observed
 - when returning to your station or shed
 - when closing down a radio listening watch

(b) Operational calls - from units

- When departing to go to an incident – call the local Firecom or Base - give crew strength, type and location of the incident, and the rank and name of the officer in charge of your unit.

- When first to approach or arrive at the scene – call the local Firecom or Base – if you are the senior officer, assume Control and give an initial sitrep. Use the ICS callsign “(name of incident) Control”. (Name the incident after the name of the property, the locale, the road or some well known nearby feature.)
- When not the first to arrive at the scene – act as instructed by Firecom or Base – if they give no specific instruction, report to Control when you are approaching or at the scene.
- When at the scene, act as instructed by Control or other unit designated by Control. (Note: Control is the only unit that should talk directly with Firecom or Base while operating at the scene.)
- When at the scene, advise the person you are reporting to of any significant hazards, significant changes in the situation, the need for any resources, and achievement of any significant objectives.
- If you are out of sight of the unit you are reporting to, make regular calls (e.g. give a regular sitrep, typically every 30 minutes) to confirm your safety.
- Make other calls on an “as needed” basis.
- When you are released from the scene, re-establish contact with Firecom or Base and advise them of your intentions and availability.

(c) Operational calls - from Control

- When first to approach or arrive at an incident – call the local Firecom or Base – if you are the senior officer at the scene, assume Control and give an initial sitrep.
- If you need additional units at the scene, tell Firecom/Base what you need. You can also ask Firecom/Base to:
 - have those units call you (Control) when approaching, or
 - have those units call another unit (specified by you) when approaching (eg. to the officer in charge of the sector you want them to go to), or
 - have those units report in person to you at the scene, or
 - have them report to a staging area for staging and briefing, or
 - give them specific instructions about what to do at the scene.

Note: If you give no specific request, Firecom/Base will tell the back up units to call you (Control) when they are approaching the scene.

- If a unit calls approaching the scene – tell them where you want them to go and what you want them to do.
- Make calls as needed to units under your command/control and give Firecom or Base regular sitreps.
- If units under your direct control are operating out of your sight, make regular contact (e.g. ask for sitreps), typically every 30 minutes, to check their safety.

- You may use other appropriate radio channels in all or part of the network at the incident to reduce congestion or improve reception.
- If another officer assumes Control from you – resume the use of your standard callsign, or use your new ICS callsign if allocated one by Control.
- If you are an officer taking over Control – get a briefing from the existing officer in charge first, then advise Firecom/Base and the units in contact with you at the scene that you are assuming Control.
- Make other calls on an “as needed” basis.

Note: Always having the Incident Controller use the “...Control” callsign makes it easy to contact whoever is in charge, regardless of how many times that control is handed over from one person to another at a large, complex and rapidly changing incident. This system might seem to be an overkill at small incidents; but using it at those incidents is the best preparation for using it at “the big one”.

(d) Operational calls – from units (other than Control) supervising others

- At large fires the fireground may be divided into sectors and/or divisions with officers in charge of each reporting through a chain of command to Control. In such cases the chain of communications is to match the chain of command.
- Make calls as needed to units under your command/control, and give regular sitreps to the unit in command/control of you.
- If units under your command/control are operating out of your sight, make regular contact (e.g. ask for sitreps), typically every 30 minutes, to check on their safety.
- You may use other appropriate radio channels in all or part of the area under your command/control at the incident to reduce congestion or improve reception.
- If another officer assumes your supervising function – resume the use of your standard callsign, or use your new ICS callsign if allocated one by Control.
- If you are an officer taking over a supervising function – get a briefing from the existing supervising officer first, then advise the unit in command/control of you and the units that you are commanding/controlling of the changeover.
- Make other calls on an “as needed” basis.

(e) Operational Calls - from Firecom/Base

- When giving incident calls to units by radio – In the initial call say “Incident call, are you available to respond?” If the unit advises it is available, advise them the type, location and any known (brief) details of the incident.
- When replying to an initial call from a unit going to an incident - advise them of other units attending and any new significant information; plus,
 - tell the first response units to advise Firecom/Base when at scene.

- tell any back-up units to call Control when approaching, (or other procedure to follow if specified by Control).
 - tell the units which channel to use at the incident, (if different from Firecom/Base primary channel).
 - tell the units when or where to call another Firecom/Base or unit and the channel to use, (if going to an out of area incident).
 - if going to a grass/bush fire during high, very high or extreme fire danger, also tell them the information specified in Fireground SOPs.
- When replying to a call from a unit reporting at scene – acknowledge. (If no unit of the first response assumes Control, ask the unit which arrived first to confirm who is in control of the incident).
 - When replying to a call from a unit giving a sitrep – be prepared to copy down their message before asking them to go ahead. (Ask for any information that should be included in a sitrep if it is not provided.)
 - Advise units of when you expect to hear from them again, according to local procedures. These may include instructions to units to:
 - call Firecom/Base when returning to station/shed.
 - call Firecom/Base when closing down radio listening watch.
 - call Firecom/Base when back on radio listening watch.
 - call Firecom/Base when returned to this channel or area.
 - call Firecom/Base when (a particular objective is reached).
 - call Firecom/Base if (a particular situation is encountered).
 - call Firecom/Base again before (a particular time for the next sitrep).
 - Make other calls on an “as needed” basis.

Note: If you are a Firecom or Base and you need to call for assistance from outside your area, you can either:

- give the other Firecom/s or Base/s details of exactly where their units are to respond/proceed to, who to call and what channel to use. (They will pass those details on to their units when they depart their station/shed), or:
- you can ask for their units to be told to call you on your primary channel when they approach your area (in which case you would give their units details about the call when they make contact with you).

3. Definitions

“Base”, (preceded by the brigade, group or location name), is the callsign of any fixed radio station used for RFS operations, except for the RFS District Firecom.

“Control”, (along with the name of the incident), is the callsign of the Incident Controller (the person in charge) of an incident.

“Firecom”, (preceded by the name of the RFS District), is the callsign of the RFS District fire communications centre.

A "Flank call" is a call made to a unit outside your normal network arrangements. (E.g. Calling another unit directly, instead of communicating via your supervising unit or Firecom/Base.)

"Incident" is the general term used to describe a fire or any other emergency event attended by the RFS.

Sitrep – "Situation Report" - See Comms. SOP #5 for full details of sitreps.

S.O.P. #5

Situation Reports (Sitreps)

1. Scope

This SOP covers short verbal sitreps, such as are typically transmitted by radio at incidents. It does not refer to long written sitreps for major incidents.

2. Procedures

- The word “sitrep” should be added at the end of call to establish contact when intending to give a sitrep, so that the other unit is ready to copy down details.
- Sitreps should be given by Control to Firecom/Base:
 - shortly after arrival at the scene of the incident.
 - when any significant objectives have been achieved.
 - when the situation changes significantly and
 - typically, at least once every 30 minutes.
- Sitreps should be given by a unit, to the unit in command/control of them:
 - shortly after arrival at the area assigned to them.
 - when any significant objectives have been achieved.
 - when the situation changes significantly and
 - typically, at least once every 30 minutes.
- Sitreps are of two types:
 - “Regular” sitreps designed to give an update on a situation.
 - “Initial” sitreps used when units first arrive at an incident.
- Regular sitreps should give the:
 - current situation.
 - probable development.
 - action being taken.
 - back-up needed.
 - any logistical needs.
- Initial sitreps (or “wordback” in some states) are a special case, and should:
 - normally be combined with the “at/approaching scene” call

- give/confirm the present size, type and location of the incident
 - briefly describe the incident's probable or possible development
 - advise any significance for the safety/condition of people involved
 - advise what action is being taken, or is proposed
 - advise if any assistance is needed.
- Initial sitreps are to include the following standard phraseology:
 - Describe the size of the incident as either:
 - Spot (i.e. an incident that can be handled using first-attack techniques)
 - Small (i.e. an incident that can be handled by units of the first response)
 - Medium (i.e. a "working job" that might require some back-up/relief units)
 - Large (i.e. an incident requiring additional back-up)
 - Describe the type of incident as either a:

- Structure fire	-	Hazmat incident
- Vehicle fire	-	Vehicle accident
- Bush/grass fire	-	Rescue
- Special fire (e.g. electrical)	-	Special service (e.g. spillage)
- False alarm	-	No sign of incident
 - Describe the probable/possible development of the incident:
 - Use a few words starting with "involving" and/or "threatening" to clarify the situation (e.g. "a large grass fire threatening stock and fences", "a small structure fire involving a shed and threatening the back of a house", or "a medium special fire involving an electricity sub-station").
 - Confirm the location by:
 - using its normal address, or
 - using a map grid reference, or
 - giving its location relative to a well known feature.
 - Advise if people are:
 - deceased - (give number)
 - trapped - (give number)
 - injured - (give number)
 - missing - (give number)
 - evacuating, or
 - all accounted for.

Under no circumstances are names, gender or age to be broadcast over the radio network. [In order to protect the identity of the victims].

- Describe your actions as either:
 - Investigating
 - Commencing (type of) attack (ie. Offensive/defensive, direct/parallel/indirect, etc.)
 - Commencing (type of) activities
 - Standing by with (type of equipment)

- Describe any assistance needed by:
 - Specifying the total number of units needed (e.g. “make tankers six”).
 - Specifying any specialist support needed (e.g. “request bulldozer”).

3. Definitions

Sitrep – “Situation Report” – A report from a unit or units at the scene of an incident to provide information to enable the incident to be safely and effectively controlled, managed, supported and recorded.

S.O.P. #6

Loss of Radio Communications

1. Scope

This SOP covers the procedures to follow if radio communications are lost due to, for example:

- The unit being out of range
- The incorrect channel being used
- The repeater not being activated (repeater channels)
- Poor transmission or reception conditions
- Failure of radio communications equipment
- A person being incapable of using the radio
- The crew being injured and incapable of using the radio.

The aim of these procedures is to enable all but the last to be eliminated and for assistance to be sent if the last is suspected.

2. Procedures

(a) For Units

- If you are a unit and you lose radio communications, as soon as operational conditions allow, you should work out the reason for the loss and re-establish communications by any safe and effective means. These include:
 - Checking the channel selection, radio, microphone and/or antenna for any obvious faults
 - On PMR systems, using the matching simplex channel, if contact on the repeater (duplex) channel has been lost
 - Transmitting from a more favourable location
 - Checking radio operation on an agreed alternative channel
 - Getting another person or unit to communicate or relay for you
 - Using alternative communications (e.g. telephone, or in person).
- If your unit has a complete radio failure, you should team up with a unit with a serviceable radio and have them communicate on your behalf.
- If a repeater has failed, the senior officer should consider setting up a unit in a favourable location where relaying using simplex working may be feasible.
- Note: Unless it would be unsafe to continue without radio contact, an operation may be continued according to plan if radio communication is lost.

(b) For Firecoms, Bases and Units Supervising Others

- If you are a Firecom, Base or a unit supervising other units, and you lose communication with one or more units, you should identify the nature of the problem and attempt to re-establish communications. Actions may include:
 - Checking the channel selection, radio and/or antenna for obvious faults
 - Transmitting from a more favourable location
 - Checking radio operation on a simplex channel (repeater failure)
 - Getting another person or unit to communicate or relay for you
 - Using alternative communications (e.g. telephone, in person, or by sending another unit to investigate).
- If you inexplicably lose communications with a unit and are unable to regain communications after trying for more than five minutes, advise the Fire Control Officer (or the duty officer delegated with his/her functions).
- If there is any evidence or suspicion that a unit is in distress or difficulties, and you cannot communicate with them, dispatch a unit to investigate and advise the Fire Control Officer (or the duty officer delegated his/her functions).
- If you have a complete radio communications failure, consider using alternative communications (e.g. mobile phone or written dispatches).
- If a repeater has failed, consider using simplex working or other alternative communications.

3. Definitions

Simplex – a radio system in which transmission and reception of calls on a channel uses a single frequency. (As opposed to repeater (duplex) working where a call is transmitted by a unit on one frequency, then received and retransmitted on a second frequency by an automatic repeater station, with all units using that channel receiving the call on the second frequency.)

PMR system – a private mobile radio system. In the NSW RFS, each PMR system normally has a primary channel (duplex working through a repeater) and a simplex working channel (using the “repeater transmit/station receive” frequency of the primary channel). – This means that calls on the simplex channel can be heard by units within range even if they are still on the primary (duplex) channel.

S.O.P. #7

Operation of Fire Communications Centres

1. Scope

This SOP is designed to outline the procedures and practices that should be in place in NSW RFS Firecoms to ensure their effective operation.

2. Procedures

District SOPs shall be developed locally and made available to operators of the Communications Centre for:

- Control of entry to the Fire Communications Centre.
- Opening up, taking over, shutting down and handing over the Centre.
- Operation and maintenance of communications and associated equipment.
- Getting access to weather information, maps, resource directories and pre-incident planning data held at the Centre.
- Promptly dispatching appropriate units to the scene of a reported incident.
- Promptly dispatching appropriate back-up units when requested by the Incident Controller or the Fire Control Officer.
- Scaling up the Centre's capability if a major incident/s occurs.
- Defining and monitoring the flow of information within the Centre, so that messages are recorded, prioritised, passed to the right people and actioned.
- Recording and reporting key information, including operational messages, weather information, the disposition of resources, situation reports, maintenance activities, training activities and/or log/journal entries.
- Liaising with other RFS Districts, Regional Offices and State Operations, other firefighting agencies, support agencies, the media and the public.
- Processing urgent safety warnings, and recording the action taken.
- Handling an "emergency" call and/or a report of firefighter/s injured.
- Taking alternative actions if some or all of the Centre's systems fail.
- Taking appropriate actions if the Centre is threatened by a fire/emergency.

3. Definitions

A "Firecom" (Fire Communications Centre) is the station controlling the communications network for a Rural Fire District.

S.O.P. #8

Allocation of Channels

1. Scope

This SOP details the radio communications channels to be used for NSW RFS operations.

2. Procedures

- The primary District channel shall normally be used for all radio communications within an RFS District.
- The matching simplex working channel shall normally be used if use of the primary (duplex working) channel is ineffective.
- An Incident Controller, the Fire Control Officer, or a person nominated by either of them, may authorise the use of an additional or alternative channel when that would help reduce radio traffic congestion or improve communications.
- Common user channels, and any channels normally allocated to the District may be used without further permission. Permission from RFS State operations is needed for the use of any other channels.

3. Definitions

- The channels allocated to each District, any UHF CB channels known to be used by the RFS in each District, common user channels and special use channels are indicated on the current (separate) radio communications chart.