

VFBV Listening Set Position Paper



VFBV

VOLUNTEER FIRE
BRIGADES VICTORIA

October 2010

VFBV Position Paper

This paper is designed to:

- Provide advice to CFA and Brigades on VFBV's position regarding the retention of a device capable of performing the functions of a Listening Set that will be compatible with the new CFA Digital radio network
- Provide advice to CFA and Brigades on the results of an extensive survey conducted by VFBV to review the number, location and uses of Listening Sets / Scanners amongst Volunteers and their Brigades throughout the state.
- Seek the support of the CFA to endorse this Position Paper and to adequately resource and fund steps to ensure such devices remain

VFBV Position

- VFBV considers Listening Sets to be an important tool of trade to both Volunteers and Brigades and that a device capable of performing their function be retained
- VFBV considers the functions performed by Listening Sets are vital, and that Volunteers reliance on, and their extent of use represents a significant risk to CFA and our communities if their capability is rendered redundant
- VFBV believes CFA should minimize any impact, including cost to Volunteers of CFA moving to a Digital Network and rendering current Listening Sets redundant
- Acknowledging that many Listening Sets have either been provided by CFA in the past, or purchased by Volunteers at their own expense over the years, that it should be CFA's responsibility to provide and fund replacement sets that are capable of working on the new network
- As with any new innovation or technology, there are initial cost impacts. VFBV considers that when budget inputs are balanced against the efficiencies gained in operational outcomes, the benefits that CFA and our communities derive from their use, convenience and firefighter safety & wellbeing, this budget impost is warranted.
- Whilst CFA has missed opportunities to minimize the cost of a future Digital Listening Set, or including it in Project funding bids, VFBV maintain that cost should not be used as an excuse or reason not to address this issue.



Recommendations from VFBV Reference Panel

The following recommendations were endorsed by the VFBV State Council on September 19, 2010.

Brigades were offered the opportunity to complete a short Survey/Stocktake that asked them to tally and provide feedback on the uses and numbers of Listening Sets within their Brigades. These results were collated and considered by a VFBV Reference Panel who then made detailed recommendations for VFBV State Council to pursue as policy initiatives.

1. The CFA be advised that Listening Sets are extremely important to volunteers, and we consider them a critical tool in providing the following functions;
 - a. Situational Awareness
 - b. Monitoring own brigade turnout
 - c. Monitoring Brigade Incidents
 - d. Pre-empting Brigade Activation
 - e. Monitoring Incident Status
 - f. Monitoring of Family Members/Loved Ones
 - g. Monitoring Weather Information & Updates
 - h. Listening to Region & Group radio Skeds
2. That CFA pursue as a priority, a solution to engage PRIOR to the CFA radio network going digital.
3. That CFA tender for the bulk purchase/production of a suitable Listening Set, with the aim of using its bulk buying power to significantly reduce the cost of replacement digital listening sets that will be compatible on the new network.
4. That CFA genuinely engage and investigate funding opportunities to purchase or subsidize replacement Listening Sets.
5. Depending on success of funding, that CFA consider the following options for distribution dependant on available funding in the following order:
 - a. CFA purchase Listening Set at no cost to the volunteer on a 1 for 1 swap
 - b. CFA subsidize the cost of a replacement Listening Set on a 1 for 1 swap
 - c. CFA take bulk orders from brigades, and use its buying power to purchase Listening Sets that will then be sold at cost to any who wish to purchase them
6. That CFA senior management consult with Volunteers and their representatives on what actions it is taking to ensure this vital resource and capability is maintained and that CFA in consultation with VFBV develop a change management strategy and plan to manage any impact of CFA frequencies switching to Digital and impacting on current Listening Sets.



BACKGROUND

CFA has traditionally relied on analogue radio communications to provide dispatch, command and control, and incident communications. CFA's current systems for the most part operate in the VHF band (136 – 174 MHz). Due to CFA's volunteer and community focus, the underlying principle of all CFA radio communications is that communications is on an open all-informed basis so that any CFA personnel and the local community monitoring the communications can hear information about an incident.

A Listening Set/Scanner is any device that is used by its brigade or its members, to monitor these CFA radio frequencies. This could be in the form of a dedicated Listening Set, a Scanner or a Mobile/Portable radio that has had its "send" ability disabled. They are normally categorized as being a small low cost device, normally costing in the vicinity of \$100 - \$200. Due to them not having any "send" capability – they do not incur any licensing fees.

In the early 90's, CFA bought and distributed 10,000 Motorola Listening Sets for use by Volunteers and Brigades. Whilst CFA senior management only believed there to be around 3,000 still in use, our estimation based on an extensive state-wide survey and stocktake puts that figure at closer to 21,000 and that excludes sets that may be used by community groups and the general public.

In early 2008, CFA received considerable government funding for two new major Communications Projects. These are each run independently but also concurrently. They are the **Radio Replacement Project** (RRP) which received a budget of \$57 Million dollars and the **Regional Radio Dispatch Project** (RRDP) which received \$42.7 million dollars.

The Radio Replacement Project will introduce new vehicle-mounted (mobile), hand-held (portable) and special configuration radios into service throughout CFA, whilst the Regional Radio Dispatch Project has been established to provide CFA and VICSES with a new regional radio (CAD based) dispatch capability.

Importantly, the RRP project has chosen a digital radio, that is capable of running in Analogue mode, which will make it backward compatible with the current CFA network, but will operate in Digital mode when the new network comes into effect. The RRDP Project has chosen to source a completely external digital P25 network. This network will be progressively rolled out to all CFA Districts, (except 7,8,13 &14) starting around June 2011. As this new network is provisioned, the old CFA network will be dismantled.

As each District switches over to the new Digital Network – all current Analogue Listening Sets/Scanners within that District will cease to be able to monitor CFA frequencies, rendering them completely useless.

At present, a Digital Listening Set/Scanner retails for around \$900 to \$1,000 – putting them out of reach to most Volunteers and Brigades.

The CFA Radio Replacement Project is funded to replace mobile and portable radios. CFA have made no allocation for any upgrade or replacement of Listening Sets or Scanners. No allocation has been budgeted for in the Regional Radio Dispatch Project either.

Listening Sets were not identified by CFA as a stakeholder requirement in either of the two Expression of Interest documents for the two new major contracts that went out to tender, and have recently closed. Nor was it included in any of the Project Plans for the Radio Replacement or Regional Radio Dispatch Projects. This is despite the issue of Listening Sets and their seriousness being raised frequently since early 2009. VFBV's advice relayed to CFA senior



management in 2009 was that the manufacturing of a low cost Listening Set be included as part of the tender process to encourage manufacturers to bid and compete to deliver a lowest cost device that would perform the functions of a CFA Listening Set. It was our belief that this would provide considerable incentive for the manufacturers to deliver an extremely low cost unit which they might provide at close to cost in order to compete on the tender.

In August 2010, whilst Listening Sets had been on the agenda for most of the year, the volunteers and VFBV representatives on the Joint Communications Advisory Committee were informed that the actual costs incurred by the Radio Replacement Project in replacing the CFA fleet of mobile & portable radios had come well under budget and additional initiatives were being reviewed. Listening Sets were not included on this list.

In a follow up question to Senior Managers on where Listening Set policy had progressed to, the Joint Communications Advisory Committee were informed that “Operational Justification” will now need to be assessed prior to considering any other options.

VFBV would like to make it clear that Volunteers rely on listening sets, and CFA and our communities benefit enormously from their use. In regional areas around the state, they are frequently the common thread that ties all other communications together. It is often referred to as part of the “bush telegraph.”

The majority of volunteers using them, have bought Listening Sets with their own money over the years so that they can better perform the duties their communities expect, and to assist their family members to stay apprised of their situation when they are off at a fire, or assist with communicating with privately owned tankers & equipment. Listening sets are often attributed via Situational Awareness in allowing CFA members to pre-empt brigade activation, and it is no little wonder that as a result that CFA record some of the fastest on-scene times of any emergency service in Australia. It also cannot be understated that putting aside the considerable “operational” reasons for using Listening Sets, they are also relied upon by wives & loved ones who frequently release their partners to attend incidents, and gives them enormous emotional support to be able to “listen in” and track what their partners are doing and involved in. To render them obsolete with the flick of a switch, without an appropriate change management/strategy in place constitutes a serious risk to CFA.



Survey/Stocktake Results



VFBV Survey/Stocktake of Listening Sets

Frustrated that Listening Sets were not being considered nor budgeted for by the CFA Project Teams, and believing that there were many more Listening Sets and Scanners in use than was often quoted in discussions with decision makers, VFBV initiated a State-wide stocktake on listening sets in April of this year to gather actual data per brigade in order to try and emphasize to CFA the importance Listening Sets & Scanners are to Volunteers, and to urge CFA to factor it in to their change management plans in the switch to digital frequencies.

As part of its stocktake, VFBV wrote to every Brigade in the state, requesting they complete and return a short stocktake/questionnaire that identified how many listening sets their Brigade members have, who owned them, where they were located, how frequently they were used and what they were mainly used for.

VFBV received over 500 responses from Brigades, and a further 100 or so responses from others such as Groups, Community Organizations, Industry Fire brigades and other affected persons.

Whilst we only included CFA brigade and group responses in the official stocktake report in order to protect the integrity of the data, it must be acknowledged that Listening Sets & Scanners are used widely in our communities, and their removal will have a significant impact.

Survey/Stocktake Results:

- 500 + responses received from CFA Brigades
- ~ 100 Responses received from Groups, Community Organizations, Industry Fire Brigades & other affected persons

Of the 500+ responses received from CFA brigades, 479 were useable. The remainder were either not provided on a survey form, or did not provide enough data on the sets identified. For example – some responses only consisted of a letter that simply stated how many Listening Sets were in use at a particular location. In order to protect the integrity of the results, if specific uses and types of sets could not be ascertained, or if it could not be ascertained that these units were not already accounted for on a Brigade response, then the response was excluded from the official results.

211 of the 479 CFA Brigade official responses included comments in support of their importance, highlighting how emotive this issue is in volunteers eyes.

Question1: How many Listening Sets/Scanners are owned/used by members of your Brigade?

	Number	Percent
CFA Owned	242	3%
Brigade Owned	1,424	18%
Privately Owned	6,211	77%
Ownership Unknown	150	2%
TOTAL	8,027	



Question 2: Where are they located?

	Number	Percent
Fixed Location	3,529	44%
Installed in Vehicle	884	11%
Portable	3,557	45%
TOTAL	7,970	

Notes provided on Survey

Fixed: These Listening Sets are usually always in the same place. They rarely move from that location.

Installed in Vehicles: These Listening Sets have been installed into a vehicle.

Portable: The location of the Listening Set changes frequently, and may mean it is sometimes carried by the member.

Question 3: How frequently are they used?

	Number	Percent
Always On	3,932	50%
Frequently	2,558	33%
Only During Fire Season	1,224	16%
Not Used	117	1%
TOTAL	7,831	

Notes provided on Survey

Always On: The Listening Set is almost always on when someone is around.

Frequently: The Listening Set is used frequently. This may be incident specific, (so whenever your Brigade has a job it is usually on) or it might be day specific (may always be on for code Orange/Red/Purple days).

Only During Fire Season: The Listening Set is only used during the Fire Season.

Not Used: The Listening Set is no longer used at all, and is packed away in a box or cupboard etc.



Question 4: What are the main reasons they are used for?

	Number	Percent
Pre-empting Brigade Activation	4,292	53%
Situational Awareness	4,839	60%
Monitor Incident Status	4,292	53%
Monitoring of Family Members	2,800	35%
Monitor Brigade Turnout	4,499	56%
Monitor Brigade Incidents	4,320	54%
Listen to Region Skeds	2,423	30%
Weather Information	2,726	34%
Other	333	41%

Notes provided on Survey

Ask members what they mostly use the Listening Sets for. This total can exceed the total amount of sets you answered in question 1, as some people may use it for 2 or 3 different purposes. However, try to only count 2 or 3 of the main reasons for each member. For example, a member may use their scanner for every reason listed – but ask them what reasons it is MOSTLY used for.

Pre-empting Brigade Activation

It is used to monitor the progress of a fire you know is close to your area, and thus will help you determine the likelihood of your brigade needing to attend.

Situational Awareness / Monitoring Regional Activity Level

It is used for general purposes so you are aware of what is happening in your vicinity. You may also use it to determine how much activity is happening in your Area/Region, and the proximity of those jobs to your area.

Monitor Incident Status

It is used to monitor a particular incident that either you know about, and want to monitor wordback and sitreps to get more information than is usually displayed via other mediums.

Monitoring of Family Members/Loved Ones

The Listening Set might be used by a partner, or family member when a CFA member has gone off to a job. They might monitor so they know how the incident is going, or might use it to know when the member is likely to be returning home for dinner or other family engagements etc.

Monitor own Brigade Turnout

It is used to monitor if your brigade appliance(s) have turned out or not and which appliances have been committed.

Monitor Brigade Incidents

It is used to monitor incidents where your brigade is in attendance. This might be to determine if any further resources may be required, or it might be to monitor when the appliances are returning so you can assist with cleanup or restowage.

Listen to Region/Group Radio Schedules (Skeds)

It is used to listen to regular Region or group radio activities/skeds. These may include local



availability skeds, preplanning, and upcoming training/meeting radio skeds.

Weather Information/Updates

It is used to gather information on changing weather observations from the field as reported by Crew Leaders and Ground Observers etc.

Other

Capture any reason that don't fit into any on the list in this category. If many members have the same reason that is not on the list, consider including this information in the general comments section at the end of the survey.



Sampling of Comments Submitted with Survey/Stocktake Forms:

Over 200 letters and comments were received in addition to the survey questions. A small sampling of these are printed below.

Members need scanners to listen to brigade incident for locations of incident, as addresses change frequently from MSG on pagers particularly in large cities/rural response areas.

Listening sets are used to monitor brigade status and pre-empting crew change over

The brigade owned scanner is used at the fire station as we do not have a base radio. It is vital to monitor support incidents and when crews are on standby (situational awareness). It enabled our standby crews to respond to the Black Saturday fire in Bracewell St long before pager activation.(Due to difficulties in getting through to Vic Fire by phone).

-Crucial to the operation of brigade -Proved invaluable on black Saturday.

Scanners are critical for notification and information for officers and active members of the brigade. For example on Black Saturday this was the only means for alert due to pagers being inoperable.

Unfortunately it looks like it is going to cost our brigade a fair bit to replace our listening sets when the CFA radios go digital. This is a cost we cannot afford!

Listening sets are a very reliable form of communication especially in times of emergency and when other forms of communication eg. pager, phone fail

I surveyed 19 fire fighters members of which 13 had listening sets and the ones who hadn't, have considered buying one for themselves in the future most are privately owned. They feel passionate about having listening sets as it provides a vital resource within our farming communities, closing the isolation gap and providing vital up to date communication especially on an extreme fire day.

On black Saturday having lunch at 12.10 the Mount Rouse fire tower reported a smoke sighting in our brigade area, with out waiting I had a very good idea where fire was because there had been a burn off 2 days before. Myself and Mount Rouse group officer both heard the tower talk and hit the fire within 5 minutes only because of the listening set. We had stopped or contained what was going to be a major fire on Purdeet lane and would have burnt to Warrnambool. Given the day it was. The fire was contained by my private unit until CFA tankers arrived 10 minutes later.

With brigade members working their farms and jobs monitoring region activities on a listening set is the only way they can pre empt if our brigade could be involved. I stress that this option being lost to the brigade would cause turn out delays and hamper the use of several private units that assist our brigade.

We are a rural brigade and members are spread over a large area. Listening sets enable us to anticipate call outs, particularly into neighbouring brigade areas

During fire season if fire starts in group as Captain I can have crew ready to role. Even before being paged which is a great time saver.

Most members when responding will listen to call to ensure appropriate appliances have responded and go straight to the call. -As we are a busy integrated brigade and get many minor call outs that the staff can handle without needing further assistance, many members will listen to the call and await further information from Vic fire.



Members who live at some distance from the station often cannot attend quickly enough for initial turn-outs. Listening sets/scanners are then invaluable to get an idea if extra crew are going to be needed.

Due to Brigade location and member home location some members use scanners to start heading toward the station to make turnout times run more efficiently.

Since the advent of A/N pagers there is no other way of knowing if your brigade appliances have responded.

All members commented that an important use of their scanners was to enable those at home (family) to monitor who their loved ones were doing as well as when they would be expected home.

All brigade members support 100% the objectives of this survey.

Our brigade members purchased the listening sets because of the proximity of their properties to the bush interface with the DSE. Having these radios help keep them informed of any fires in their area and believe that without them they will be more vulnerable to the risk of wildfire. It is essential that these listening sets be replaced.

Our survey results indicate the vast majority of our active members currently use scanners to support operational activities and preparedness. We are concerned that moving to digital scanners will not be possible for many of our members due to the cost fr change over.

Listening sets are still required as internet related systems require reusable 240 vac power (& mobile coverage where appropriate) to operate. Pager messages do not include stop, returning to station or word back information. Internet and pager messages are delayed in times of heavy traffic Information via listening set is generally still available long after lap top p.c battery has gone flat. (In event of power failure.)

They are a vital tool used by brigade members throughout the State of Victoria,. Most listening sets and scanners were bought by volunteers using their own money so that they can better serve the community in their own time. For the CFA to change frequencies so that volunteer radios do not work and to make us pay further money for new radios is a disgrace. It is no wonder members become disenchanted with the organisation.

Current indications are that if replacement scanners are going to cost several hundred dollars, then members will not purchase them as we all did last time there was change in the radio network. This will affect the brigade's performance.

The Brigade finds the handsets vital to cure everyday activity from monitoring incidents to getting the right equipment to the fire fighters. We have alot of members that live on the Baidari where they cannot get to the fire station in time required. Due to us being a small brigade numbers are vital on scene, fire fighters can then drive to the incident or in some cases when the information is incorrect to where the incident is, they can be redirected to the right place. When these incidents are false alarms they can return without any trouble. They can also be informed of needs on scene, and pick up things like the slipon or collar tanks or informing to our very dedicated support team that we need supplies. We have also found its very useful during the fire season if we can listen into what is happening, we are at the station ready to go even before our pagers go off.

It is an important tool for wives and partners. It is commonly known that they use them for monitoring local activities and also to be kept up to date with status of incidents that partners are involved in. They find these listening sets very comforting.



The listening sets owned privately by brigade members are still considered to be the first indication of a brigade incident or group incident and are therefore an irreplaceable part of brigade life. The group sched at 12.30pm is keenly listened to for info (CFA), weather and general news. I could not imagine this brigade operating without them!

Listening sets are an integral part of our brigade operation. They help us man private units and help us getting equipment to targets quickly to do the job. If we don't have them the efficiency of this brigade will seriously diminish.

Scanners/ Listening sets are a great asset to our community in general. They are a form of communication that can provide "the edge" to people in a pending situation. They can also provide information to community members therefore freeing of valuable time of CFA volunteers.

Probably the most useful tool available to the volunteer firefighter. The advantage of monitoring the incident en route enables you to do an initial size up prior to arrival.

So families know what is going on if the loved ones leave home to a situation once the pager has left the home.

Others in our brigade who don't own sets ring those who do to follow incidents and loved ones. Non-members also do this to monitor situations and fires. They are a valuable tool in our area as local radio stations and TV can not be received at many of our resident's homes due to poor coverage.

Listening Sets are and have always been an integral part of our Group performance and safety. Our group consists of 19 Brigades covering 405,000 hectares in Western Victoria and is prone to very fast running grass fires and listening sets are still an integral part of communications for turning out private tankers and CFA unit activation. It is a well known fact that at least 90% of fires in our group are put out by private units. The ability to listen to local radio traffic when fires start usually ensures a quick response.

The safety of our residents and fire fighters is paramount and we consider listening sets to be the greatest asset any household and private tanker can have. Being able to monitor a fire in its progression gives everyone all the information they need as to:-

- 1. Whether to attend the fire in their private unit*
- 2. Local knowledge of knowing where the fire is and what precautions to take*
- 3. Listening sets in private units at fires can monitor CFA traffic and do what they are asked to do and ensure safety on the fire ground.*

Like CB radio, the upper reaches, and not so upper reaches of CFA is negative about the use of scanners at all. I made enquiries early in 2009 as to when the radio changeover was really likely to occur, as my brigade wished to purchase an additional 2 Listening Sets for the use of officers, and wanted to know how long they would be useful for. I do not recall specifically who I spoke to at CFA State HQ, but he was a senior manager in Communications. He was very suspicious about my motives for the call, and I had difficulty getting information from him about the proposed roll out of digital radios. The gist of the conversation was that he did not support anyone monitoring CFA channels, his reason being that radio comms could be taken out of context or misunderstood. I found this to be a very negative attitude, and I expect it will continue in the future. I do not believe CFA will care about the enormous cost to volunteers, brigades and members of the public in replacing their current scanners. I commend the VFBV on pursuing this matter at an early stage.

