

# THE VOLUNTEER

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**Lest we forget**



# FOREWORD



## THE C.F.S. REVIEW IN PERSPECTIVE

Recently, at the request of the Board, members of C.F.S. brigades and officers of rural Councils have been given the opportunity of perusing the corporate review of the C.F.S. together with an explicit invitation to lend either voice or pen to comment. *It should be emphasised that this investigation was actually sought by the Board of the C.F.S. and not initiated by any other body.* During the course of very properly informing the Minister of the day of its wish to engage the management consultants Arthur Young and Associates, the Board was asked to include the Public Service Board in the review team. In view of the subsequent developments it is perhaps not remarkable that on the day that copies of the report were distributed to members of the Board, they were informed that the document had also been given to the Government. While the Board had nothing to conceal, the train of events did generate the impression in some circles, including the media, that the Board itself was under some form of externally imposed evaluation, which opinion was reinforced when the Government rather than the Board announced the release of the findings. Bearing in mind that it was the Board which was the client seeking as well as paying for a professional analysis of information relating to C.F.S. matters, events have taken a distinctly unusual turn.

Some aspects of the report were distinctly welcomed by the Board, particularly those concerned with financial reporting with which it has sought professional help for some years, in vain. For reasons which can only be conjectured upon, administrative links between the Board and the Government, particularly with regard to finances have generally been less than satisfactory in recent years and a cause of many unnecessary difficulties. It was properly thought that the Government might be more favourably inclined to help in this area if external consultants also emphasised a need. In this matter the report has been most helpful and Government approval for a qualified financial manager was forthcoming almost immediately.

With only limited funds available for the subsidies programme in recent years, the Board was pleased to receive the outline of a basis for a more equitable method for establishing priorities based on standards of fire cover. Because of the deep feelings that subsidies problems have been arousing in some districts, the Board realised that there was no way in which it could devise a solution which would be regarded as an impartial one by all concerned. In fact in the absence of a generally agreed code or formula, the Board was practically powerless to prevent some Councils from acquiring unnecessarily expensive equipment or to force others to up-date antiquated fire fighting facilities. It was here that the role of external consultants was regarded as being one of an indispensable arbiter or umpire.

*The Board wished to find a way out of the existing situation in which it had consistently found itself quite unable to please or even satisfy simultaneously the Government, District Councils and Brigades, although it had never concealed any "cards" many of the interested parties were just too far away to see them on the table!*

The reviewers' proposals on funding are rather disappointing, in that current inequities such as the requirement for insurance policy-holders to collectively match the Government grant to the C.F.S. have not been addressed. Indeed it has been suggested that the existing system should basically continue. What this means is that the Government will continue to cover only about one third of auditable C.F.S. costs when unsubsidised Council expenditures are included with insurance companies being obliged to continue acting as selective tax gatherers.

The present Board, although appointed by the Minister responsible for the C.F.S., has generally been understood to be in charge of a Statutory Authority. In view of the relative distribution of contributions to operating funds it was probably only correct, by virtue of the C.F.S. Act, that the Government was envisaged to be involved only "behind the scenes". Were the Government to wish for closer control, such as in the case of one of its own Departments, it should be clear that general revenue would need to cover a far greater proportion of the costs. The present Board members are therefore surprised at the suggestion that they might be replaced by a smaller Board of Management with a senior public servant in the chair. Volunteers might well wonder if they feel "left-out" occasionally now, in spite of 4 out of 10 Board members being delegates of fire-fighting associations, whether they will have any real influence when only one of them has a place on a 4-man Board!

The present Board has always taken its responsibilities to the 15,000 C.F.S. volunteers very seriously. It has also been concerned for the well-being of all of the rural people of South Australia and for the protection of the State's rural resources as well as its historical and environmental heritage. As the Board's chairman (still) it is with great pride that I can state that the individual members of the Board have consistently and sympathetically shown a collective responsibility toward a broad range of community interests in an amicable and constructive manner which few other rural fire authorities in the Commonwealth can claim to match.

A handwritten signature in cursive script, reading "Peter Schwerdtfeger".

Professor Peter Schwerdtfeger Chairman, C.F.S. Board

## EDITORIAL



### IS THERE A BETTER WAY?

By now all brigades and councils will have received a copy of the Country Fire Services Corporate Review and no doubt midnight oil will be burnt preparing recommendations to the Minister for Emergency Services.

Individuals and organizations will undoubtedly see good points and unacceptable points in the various issues and I will be most surprised if there is any general agreement on the document as a whole.

It must however, be remembered that the CFS Board commissioned the Review with the intentions of seeking ways and means to more efficiently serve the CFS brigades in particular and the public in general.

One of the most important issues in my mind is the establishment of the Standards of Fire Cover and I sincerely hope that this project, which requires a great deal of input from the fire fighters in the field will not be lost in the debate over other, perhaps more sensitive issues.

LLOYD C. JOHNS,  
Director  
S.A. Country Fire Services.

#### Front Cover :

#### *Lest we forget*

**The Governor of South Australia Lieutenant General Sir Donald Dunstan unveiled a memorial stone and plaque on 16th February 1984, to commemorate the first anniversary of South Australia's most tragic and disastrous bushfires in which 28 people lost their lives.**

*Plaque inscription reads:*

**IN HONOUR OF ALL FIREFIGHTERS  
WHO FOUGHT THE FIRES IN  
SOUTH AUSTRALIA ON  
WEDNESDAY, FEBRUARY 16, 1983  
AND ESPECIALLY THOSE WHO  
GAVE THEIR LIVES IN THE  
PROTECTION OF OTHERS**

**UNVEILED BY HIS EXCELLENCY, LIEUT. GENERAL  
SIR DONALD DUNSTAN, K.B.E., C.B., K.St.J.,  
GOVERNOR OF SOUTH AUSTRALIA.  
FEBRUARY 16, 1984.**

Front Cover photograph reproduced courtesy "The Advertiser"

## New Minister for Emergency Services.



MR. J.D. WRIGHT, M.P.  
DEPUTY PREMIER OF SOUTH AUSTRALIA

The new Minister for Emergency Services, Jack Wright, is one of the most experienced Ministers in the State Cabinet.

After 30 years in the trade union movement, Mr. Wright entered Parliament in 1971, and from 1975 to 1979 was Minister for Labour and Industry in the Dunstan and Corcoran Governments.

On the election of the Bannon Government in 1982, Mr. Wright was elected Deputy Premier, appointed Minister for Labour and Minister for Public Works.

His entry into the Emergency Services portfolio earlier this year was a direct result of the Ash Wednesday bushfire.

"Like all other sections of the community the Government was shocked by the devastation caused by the fires."

"We were determined to do what we could to make sure the damage from any such future catastrophe would be lessened," said Mr. Wright.

The idea which had taken seed immediately after the fires, of combining all emergency services under one minister, was given a further boost by the Scriven-Lewis report into the bushfires.

That report recommended the amalgamation of the Country Fire Services and the Metropolitan Fire Service.

"However, the Government decided that the time was inappropriate for such an amalgamation," said the Minister.

"Individually both services had performed well. What was needed was better co-ordination. And we concluded that this could be achieved by bringing both services under the administration of one minister. At the moment that is one of my top priorities. I have already had talks with the executive officers of both the CFS and the MFS with a view to improving the co-ordination and co-operation between the two services.

"So far, progress has been excellent, and I have nothing but praise for the diligence and competence of all with whom I have come into contact in both the CFS and the MFS.

"In addition to those talks of course, I have released for public comment the Corporate review of CFS activities, which outlines a plan for significantly upgrading the services provided by the CFS.

"Some of the changes proposed are significant, so I have given interested bodies until the end of May to comment. I don't want to make any changes until those bodies, most directly concerned, have had a chance to give their views.

"The Country Fire Service has served the South Australian public magnificently over the years, and I am confident that with the changes now in the pipeline, that record of unparalleled service will continue." Mr. Wright said.



# Letters to the Editor.

## EXEMPTION FOR C.F.S.

Dear Sir,

I'm writing with some information on C.F.S. Bank Accounts you may wish to include in "The Volunteer".

We have recently applied for, and been granted, exemption from Bank Account Debits Tax (Administration Act 1982) and Financial Institutions Duty (Act 1983) applying to our interest bearing C.F.S. Cheque Account.

Application forms are available from the Australian Taxation Office, 65 King William Street, Adelaide, 5000 (for Bank Account Debits Tax) and the State Taxation Office, Stamp and Succession Duties Division, Victoria Square, Adelaide, 5000 (F.I.D.).

Both forms ask the source and nature of deposits:

"Proceeds from fund raising activities and Donations"

and the use of the account:

"Purchasing Brigade Equipment and supplies".

I hope this may be of benefit to other Brigade Secretaries/Treasurers.

Yours faithfully

K.M. Roberts

Sec/Treas.

MALLALA C.F.S.

5/3/84

## 17m read of Holocaust

Almost 17 million people read of the horror and heroism of last year's Ash Wednesday fires in South Australia and Victoria, in the February 1984 issue of Readers Digest – the world's most read magazine.

The 32 page article "HOLOCAUST ON ASH WEDNESDAY" was written by British roving editor for Reader's Digest Mr. David Moller, following a tour of the fire devastated areas to interview the many victims and heroes.

*"It is a story to make you weep for those who suffered and a story to make you proud of the resource and bravery that such a disaster can bring out in our nation."*

*The only criticism one can level at the article is that the South East of S.A. did not get a mention and yet that area of our State had SEVERE losses inflicted upon it. . Editor.*

## The Devourer

by Emma Pearce

Through the humult of the whirling winds,  
In darkness and in fear,

Death leaps roaring upon the hillsides,  
The fire draws near.

A mourning shroud of smoke, a pall of ash  
hides the Devourer,

Singed birds plummet from the skies,  
a dying koala screams.

Fleeing snakes slither helplessly

On red-hot rocks,

Falling ash rains on their funeral pyre,

Trees groan in pain.

## PLEASE NOTE

## Street Name Change

Effective from Sunday 1st July 1984 the Council of West Torrens will change the street name of West Beach Road to: **RICHMOND ROAD.**

Please address all correspondence from 1st July 1984 to: COUNTRY FIRE SERVICES, 20 RICHMOND ROAD, KESWICK. S.A. (formerly: 20 West Beach Road, Keswick, S.A.).

The Postal Address: P.O. Box 312, Goodwood, S.A. 5034 remains unchanged.

## APOLOGY

The Author of Fire Management and National Parks – an article that appeared in "The Volunteer", Volume 19, December 1983 was Mr. Nicholas Newland, National Parks & Wildlife Service.

## HELMETS AND HATCHETS

A History of the Hobart Fire Brigade 1883-1983

**As part of the centenary celebrations for the Hobart Fire Brigade the Tasmania Fire Service has commissioned a history of the Brigade from its modest beginnings to the present day, with a book titled "HELMETS AND HATCHETS".**

## The Book

The Author, Mr. Roger McNeice has constructed a fascinating and meticulously detailed account of service to the community. The book is at the same time a valuable contribution to Tasmanian history and a readable chronicle of human drama and tragedy.

The ongoing story of the Hobart Fire Brigade is interspersed with numerous anecdotes and interesting extracts from the newspapers of the time recounting some of the thousands of fires in and around the city of Hobart.

The Tasmania Fire Service is keen to see the book circulated among people throughout Australia with an interest in fire brigades.

The Book "Helmets and Hatchets – A History of the Hobart Fire Brigade 1883 to 1983" can be obtained for \$29.95 each (plus \$4.50 postage and packing) from Wombat Books, 8 Toorak Avenue, Lenah Valley, Tasmania, 7008.

## Anti-fire gear sales tax waived

**Sales tax on fire prevention equipment will be waived for South Australians building homes in fire prone areas.**

The Prime Minister, Mr. Hawke, has agreed to the move after a request from the Premier, Mr. Bannon.

Mr. Bannon wrote to Mr. Hawke after the Ash Wednesday bushfires in February last year.

The 20 per cent sales tax exemption will apply to water pumps installed by homeowners to combat future fires.

It also will apply to pumps which form part of a householders' general water supply system and irrigation pumps used to fight fires.

Mr. Hawke made the decision despite advice from the Adelaide Taxation Office the pumps did not qualify for sales tax exemption.

Mr. Bannon said residents who had their homes destroyed in the Ash Wednesday fires were following expert advice and installing fire prevention equipment.

But the Government was concerned by the additional financial burden of sales tax and had asked the Commonwealth to waive it as a matter of urgency.

The decision has been welcomed by the State Government Insurance Commission assistant general-manager, Mr. B. Woods.

"While sprinklers and hoses had not been made exempt, the decision on water pumps would encourage home owners to take positive action to protect their homes and property".

"It also will take the pressure off the Country Fire Services," he said.

"We hope this announcement will be a forerunner of other moves to assist householders play a greater protection role."

Article courtesy The News journalist Craig Bildstien.

## ASH WEDNESDAY REMEMBERED

A twilight memorial service to honour all who fought and the 28 South Australian firefighters and civilians who died in the Ash Wednesday II bushfires last year, was held at Mount Lofty on Thursday 16th February 1984.

Stark reminders of the ferocity of the bushfires in the Adelaide Hills were still visible to the 600 people who gathered at the Summit in remembrance.

The service commenced with the ringing of the bell at the nearby ruins of St. Michael's House which was itself destroyed in the bushfires.

Throughout the ecumenical service tributes were paid to the volunteers and members of the public who gave their lives in the attempt to save others.

The volunteer firefighters were commended for their tremendous courage in the face of adversity and the public for the community spirit which prevailed during the clean-up and rebuilding programme.

Major E. Lamotte Divisional Commander of the Salvation Army in S.A. conducted the service and spoke of the personal devastation suffered by so many.

S.A. Premier John Bannon said the tragedy brought out the heights of individual courage and sacrifice.

*"It was a time of pain and sorrow, but we can carry the memories of community spirit and fellowship into our lives as well as the sadness," he said.*

*"The best way to remember those who died is to make sure it does not happen again."*

The Reverend Milton Hopkins of Summertown Uniting Parish was deeply moving as he led the gathering in prayer, dressed in his faded C.F.S. uniform which had seen many years' wear.

*"We give thanks for the life and death of those who lost their lives. They sacrificed themselves in trying to help others. We can still love them, knowing they are in His care."*

Other clergy participating included the Rev. Ken Maher, of Stirling Uniting Church and the Rev. Father Tony Kain, of Mount Barker Catholic Church.

The South Australian Police Band provided music and accompaniment for hymns.

S.A. Governor Sir Donald Dunstan then unveiled the memorial stone and plaque and the Australian flag with a scroll was presented to Harley Matthies aged 3½, son of the late Peter Matthies who, as a member of the Norton Summit C.F.S. lost his life fighting the fires.

The scroll read:

**"This South Australian flag was presented to Harley Matthies on February 16, 1984, by an Honour Guard of the Country Fire Services in honour of his father, Peter Matthies, of the Norton Summit C.F.S. Brigade, who gave his life for the protection of others while fighting the disastrous bushfires of February 16, 1983."**

C.F.S. Director Mr. Lloyd C. Johns paid tribute to S.A.'s finest and best, who answered the call – the 5,000 fire fighters from country and city brigades.

The service concluded with the playing of "The Lament" by Adelaide University Regiment piper Staff Sergeant Phil Wyld, silhouetted against the setting sun.



C.F.S. Volunteer firemen lay a wreath at the foot of the Memorial Stone.

(Photograph reproduced courtesy "The Courier," Mt. Barker).



Mrs. Joanne Matthies, second from right, holding her son Harley aged 3½, and her late husband's mother Mrs. Matthies (right) with other relatives, pay their tribute at the memorial plaque.

Memorial services were also held in the South East of S.A. on the first anniversary of Ash Wednesday.

An 11 a.m. service at Wattle Range organised by the Millicent Uniting Church was attended by about 200 people, who gave thanks for recovery since the fires of February 1983.

Millicent Uniting Church Minister Rev. F. Measday said the thanksgiving, for the regrowth of nature and what the fire had taught people.

Victims of the fire were also remembered during prayers.

At Kalangadoo one of the districts worst hit by the fires – a memorial service was conducted in the St. Joseph's Catholic Church. The Mass was celebrated by Penola's Catholic Priest Father John Vildzius.



# CORONER'S INQUEST - FINDINGS - 1983 ASH WEDNESDAY II BUSHFIRES

## POWER LINES CAUSED SOME FIRES

(South East Fires, Ash Wednesday II 16th February 1983)

**MOUNT GAMBIER** - Electricity Trust power lines caused some of the bushfires which devastated South Australia's South East on Ash Wednesday II.

The State Coroner, Mr. D.B. Ahern, on Wednesday 14th December 1983 gave his findings at the end of the series of 17 inquests, at Mount Gambier Courthouse.

As a result of the fires that occurred in the South East on the Ash Wednesday 16th February, 1983, 14 people died, 97 persons were treated in hospitals. Between the 16th and 18th February the St. John Ambulance treated 459 persons for minor injuries, smoke inhalation, heat exhaustion, etc. 96 houses had been destroyed and 27 damaged, 514 sheds and 264 vehicles destroyed or damaged, stock loss totalled \$11 million.

In his 200 page report, Mr. Ahern dealt with 10 inquests covering the 14 deaths, and 7 further inquests into individual fires.

Mr. Ahern described the events of 16th February as "The most tragic episode in the history of the South East."

Temperatures had reached 43 degrees, wind gusts reached 90 km/h and several fires broke out at different times and in different locations as far apart as Naraween and Eight Mile Creek, some 90 kilometres or thereabouts in a direct line. The rate at which the flames spread in grassland areas was among the highest recorded in South Australia.

### Findings

Mr. Ahern found:

- Some fires were caused by contact between trees and power lines.
- Lines were not up to standard in at least one case.
- Necessary remedial action had not been taken when he revisited the site of one fire in November.
- The 14 deaths resulted from inhalation of smoke and from burns.
- In a number of cases, ETSA linesmen were not fully acquainted with the trust's requirements in relation to power lines being clear of trees.

### Recommendations

Among his recommendation for action Mr. Ahern called for:

- Establishment of an upgraded police communication system as soon as possible.
- Overcoming of any difficulties in CFS communications before the "coming fires".
- Removal of large sections of the S-E forests, close to power lines.
- The formation of an emergency fire plan for every town in the South-East, with details being made known to every householder.
- The need for ETSA research into electric fences even though they had not been responsible for any of the fires.
- A call on ETSA to look carefully at electric tie wires, some of which were found to be defective.

Mr. Ahern said: "Having regard to the factors of high winds, very hot temperatures and the dry vegetation, one can easily appreciate that the stage was set for a holocaust."

"As events turned out this is what actually eventuated."

### Impossible odds

"It is obvious that having regard to the prevailing climatic conditions, the fire fighting personnel were battling against virtually impossible odds.

The difficulties were multiplied by the numerous separate fires and also the change in wind direction which occurred later in the afternoon and which was not expected until later.

## SOUTH EAST FIRES continued . . .

This change in my view was a significant factor contributing to a certain number of deaths which occurred.

I might add that having regard to the prevailing circumstances of Ash Wednesday those persons involved in the fire fighting activities that day performed admirably."

### Power needed

In a further recommendation, Mr. Ahern said the CFS Board should be given the power to instruct local councils to clear any land believed to be a fire hazard.

### Fire causes

The coroner's findings on the various fires were:-

**Hackett Hill** - "this fire spotted from the Mt. Muirhead area which was the most likely locality .. it probably originated a little after 3.30 p.m. (1530 hours)"

**Claywells** - "there is no evidence before the court to indicate the cause of this particular fire, which burnt about 23,500 hectares of land. The Claywells fire originated around about 1.35 p.m. (1335 hours), give or take 4 minutes either way."

**Eight Mile Creek** - "there was ample evidence to support the view that a tie wire on the north-western pole had become loose thus allowing the conductor to move from the insulator. Arc marks on the alley arm indicated a contact between the tie wire or conductor. An arcing process on electricity lines had produced showers of molten metal which could have been carried the distance of approximately 26 metres to dry vegetation to start the fire." The fire burnt out approximately 250 acres, 3 hay sheds containing approximately 7,000 bales of hay and destroyed 7-8 miles of fencing.

**Naraween** - "it was 'reasonably certain' this fire was due to an electrical fault which occurred when a rather tall swamp gum fractured and fell across an electricity SWER (single wire earth return) line and made contact with and then broke the conductor. There is ample evidence to indicate the tree was in a decayed or rotten condition and having regard to its height and its condition and its reasonably close proximity to the SWER line constituted a danger." "The Naraween fire originated probably shortly after midday." The total distance travelled by this fire from its point of origin was approximately 90 kilometres, area burnt, approximately 80½ thousand hectares - pine forests being a significant portion.

**Konelgin** - "Mr. Ahern noted a report to him, which said: "The source of ignition for the fire could have been the molten particles produced by the arcing between the two sets of lines or the fracturing or falling to the ground of the 19KV conductor - or a combination of both. This would have caused a shower of molten metal particles to fall on to dry vegetation under the line thus causing ignition."

**Mount Muirhead** - "this fire originated at least fairly close to an area where a tree or trees fell across a conductor. It may be and I say this guardedly that the contact between a tree trunk and the conductors or conductor was of sufficient duration to cause burning to the tree with the consequential dropping of hot material to the ground thus igniting vegetation. There is no evidence to suggest that any person deliberately started this fire and I discount the theory that it was a spot fire."

The Mount Muirhead fire originated at about 3.10 p.m. (1510 hrs) or thereabouts.

Continued page 7

# CORONER'S INQUEST - FINDINGS - 1983 ASH WEDNESDAY II BUSHFIRES

## SOUTH EAST FIRES continued . . .

*The Avenue* - "it seemed very reasonable to conclude that clashing of power lines caused this fire."

Mr. Ahern said that, when the lines were constructed in 1967 they complied with the then code of practice. "The lines certainly do not comply with current standards now in existence in the sense that they were not sufficiently spaced as regards distance apart."

"There can be no doubt in my view that two of the conductors did clash - first causing production of molten particles which fell to the ground causing the dry vegetation to ignite. The fire originated at about 3.30 p.m. (1530 hrs).

*Koniak* - "tests indicated a burning particle of carbon emitted from a tractor stack ignited and started the fire.

About 70 acres of grassland was burnt.

*Range Road* - "A pine tree close to pole 45 fell across the lower conductor resulting in the conductor becoming detached from a hook on the cross arm. There was arcing between the armour rods protecting the conductor and the steel part of pole 46."

There is no evidence before the court to suggest that the electric fences were in any way responsible for any of the fires which occurred, said Mr. Ahern.

## CLARE FIRE CAUSED BY E.T.S.A. CONDUCTORS CLOUTING

(Coroner's Findings Delivered on Clare Fire, Ash Wednesday II, 16th February 1983.)

**CLARE - clouting of conductors on the ETSA line discharged molten aluminium particles which ignited grass in Wandels paddock on February 16th 1983 causing the Ash Wednesday bushfire.**

**The Deputy Coroner Mr. K. Prescott delivered his findings on Tuesday 13th March 1984 in the Clare Courthouse before representatives of the media, ETSA, Police, District Council and CFS.**

Mr. Prescott found:

The fire which occurred off West Terrace at Clare on Ash Wednesday, the 16th of February, 1983, was caused by molten particles of aluminium being discharged from the Electricity Trust of South Australia's conductors which clouted together resulting in the discharge of molten particles into grass in the adjacent paddock which particles set alight to the grass.

The clouting of the conductors was caused by:

- (1) The wind strength
- (2) The gusting of the wind
- (3) The effect of a tree on the swing of the conductors.

Mr. Prescott said 163 fire damage reports were lodged by victims of the bushfire last year. Summarising he said 9 houses were destroyed, 11 damaged, 36 sheds and 52 farm implements destroyed or damaged, 504 km of fencing, 5497 bales of hay, 2,000 livestock & 47.5 hectares of crops destroyed. Estimated total damage was \$4.22 million - Including Telecom \$20,400, Australia National Railways \$180,000, Highways Department \$3,000, District Council of Clare \$26,500 and ETSA \$15,000.

Mr. Prescott detailed the spread of the fire and said "it was fortunate there were no deaths resulting from the fire, although a number of people sustained injuries."

"There were a number of important matters that arose indirectly through the evidence of 38 witnesses. It is not intended that any of these matters should be regarded as reflecting upon the conduct of any person or organisation."

Mr. Prescott made special mention of the fire fighting efforts of the CFS in particular and the community generally.

"One hundred and ninety seven CFS and private fire fighting units were involved in fighting the fire, crewed by a total of 1,000 men.

## CLARE FIRE continued . . .

They are conscientious and diligent, but it was expected they would experience difficulties in such a huge bushfire.

It was obvious too, that the efforts of private units particularly those on Spring Farm Road were largely responsible for minimising the loss which occurred."

## Summary of Recommendations

1. That there be an evaluation of the Clare township water reticulation needs.
2. That permanent fire hydrants be established at all Government and semi-Government works depots in high fire risk areas.
3. That C.F.S. training give prominence to the need for adequate fire surveillance.
4. That prominence be given in C.F.S. training to the concept of fire suppression activity being directed by a base established for that purpose.
5. That Local Government vehicles be fitted with two-way radios.
6. That Local Government and Highways Department employees receive basic first-aid training and basic fire fighting training.
7. That fire control officers be members of C.F.S. brigades.
8. That formal communications between C.F.S. brigades and councils be reviewed and that councils conduct an annual inspection of C.F.S. equipment.
9. That C.F.S. equipment be tested regularly.
10. That councils in high fire risk areas draw up and circulate to residents a fire strategy plan.
11. That councils in high fire risk areas on days of extreme fire danger (red alert days) have personnel immediately available to assist in fire fighting activities.
12. That residents in high fire risk areas be encouraged to establish adequate fire fighting facilities on their own properties.
13. That the use of 'total fire ban' and 'red alert day' be uniform; that the words 'red alert' receive recognition under the Country Fires Act Regulations.
14. That employers of C.F.S. crews be encouraged to have their employees engaged in standby activities at C.F.S. stations on 'red alert days'.
15. That police patrols of fire perimeters be carried out using two-man patrols.
16. That communities involve themselves in the preparation of interim disaster plans.
17. That the State Government make representations to the Federal Government for wage and salary earners to attain deductability for the expense of fire fighting equipment and that tax-payers be allowed to deduct in the year of expenditure amounts expended on fire fighting equipment.
18. That the Regulations made under the Country Fires Act be amended to provide for a positive duty to be placed upon C.F.S. brigades to ensure that their equipment is maintained in good order and condition.
19. That fire control officers for any particular area not be chosen from residents of that area.
20. That steps be taken to provide schools and other institutions with early knowledge of the proclamation of a 'red alert' day.
21. That publicity be given to the wearing of protective clothing in proximity to a fire.
22. That property owners annually inspect power lines crossing their properties to ensure that there is sufficient clearance between power lines and vegetation.
23. That fire bans operate from 7.00 a.m. for a period of 24 hours.
24. That councils be encouraged to advise rate payers to reduce flammable vegetation.
25. That the Electricity Trust of South Australia be encouraged to investigate sensitive earth-leakage protection systems for use on low voltage lines.
26. That the Electricity Trust of South Australia ensure that employees receive adequate instruction in tree growth rates.



## ASH WEDNESDAY & C.F.S. FIRE FIGHTERS.

Dr. A.C. McFarlane  
Lecturer in Psychiatry, Flinders Medical Centre.



Dr. Alexander McFarlane (left) accepts a cheque awarded to him under the first S.A. Training and Research Foundation Grant; from the Minister for Emergency Services, Mr. Jack Wright. The grant will enable Dr. McFarlane to undertake further research into stress disorders suffered by C.F.S. volunteers after fighting fires.

*Although there has been a substantial amount of research into the psychological effects of man-made and natural disasters, each type of disaster is unique in some respects and raise special problems that require consideration and description. Until the Ash Wednesday fires, there had been no research carried out specifically as to the psychological effects of bushfires or forest fires that involved the loss of life and destruction of residential and farming property.*

Previous reports of the psychological effects of fire as a disaster described the reaction of people trapped in work or public places that had caught fire. These had included a night-club fire in America and the consequences of a marine explosion in 1959 on the Delaware River in the U.S.A. This research had suggested that significant psychological morbidity occurred amongst at least a proportion of those exposed to such events. Perhaps the most individual account of the effects of a major fire and its psychological impact were outlined in Samuel Peep's diary of the Great Fires of London. **A research project has been conducted into the impact of the Ash Wednesday fires on C.F.S. members.** People who lose relatives, sustain significant injury or suffer property losses are the focus of public concern after major disasters. Yet often the distinction between victim and helper in disaster situations is less distinct and is sometimes acknowledged. To begin with, particularly in situations such as major fires, many of those who assist in fighting, rescue and recovery come from the affected or surrounding communities and themselves may, be to some degree affected by the disaster. **One aim of the research project was to investigate the nature of the experience fire fighters had on Ash Wednesday and also to make some assessment of the losses that Country Fire Service members had sustained.** The questionnaires were distributed through the Country Fire Service hierarchy. Four hundred and eighty nine questionnaires were retained. It was not known exactly how many questionnaires were distributed and who received them. For this reason it is not known how representative this set of results is of the total C.F.S. members. Currently a project is being carried out amongst the Summertown, Ashton, Carey Gully, Millicent and Avenue Range units to see how their experience corresponds to that of the original fire fighters who responded to the questionnaires.

**The study first attempted to outline the background of C.F.S. members.** The average age of people who fought the fire on Ash Wednesday was 34 but the ages ranged from 16 to 67. There was also one person aged 76 who took to the field.

Table 1 outlines the occupational backgrounds of C.F.S. members. It demonstrates that people come from a wide range of occupations and as a group are reasonably representative of the community.

**TABLE 1: OCCUPATION OF C.F.S. MEMBERS**

1. Professional, semi-professional, managerial	9.2%
2. Own business, farm	29.8%
3. Clerical and sales	12.0%
4. Skilled worker	18.8%
5. Semi and unskilled worker	21.2%
6. Unemployed, student etc.	9.0%

**The study then attempted to outline the degree to which members were victims of the fire.** Property losses were sustained by 23.3% of the men.

A detailed breakdown of the losses is outline on Table 2. Of those who did not lose their homes, 14% had their house or property threatened by the fire. Significant injury or death was experienced by the friends or relatives of 22.8% of the fire fighters. Thus, on all accounts, the direct consequences for Country Fire Service fire fighters on Ash Wednesday was substantial. A number of them were directly victims of the disaster.

**TABLE 2: PROPERTY LOSS**

1. Lost home	0.9%
2. Damage to home or other building	9.3%
3. Damage affecting livelihood	9.3%
4. Lost motor vehicle	1.5%
5. House or property threatened but not damaged	14.0%
6. Lost stock	4.3%
7. Defended own house or property during the fire	9.6%

**The exposure of members to the fire was also established as part of the questionnaire.**

This is summarized on Table 3. An average of 15.6 hours was spent fighting the fire and 3.8 days was spent mopping up. A close encounter with death was experienced by 19.7% of those who responded to the questionnaire. The intensity of this exposure was confirmed by the number of injuries reported.

**TABLE 3: EXPOSURE TO THE FIRE**

1. Average number of hours fighting the fire	15.6 hour (0 to 72)
2. Average number of days mopping up	3.8 days (0 to 20)
3. Number trapped by the fire	31.4%
4. Number who used emergency procedures to defend themselves	41.2%
5. Number close to being burned	50.9%
6. Number close to dying	19.7%

Table 4. Although a number of the injuries sustained were relatively minor, 26.6% of people received one injury or another. The most common were smoke inhalation and burns to the eyes although skin burns were not infrequent. These injuries were of sufficient severity to warrant hospitalisation in 3.2% of the membership. A further 50.9% believed they came close to being burnt and 41.2% had to use emergency procedures at some stage during the fire to defend themselves. This data confirms that as a natural disaster, fire is perhaps one of the most terrifying and destructive because there is no retreat for those threatened. The intensity of exposure and the degree of threat experienced by many of the Country Fire Service volunteers, documented in this research was likely to be a once in a lifetime experience.

**TABLE 4: INJURY DURING THE FIRE**

1. Number injured	26.6%
2. Type of injury	
Smoke inhalation	14.4%
Skin burns	5.6%
Burns to eyes	14.4%
Other	6.7%

Continued page 9



## ASH WEDNESDAY & C.F.S. FIRE FIGHTERS

TABLE 4 continued . . .

3. Type of treatment	
ambulance crew/nurse	13.8%
casualty service/doctor	8.5%
admitted to hospital	3.2%

When asked how many major fires people had previously fought, the average number was 10. The range varied from 0 to many hundreds.

This information is summarised in Table 5. The intensity of this exposure raised the possibility whether some people would suffer some prolonged and unwanted psychological effects. Being an organisation of volunteers it is possible for the consequences of such stress to go unrecognised.

TABLE 5: NUMBER OF MAJOR FIRES PREVIOUSLY FOUGHT

0	19.8%
1 - 2	23.7%
3 - 5	24.8%
5 - 10	17.0%
10 - 20	5.6%
21 +	9.1%

Average = 10 fires

Subsequently a sample of 50 fire fighters were given a detailed clinical interview. Of those interviewed, 24.5% said that at some stage they were afraid of losing control of their feelings and 28.6% of them reported having observed panic amongst fellow fire fighters. Fire fighters who were exposed to the most intense parts of the fire on Ash Wednesday were very ready to admit their sense of fear and the subsequent stress related symptoms they experienced. On the other hand, a number of people who were not exposed to an extreme threat and were on the periphery of the fire tended to laugh at the idea that people could suffer long term consequences as a result of their experience or even have been so acutely fearful on the day. This has subsequently made it hard for those who have had some difficulties because attempts to talk to friends and colleagues have on occasions met with little understanding.

The questionnaires obtained on the 489 men four months after the fire demonstrated that a significant number experienced some effects of stress. These included recurring thoughts about the experience, waves of anxiety, sleep disturbance and feelings of depression. In most these symptoms spontaneously resolved over a period of time. Therefore this research indicates that after a life threatening stress such as Ash Wednesday a number of people will develop psychological symptoms, but it is important that these are not seen as signs of serious psychological difficulty because many will resolve with time. Other people, reported that after Ash Wednesday they felt that they had a better sense of their values and their attitudes to life had changed in a positive way. A proportion of people felt more confident and able to make decisions about their life and future.

On the other hand, it is important to realise that a small but not insignificant minority will develop more serious psychological problems. The continuing research is attempting to investigate the extent of this problem. For some, the initial pre-occupational thoughts of the fire did not subside and can in fact worsen. A person may experience nightmares about the fire or have sudden waves of fear that the fire is occurring again. This experience can be triggered by watching a television programme about Ash Wednesday. These people may also experience a sense of emotional numbing that can lead to a psychological withdrawal in their relationships and marriages. Other psychological symptoms that can be present include an exaggerated startle response, difficulty concentrating and a wish to avoid reminders of the fire.

Many of those who have experienced significant psychological problems after the fires do not in fact attribute their difficulties to their experience on Ash Wednesday. A number have reported symptoms such as headaches and general body aches and pains associated with the feeling of ill health. These symptoms are common in post traumatic stress disorders and the association is often missed.

It is important that people who do continue to suffer the adverse effects of an experience such as a disaster receive early treatment as at least in some cases, these difficulties tend to get worse rather than better with time.

Although this research project is still not completed, it is possible to conclude that after an event of such proportions, some of the relief workers such as C.F.S. members themselves can be victims of the event. There is evidence to suggest that a formal debriefing that included discussion of the individual's experience as well as the logistic aspects of the disaster work will decrease the continuing effects of such stress. Another important finding in the research has already indicated the need for fire fighters to discuss their experience with their families. This is particularly the case if the fire fighter has been placed under considerable threat. Their families are often aware of the impact of the experience but do not know how to respond if the issue has never been discussed.

In recent months, those who responded to the original questionnaire have been contacted again. As already described, a control group has been set up where all members of several fire units have been contacted and asked to complete questionnaires. The analysis of this data will indicate the prevalence of the continuing effects of stress amongst C.F.S. members and assist in development of strategies to minimise the effects of such experiences in future disasters. It is important in the disaster plan of organisations that the psychological needs of the workers are not forgotten because work from other disasters has demonstrated that at least some people have continuing effects from their experience.

### "MUTUAL AID PLAN"

A Mutual Aid Plan has been established jointly by South Australian Country Fire Services and S.A. Metropolitan Fire Service.

*"Following discussion between Messrs. L.C. Johns, Director, Country Fire Services and A.W. Bruce, Chief Officer, S.A. Metropolitan Fire Service, an inter-service group was formed to organise and formulate a mutual aid system of fire defence, within a nominal 40 kms from the metropolitan area as defined by the S.A. Fire Service Act 1936/1980. Request for assistance beyond this distance to be assessed on the situation applicable at the time."*

The main thrust of the plan is to ensure that a maximum co-ordinated effort is put into effect in a properly controlled manner for major fires.

The actions to put the plan on standby and into operation will be co-ordinated at CFS/MFS Headquarters and any requests for the use of the MFS Task Force is to be communicated direct to the Country Fire Services Control Centre and should come from the Supervisor/Group Captain level of your organisation.

Arrangements for the operation of the Mutual Aid Plan in respect to Country MFS Brigades should be made direct between the Senior CFS and MFS officers in conjunction with the CFS Regional Officer.

Should a response by CFS appliances into MFS areas be required at a 3rd or 4th alarm stage, selected Country Fire Services Brigades will be contacted in the near future by their respective Regional Officer and details of such responses finalised.

The definitions of 3rd and 4th alarms is:-

- (a) 3rd Alarm - 12 appliances at an incident.
- (b) 4th Alarm - 16 appliances at an incident.

Should you have any further queries related to the plan, please contact your Regional Officer or Country Fire Services Headquarters.



## HEAT STRESS ON FIRE FIGHTERS



(Photograph reproduced courtesy "The Courier", Mt. Barker.)

The material below has been adapted from an article published in the *Bush Fire Bulletin*, the official journal of the Bushfire Council of New South Wales, prepared by the Council's Planning and Research Officer, Mr. Andy Tegart.

This article is based on the work of Associated Professor Grahame Budd who has been engaged in research into the effects of heat stress for more than 20 years at the School of Public Health and Tropical Medicine at Sydney University.

Professor Budd is currently continuing this research as Head of the Environmental Health Section of the Commonwealth Institute of Health.

The Institute's current research includes extensive work with front line fire fighters in action and is being carried out in conjunction with the Project Aquarius water bombing trials in Western Australia and Victoria.

Because any water bombing exercise necessarily involves co-operation between ground fire fighting forces and the air crew, Project Aquarius has presented Professor Budd with a ready-made and easy-to-study ground fire fighting team.

(Obviously it is easier to conduct a project which involves monitoring personnel when you know where and when the fire is going to "break out" and when the monitoring equipment can be set up and used for an extended period in one location).

The ground crews assisting Project Aquarius were employees of the West Australian Forests Commission. All the members of the Institute's research team acted as the control group.

The researchers were able to monitor the responses of both groups at close quarters – talking to both the experienced fire fighters and the control group about their subjective responses to heat stress, while at the same time measuring their physiological responses scientifically.

The long-term aim of this research is to build up a more accurate picture of both the physiological and psychological responses to heat stress as a pre-requisite to developing ways of overcoming any problems associated with these responses.

A paper entitled "Effects of Heat on Health, Comfort and Performance" (published by Professor Budd in "Occupational Health Australia and New Zealand" in May, 1979) stresses the importance of this preventative approach based on a better knowledge of the subject. (The paper concerned any type of work and did not refer specifically to fire fighting. However, the general principles are equally applicable).

The following extracts from Professor Budd's paper underline the fact that the effects of heat stress can be modified by appropriate behaviour based on a better understanding of all the factors which contribute to that stress in the first place.

*"If prolonged or excessive, heat stress can affect health by:*

- *inducing various kinds of heat illness;*
- *inducing unsafe acts which can cause accidents;*
- *aggravating the effects of pre-existing disabilities . . .*

*" . . . In many cases, the adverse effects are due not so much to the heat itself as to inappropriate behaviour by the person exposed to it, behaviour which fails to support the physiological defences and sometimes actually hinders them . . .*

*" . . . The application of a few general principles based on an analysis of the factors responsible for heat stress in a given situation can do much to alleviate heat stress and discomfort.*

Results of the current research being carried out in conjunction with Project Aquarius will be published when the collation and analysis of the data have been completed.

However, in the meantime, there are already some important rules for fire fighters if they are to avoid the adverse effects of heat stress. These rules, summarized below, are based on currently available and already verified data.

These guidelines represent the current state of the art. We hope the store of knowledge on the effects of heat stress and ways to prevent them will soon be widened by the work of the Institute's team.

### Some Basic Precautions

Everyone has a certain capacity to handle heat through the in-built cooling system known as sweating.

Avoiding or minimizing heat stress problems basically amounts to not overloading the body's cooling system.

The efficiency of this cooling system depends on a number of factors – most of which can be modified by a person's behaviour: resting from heavy work; wearing the most appropriate clothing for the job; drinking regularly to avoid dehydration; avoiding work for which a person is not physically fit.

Fire fighters of course are exposed to particularly severe heat and must take special precautions to avoid being adversely affected.

### Wearing Appropriate Clothing

On a very hot day, most people try to wear clothing that is as scant and as light as their particular environment will allow. While it is important too for fire fighters not to be overloaded with heavy clothing, it is equally important that they be wearing enough clothing to cover exposed skin and protect them from radiant heat.

In the fire fighting context therefore appropriate clothing means striking a balance between the need to allow sweat to evaporate and air to circulate, and the need to provide adequate protection for the wearer. This is why the *Country Fire Services Board* currently advocates loose-fitting cotton overalls for volunteer bush fire fighters: the overalls come closest to meeting these requirements.

### Avoiding Dehydration

The relationship between work and evaporative cooling (i.e. sweating) is obviously very important. The person sitting in the sun on a beach will be evaporating less fluid than one stoking a furnace or fighting a bush fire.

A fire fighter can easily evaporate a litre of water in an hour under hot conditions, and it is vital that this water be replaced. When conditions are very hot, a drink of water every ten minutes may be essential for a fire fighter. To quote Professor Budd again:

*"In theory, dehydration is easy to prevent; all you have to do is to drink. In practice it is less easy.*

*A person's thirst is quenched before his fluid losses have been made good; water is often not accessible enough or palatable enough; and folklore wrongly warns us that drinking on the job will cause stomach cramps. These deterrents can be overcome, but it requires a determined effort . . . The effort is worthwhile because it has been convincingly demonstrated on many occasions that both performance and heat tolerance are improved when people drink enough to prevent dehydration."*

For volunteer bush fire fighters, the important part of the message is: if you are working at a fire front under hot conditions, take a drink of water every ten minutes or so – EVEN IF YOU DON'T FEEL LIKE IT.

### Acclimatization

Acclimatization is a very significant factor in coping with heat stress. In his paper of heat stress Professor Budd says:

*"Acclimatization is a striking physiological adjustment that develops during the first week or two of work in a hot environment.*

*It improves the ability to work in heat, reduces the strain felt, and lessens the risk of heat disorders.*

Continued page 11



*It decays in a few weeks when exposure to heat ceases so workers returning from sick leave or holidays are likely to have temporarily lost their tolerance to heat and should be treated accordingly."*

The message which volunteer bush fire fighters can draw from this quote is that, since by its very nature bush fire fighting is an occasional activity, few bush fire fighters are likely to be particularly well acclimatized to intensive heat. The need for caution in fire fighting is therefore even more pressing.

Fitness is a significant factor in a person's resistance or susceptibility to heat stress and fire fighters should be aware that persons in the following categories could be at risk. People who are:

- overweight;
- physically unfit;
- unhealthy, particularly if suffering from disease of the heart, circulation, or skin.

One final word of caution: people have different levels of tolerance to heat stress. It is an unavoidable fact that hot jobs disagree with some people. If you are one of these people, opt for something other than a front line fire fighting role.

Professor Budd says most people leave hot jobs which disagree with them but casualties are likely among the few who, because they are either "too highly motivated" or "through a desire to be accepted by their colleagues", keep working when they feel unwell.

### How adverse heat effects arise

Most adverse effects of heat arise either from overloading the body's cooling system or from not giving it the support it requires.

To maintain the correct body temperature three things are essential -

1. The circulation must be able to carry to the skin all the heat produced in the body.
2. The skin must be able to produce the necessary amount of sweat; and
3. The sweat must be able to evaporate.

The failure of any link in this chain of heat transfer will cause body temperature and heart rate to rise. But the successful operation of the system will also lead to its eventual failure, unless the progressive dehydration caused by sweating is corrected by drinking sufficient water.

These are some common reasons why each link in the chain may fail:

1. The circulation is overloaded by trying to handle a heat load that is beyond its capacity - a capacity which may already be limited by poor physical condition or heart disease, and which will be progressively reduced if dehydration occurs.
2. Too little sweat is produced, common causes being dehydration, lack of acclimatization, old age, and certain medical conditions.
3. The sweat cannot evaporate freely enough to do its job of cooling properly, because of too much clothing, too little air movement or high humidity.

### GO EASY ON THE SALT

Unless a person is fire fighting for very extended periods - i.e. days on the fire front - salt loss is not likely to be severe enough to warrant the use of salt additives. Most people absorb enough salt in their normal diet to make these additives unnecessary except in very extreme circumstances. Professor Budd says if salt loss is prolonged and excessive, replacement is best done through using extra salt in meals or, if sweating is very heavy, by adding one teaspoonful of salt to each gallon of drinking water to make a 0.1 percent solution which is quite palatable. Any higher salt concentration would only tend to aggravate dehydration.



### FIRE STOP A GOOD DEFENCE

**The Firestop Blanket, recently launched by ACI Fibreglass is a useful first line of defence against certain types of fires.**

As most home fires start in the kitchen, this is an ideal place to keep the Firestop Blanket on hand. If the unthinkable happens, it is perfect for smothering burning fat and oil fires. As well as in the kitchen it can be useful in many other instances such as boat-galleys, camp-fires and caravans.

The Firestop Blanket has been accepted for display at the safety model kitchen at the Child Accident Prevention Resource Centre. The Resource Centre, annexed to the Royal Children's Hospital is the Melbourne Branch of the Child Accident Prevention Foundation of Australia. The Foundation deals with research into the probable causes of accidents and the subsequent efforts to reduce such accidents.

Firestop is made from fine, lightweight glass fibres, specially treated to give a flexible, water and oil repellent re-usable blanket. It does not melt, burn or give off smoke and is packaged in a handy, quick release container which can be conveniently stored for easy access in an emergency.

The Firestop Blanket is available at all Myer and Lloyds stores.

Editors note:

*It must be pointed out that the principal use of a fire blanket is to use on persons who have clothing on fire: First, lay the person down to prevent flames spreading. Second, roll the person in the fire blanket to exclude oxygen - smothering the fire. Third, apply first-aid and seek medical assistance.*

### DANGER!

### WELDING FUEL CONTAINERS

**A recent accident at Meningie in the South East has highlighted the need to warn the public against attempting to weld or cut empty fuel containers.**

A man received eye and body injuries in an explosion while using an electric angle-grinder to cut open a disused 44 gallon drum that had originally contained a D.D.T. mixture. The drum was first filled with water before the cutting was attempted.

The explosion was caused by vapours coming off the D.D.T. residue. Water does not wash petrol, volatile oils or solvents from container seams.

The danger of welding and cutting drums should be obvious, yet fatalities, severe injuries and near misses continue through misuse of 44 gallon drums or similar containers.

Purging of containers to make them safe is a complex job that should not be done by the inexperienced.

The only welding or cutting jobs considered safe are those which could be done with the container *completely* filled with water, but this practice is not recommended.

Do not use drums as pressure vessels because an ordinary drum could become unsafe at 10 to 12 p.s.i. pressure.

Evidence of the danger - a recent fatality occurred when a 44 gallon drum was pressurised by an air compressor to expell a pesticide spray.

# HAZCHEM

In 1981, the London Fire Brigade decided to update and improve its already impressive Chemical Information Databank – a decision spurred by the success of the HAZCHEM emergency action code system. The route to greater effectiveness chosen was the acquisition of a powerful mini-computer and system of programs. It was given the name CIRUS. (Chemical Information Retrieval and Updating System) and suitably modified information from the old card system was soon incorporated in the new computer-based system.

Also, as the name implies, new information has been continually added to the database, and older information updated to ensure maximum accuracy. Due to the unique properties of such computer based systems, it has been found possible to cross-reference entries and also to cross-reference these entries to foreign chemical names – a significant improvement on the old card system.

At the present moment, the database contains details of over 27,000 chemical names, and some 1000+ companies – all accessible within minutes.

The London Fire Brigade decided to make the contents of the computer database readily available at relatively low cost – by the introduction of a microfiche version of CIRUS. The only item of equipment needed to utilise the microfiche system is an inexpensive microfiche reader.

**The Hazchem information (CIRUS) and microfiche reader have been installed in the CFS HQ Control Centre and information is readily available to all brigades either directly from the Control Centre or via their Regional Officer.**

Each chemical listed in the system has the following information provided for it:-

## 1. HAZCHEM CODES

Perhaps the most important from the point of view of the C.F.S. are these emergency action codes.

## 2. U.N. CLASSIFICATION NUMBERS

The U.N. Numbers for appropriate chemicals are included, both as a subheading and as chemical entries in their own right. This enables speedy location of the appropriate emergency action codes for substances on the U.N. list – all are included.

## 3. ADDITIONAL INFORMATION ON PERSONAL PROTECTION

Information provided in this section is designed to augment that given in the Emergency Action Code section. The categories are:

1. LIQUID ATTACKS PROTECTIVE CLOTHING – CLEAN AS SOON AS POSSIBLE AFTER USE.
2. WEAR GAS-TIGHT SUIT.
3. WEAR POSITIVE PRESSURE B.A. OR GAS-TIGHT SUIT.
4. NO TYPE OF PROTECTIVE CLOTHING PROVIDES ADEQUATE PROTECTION SPECIAL OPERATIONAL PRECAUTIONS MAY BE NECESSARY.
5. OTHER – SEE REMARKS.

## 4. DECONTAMINATION INFORMATION

This section provides a handy reference for the appropriate decontamination procedure for different substances, using readily available decontamination techniques and agents. The methods described are:-

1. WET – MAY BE WASHED TO DRAIN.
2. WET – CONTAIN (CONTACT CONTROL).
3. WET/COMPROX – WASH TO DRAIN.
4. WET/COMPROX – CONTAIN (CONTACT CONTROL).
5. WET/SODA ASH – WASH TO DRAIN.
6. DRY – VACUUM CLEAN (CONTACT CONTROL).
7. SPECIAL – (CONTACT CONTROL).
8. SEE REMARKS FOR FURTHER INFORMATION.

## 5. REASONS FOR EVACUATION AND VIOLENT REACTIONS

Occasionally, chemicals will be encountered with Emergency Action Codes indicating either the possibility of violent reactions (coded P,S,W,Y), or that evacuation should be considered, (coded "E"). This section was devised to provide the personnel involved with some necessary extra information. The information provided is listed below:-

- A. Reason for "V" code.
  1. UNSTABLE WHEN HEATED.
  2. LOW FLASHPOINT.
  3. STRONG OXIDISER.
  4. VIOLENT REACTION WITH WATER.
  5. REACTS WITH WATER TO EVOLVE FLAMMABLE GAS.
  6. OTHER – SEE REMARKS.
  7. DUST EXPLOSION RISK.
- B. Reason for Evacuation.
  1. TOXIC VAPOURS.
  2. FLAMMABLE VAPOURS.
  3. ASPHYXIAANT VAPOURS.
  4. EXPLOSIVE RISK.
  5. LOW FLASHPOINT.
  6. OTHER – SEE REMARKS.

## 6. PHYSICAL FORM

This section includes information on the physical nature of a substance – i.e., its colour, form (liquid, solid, pellets, powder, etc.) and consistency. This has been found useful as a backup identification feature.

## 7. SYNONYMS

These are differing names which apply to the same substance – this information is sometimes of value to scientific advisers, etc.

## 8. FLASH POINT & VAPOUR DENSITY

These parameters are often useful (where applicable) in determining the course of action to follow at an incident. For example, if substances with high vapour densities are encountered, it is a wise course of action to cover drains and evacuate basement etc. especially if the action code dictates that the substance is to be contained.

## 9. USE

Again, this provides us with an indication of whether or not the preliminary identification was accurate, and this information is also of interest to scientific advisers.

## 10. REMARKS

This section provides details of features which are considered to be of importance to personnel involved in incidents. Also, in the cases of the more dangerous substances, additional information concerning packaging, etc. is given.

## 11. DETAILS OF MANUFACTURERS

This section contains only the name of the manufacturer(s) of the substance concerned – if further details are required, the Company Data Plate should be accessed.



## RESPONDING TO A HAZARDOUS MATERIALS INCIDENT

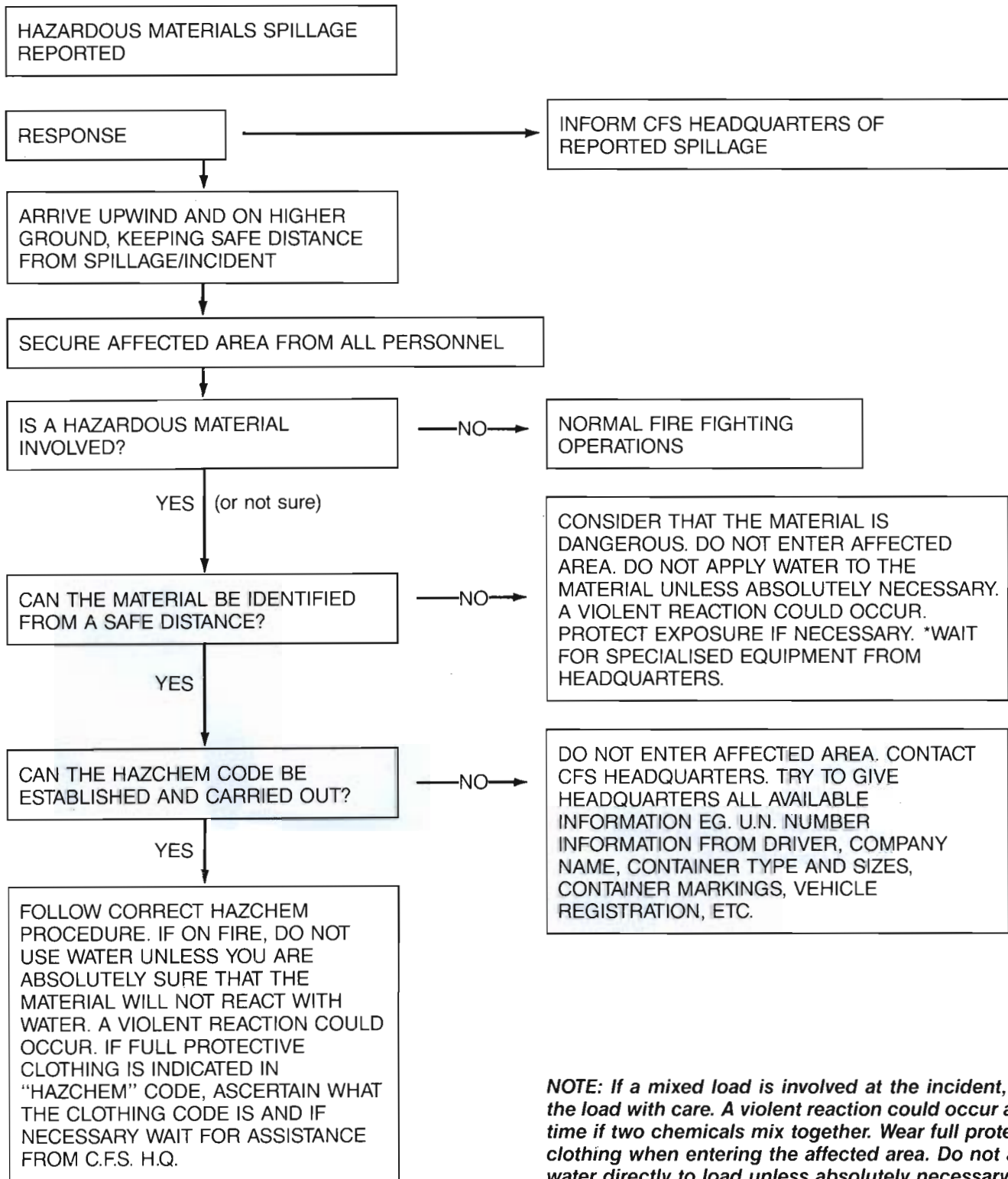
With the increase in the number of tankers and other hazardous load carrying vehicles travelling across our state, the site of an overturned hazardous materials vehicle leaking its content onto the road or into the atmosphere is becoming increasingly familiar. Too familiar also is that shed fire where hazardous materials such as agricultural chemicals are involved.

**If you were called to a Hazardous Material Incident would you know the correct procedure to follow?**

Shown below is a flow-chart giving a step-by-step procedure which should be followed in the event of a Hazardous Materials Incident being reported.

The flow-chart does not go into detail in any particular area, but gives an overall picture of the procedure which should be followed. If you wish to know more about a particular area (such as Hazchem) contact your Regional Officer or R.O. Bruce Hogan at C.F.S. Headquarters.

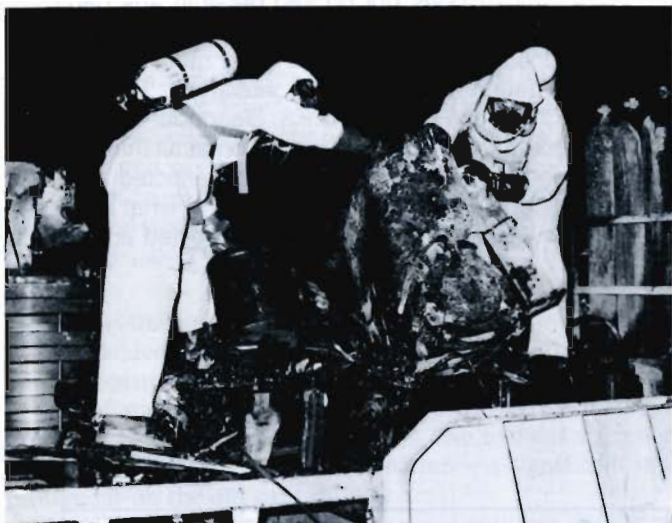
*Remember:* If you have any indication at all that a Hazardous Material is involved, stay out of the affected area until you can ascertain the type of material and what affect it is going to have on you, if you enter the affected area.



**NOTE:** If a mixed load is involved at the incident, treat the load with care. A violent reaction could occur at any time if two chemicals mix together. Wear full protective clothing when entering the affected area. Do not apply water directly to load unless absolutely necessary.

## ARE YOU ADEQUATELY TRAINED?

by R.O. Bruce Hogan, Training



In the light of recent incidents (both fire and chemical) at which CFS brigades have been asked to attend, it has been shown that experience alone has not been a sufficient training medium to deal with these types of incidents.

With the increasing use of materials which create a hazard when involved in fire as well as the ever increasing cost of replacing homes, and machinery involved in fire, it is most important that you, the volunteer fire fighter be trained so that you understand why a substance burns, and what the most effective method is of extinguishing a fire.

Are you sufficiently well trained to quickly and effectively extinguish a fire or handle a chemical incident which could occur in your brigade district?

Regional Training Schools are being held throughout the State for all C.F.S. volunteers. The full course consists of four schools – Stages 1, 2, 3 and 4. It is preferred that if possible, the course be completed within two years of the commencement of Stage 1. As the course is the same throughout the State, it is possible to change from one region to another while undertaking the course. It is in your best interest and that of the area that you protect, if you attend the Regional Training School Programme.

Schools planned for this year are listed below.

For further information contact R.O. Bruce Hogan at CFS Headquarters or your Regional Officer.

Nominations close three weeks prior to the start of the school.

### Regional Training Schools.

Region	Dates	Type	Location
<b>Region 1</b>	May 4, 5 and 6	Stage 3	Aldinga Beach
	June 20, 21 and 22	Stage 1	Keswick
	August 31, September 1 and 2	Stage 4	Aldinga Beach
<b>Region 2</b>	September 21, 22, 23	Stage 2	Keswick
	Contact R.O. B. Menadue for details		
<b>Region 3</b>	June 1, 2 and 3 October – To be advised	Stage 1	Port Vincent Kangaroo Is.
<b>Region 4</b>	June 15, 16, 17	Stage 1	Crystal Brook
	August 24, 25, 26	Stage 4	Crystal Brook
	October 12, 13, 14	Stage 2	Crystal Brook
<b>Region 5</b>	June 1, 2 and 3	Stage 1	Wrattonbully
	July 27, 28 and 29	Stage 2	Wrattonbully
	September 14, 15 and 16	Stage 3	Wrattonbully
	November 23, 24 and 25	Stage 4	Wrattonbully
<b>Region 6</b>	October – Contact R.O. K. May for details		

**Region 7** April 27, 28 and 29  
October 12, 13 and 14

Stage 1 Barmera  
Stage 2 Barmera

Regional Training Schools are held over 2½ days –

Day 1 1830 – 2230 hours.  
Day 2 0800 – 2230 hours.  
Day 3 0800 – 1700 hours.

### C.A.B.A. Schools

Compressed Air Breathing Apparatus (CABA) Schools are being held throughout the State. The course consists of 3 days training, involving both theory and practical work.

When a fire fighter is called on to wear a Breathing Apparatus, he/she is subjected to stresses and physical demands not encountered in a normal work situation.

Bearing the above in mind, the following sets out the requirements a volunteer should undertake before being classed as a Compressed Air Breathing Apparatus Operator.

The volunteer should:–

1. Be a normally fit person capable of being able to see sufficiently well without spectacles so as not to endanger the lives or limbs of himself/herself or other personnel.
2. Be a competent fire fighter with at least two years experience in active fire fighting operations.
3. Be sufficiently clean shaven so that facial hair does not come in contact with the face seal on the B.A. mask, and therefore impair the face mask seal.
4. Attend and pass a satisfactory medical examination (as per CFS Headquarters approved medical form for CABA Operators), by a qualified medical practitioner prior to attending a CABA Operator Course.
5. Attend and pass a refresher course every five years.
6. Wear a CABA set for full cylinder duration at least every three months following a written procedure (Fireground Practices).
7. From age 50, attend and pass a medical examination annually.

A CABA Operator who meets the above requirements will be identified by an insignia worn on the arm of his/her overalls.

If individual personnel or brigades wish to attend a CABA course, contact your Regional Officer or R.O. Bruce Hogan at CFS Headquarters for details.

### C.F.S. Members Honoured



C.F.S. volunteer fire fighter brothers Winston and Alf Bryant have both been honoured with Life Membership of the S.A. Country Fire Services and awarded the British Fire Services Association 20 year medal.

H.Q. Control Centre Operator Winston Bryant has been a member of the Salisbury C.F.S. since 1973 and former Yorketown C.F.S. member for 11 years. His brother Alf a member of the Salisbury C.F.S. since 1977 was also a former Yorketown C.F.S. member for 15 years.

Earlier in their service both men received B.F.S.A. 10 year medals and Australian National medals for 15 years continuous service.

Their other brother Mervyn Bryant was also a member of Yorketown C.F.S. for over 10 years, until his work as a Harbors Board diver took him away from the district. Mr. Bryant has since returned to Yorketown.

(Photograph reproduced courtesy Pioneer Printing Office and Yorke Peninsula Country Times.)





MARK P. DAWSON

B.SC.For (Hons), DipRecPng, DipResMgt, MIFA, MRAIPR.

Regional Officer, Research Division.

Before joining the Research Division, Mark worked with CSIRO's Project Aquarius and lectured in fire management for seven years at the Australian National University.

Mark has a rural background with fire experience in all Australian States. He is particularly interested in fire behaviour and the integration of fire and land management objectives.

Initially, Mark is responsible for the development and implementation of fire statistics reporting and computing systems.

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## CORRECT PROCEDURES —

### *On arrival at an Incident.*

by R.O. Mike Gent - Fire Prevention

Every fire is different, the old hands will tell you. So it is, and not just fires, but all the other emergencies we are expected to attend.

Certain basic approaches to every incident are worth going over, and remembering, especially as long periods may elapse in between calls. The only way to maintain the good standard that the public has come to expect from the C.F.S. is to train regularly. There is no other substitute. We must make training interesting, enjoyable, fruitful, and with as much realism as those organising can achieve.

Our first duty on arriving at any incident is to find out if any persons are in danger and to take immediate steps to ensure safety of persons. This may well include members of the attending fire crew.

**No matter whether the call is to a bushfire, a building fire, a road accident or Hazchem incident. The first principal is lives first, property second. It is so easy to be side tracked on arriving at an incident and seeing large flames, to start fighting fire instead of rescuing.**

In extreme cases you may have to decide who to rescue first, it has to be the one in most danger. You may have to, "knock the fire down", before a rescue can be undertaken, all these considerations will be the job of the officer in charge on arrival at the scene. The rest of the crew must act while the leader is "sizing up the job". At a building fire, the hose reel should be run out almost before the unit has pulled up, its bound to be wanted and it inspires confidence to see a well trained crew. Fast and decisive action to a regular drill will give you confidence in a situation that to those needing your help is frightening.

Fighting bushfires is a highly skilled operation, at which the CFS excell, the older hands having a wealth of experience to pass on to the younger ones. We must not lose sight of the fact that many brigades have the responsibility of fighting fires that occur in the local hospital, aged persons home, school, pub, silo, or our neighbour's private home with his family in need of rescue from a smoke filled building.

The public expect a lot from the fire fighters of the CFS. That expectation comes from respect earned over many years.

## C.F.S. TRAINING MANUAL

Listed below are the sections which are available for the C.F.S. Training Manual. As future sections are completed you will be notified through "The Volunteer". If you wish to update your notes of the C.F.S. Training Manual, contact your Regional Officer.

Covers, which are issued to personnel who attend Stage 3 of the Regional Training School course, are also available for purchase at \$3.50 each. Contact your Regional Officer for details.

All C.F.S. Brigades should have been issued with one copy of the C.F.S. Training Manual.

If in doubt *first* please check with your brigade members on the whereabouts of your Training Manual before you advise your Regional Officer that you have not yet received a copy.

### SECTION

#### 1. HISTORY AND STRUCTURE OF CFS

- 1.1 The S.A. Country Fire Services
- 1.2 History

#### 2. COUNTRY FIRES ACT

- 2.1 The Country Fires Act - A Short Summary
- 2.3 Powers and Duties of Fire Control Officers

#### 3. METRICATION

- 3.1 The Metric System
- 3.2 Units of Metrication
- 3.3 Conversion Tables

#### 4. FIRE EXTINGUISHMENT

- 4.1 Physics and Chemistry of Combustion
- 4.2 Ignition, Growth and Development of Fire
- 4.4 Fire Extinguishing Agents
- 4.5 Fire Extinguishers

#### 5. HYDRAULICS

- 5.1 Characteristics and Flow of Water
- 5.2 Calculation of Water Supplies
- 5.3 Pumps
- 5.4 Primers
- 5.5 Fire Service Hose

#### 6. APPLIANCE EQUIPMENT

- 6.1 Ladders

#### 7. SEARCH AND RESCUE

- 7.1 Ropes and Knots
- 7.2 Search Techniques
- 7.3 Rescue Techniques

#### 8. RURAL FIRE ATTACK

- 8.3 Map Reading

#### 9. BUILDING FIRE ATTACK

- 9.2 Attack and Extinguishment
- 9.4 Ventilation

#### 10. HAZARDOUS MATERIALS

- 10.3 Hazchem
- 10.4 L.P. Gas

#### 12. FIRST AID

- 12.2 Resuscitation
- 12.3 Minor Injuries and Burns

# Smoke is a silent killer

by DR. JAMES C. DILLON  
INDIANA UNIVERSITY SCHOOL OF MEDICINE, U.S.A.

**Some of the most dangerous substances known to man lie hidden in the soft coils of smoke from a fire. They can cripple and even kill firefighters and civilians.**

The term "suffering from smoke inhalation" which is used often to describe the condition of people injured in fires in Australia actually covers three different problems.

They are: Hypoxia (not enough oxygen; Systemic poisoning; and local irritants affecting the broncho-pulmonary system.

More often than not the effect of these smoke inhalants is combined and they become more toxic than the total effect would be if each were inhaled separately.

**Hypoxia** is any condition where there is an inadequate supply of oxygen for body tissues. It occurs in fires when the slow burning of materials reduces the oxygen content of a closed area to dangerously low levels. Open flame usually vanishes as the oxygen content of a room falls, but heat and burning may continue, as may the release of toxic material.

Hypoxia is a common type of injury among civilian fire victims who have been overcome while asleep. They may suffer a combination of hypoxia along with other types of smoke inhalation problems. Hypoxia is very uncommon among fire fighters, both because they often use self-contained breathing apparatus, and because air usually enters a room when fire fighters enter to begin fire fighting and rescue operations. Ventilation replenishes the oxygen supply and helps reduce the incidence of hypoxia.

Hypoxia may be seen among poorly-trained or inexperienced fire fighters who linger for a long time after the fire is knocked down in a room that has a low oxygen content. More experienced fire fighters will leave the area and allow the room to air out and cool down.

Death occurs from hypoxia because of lack of oxygen to vital organs, and the subsequent break-down in cellular metabolic functions. Even if hypoxia is reversed early, it may result in some permanent disability depending on the organ system involved.

There are basically three common poisons that kill fire fighters and civilian smoke inhalation victims: carbon monoxide, hydrogen sulphide, and hydrogen cyanide. By far the most significant fire fighting problem is *carbon monoxide*. More fire deaths occur from carbon monoxide than any other single poison. Carbon monoxide is generated in every fire, but the less complete the combustion, the greater the production of carbon monoxide.



*As a general rule, the darker the smoke, the higher the carbon monoxide level, because black smoke is high in particulate carbon as a result of incomplete combustion.*

**Carbon monoxide** is lighter than room air and has an attraction for blood cells that is 210 times greater than that of oxygen. Thus, it tends to displace oxygen at a great rate. If enough oxygen-carrying blood cells are displaced, the victim will die from anoxia – total oxygen depletion. The usual concentration of carbon monoxide in air

is less than 0.03 percent, and any concentration higher than 0.05 percent is dangerous. Twenty ounces (0.6 kg) of wood burned in a 1600-cubic foot 45-m<sup>3</sup> closed room will produce a 0.5 percent carbon monoxide concentration in a victim's bloodstream. This is lethal within thirty minutes.

**Hydrogen sulphide** is a significant contributor to death under certain circumstances. It is usually a problem only with industrial accidents. It is a skin irritant, and although the gas is colourless, it is distinguished by its "rotten egg" odour.

Hydrogen sulphide is heavier than air and can be found along the floor of smoky rooms. In large concentrations, it is thought to interfere with – and actually paralyse – the respiratory centre of the central nervous system, resulting in suffocation. Industrially, hydrogen sulphide is produced by either organic decomposition or by the actions of acids on metallic sulphides.

It is found in large quantities in certain laboratories, manufacturing plants, sewers, and cesspools. Any concentration above 0.02 percent is poisonous, and a 0.1 percent concentration is very dangerous. At less than lethal levels, symptoms of giddiness, nausea, abdominal pain, labored respirations, dizziness, sleepiness, headache, irregular heartbeat, and convulsions may occur.

**Hydrogen cyanide** is commonly found in the by-products of combustion. It interferes with respiration at the cellular level, preventing the proper exchange of oxygen and carbon monoxide. It appears that there is a synergistic effect when hydrogen cyanide is mixed with carbon monoxide: the former increases a person's respiratory rate and causes more carbon monoxide to be inhaled.

This substance is very soluble in water, and a blood level of 3 to 10mg/l is lethal. Cyanide gas is colourless and has a characteristic heart rate (to more than 100 beats a minute), gasping respirations, and muscle spasms.

**Carbon dioxide** which also can be considered a poison released by combustion, usually is of no consequence. Since it is heavier than air, it usually collects in the lowest levels of buildings that are involved in flames. Still, fire fighters must remain aware of its dangers, particularly when there is not much smoke present.

Thermal injuries to the lung should be mentioned, but in many ways they are over-emphasized in medical and fire literature. Flame or heated dry gases are virtually incapable of damage to the broncho-pulmonary tree below the larynx because of the gases' low specific heat and the efficient heat exchange mechanism of the body. Once hot, dry gases enter the nose or mouth, their temperature is quickly reduced to a level the body can tolerate.

Usually when there are thermal injuries to the lung, there almost always are accompanying severe facial or upper airways burns. The one exception to this may be steam burns, because of steam's high specific heat. One of the common ways of attacking a fire involves turning water spray into steam. Consequently fire fighters can suffer steam inhalation and should be aware of this hazard.

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## Irritants released by burning common materials:

### Wood:

Carbon monoxide  
Carbon dioxide  
Formaldehyde  
Formic acid  
Carbolic acid  
Methyl alcohol  
Acetic acid

### Rubber:

Carbon monoxide  
Hydrogen sulphide  
Sulphur dioxide

### Plastics:

Carbon monoxide  
Carbon dioxide  
Hydrogen chloride  
Aldehydes  
Ammonia  
Cyanide  
Nitrogen oxides

### Wool:

Carbon monoxide  
Hydrogen sulphide  
Sulphur dioxide  
Hydrogen cyanide  
Ammonia

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*Article reproduced courtesy Dr. Dillon, Lecturer at the Indiana University School of Medicine, U.S.A. "Smoke is a silent killer" published in Australian Family Safety.*



## LOW WATER LEVEL WARNING DEVICE

The VDO low water level warning device is suitable for commercial and agricultural vehicles. It is designed to obtain the instant attention of the operator by buzzing continuously and flashing a light.

While most temperature gauges in trucks and buses are accurate they are unable to register sudden rises in engine water temperatures. Should a radiator hose burst, the engine could seize through overheating before the driver noticed the change of reading on the temperature gauge.

The warning device responds within a few seconds of the radiator dropping to a critical level and this can only be cancelled by switching off the engine and rectifying the fault.

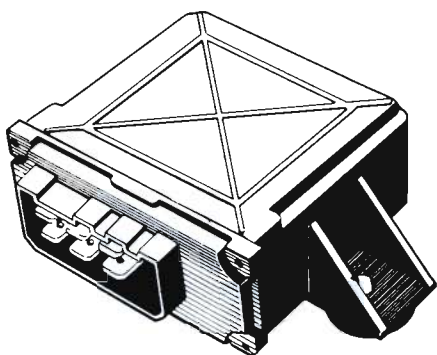
The electronic control module contains a built in delay action to avoid premature triggering and a functional check is carried out every time the ignition is turned on.

Location of the water probe in the radiator determines the preset water level and installation can be carried out by any competent mechanic.

A VDO low water level warning device is not a purchase it's an investment, don't drive without one.

\*Distributor and service agent: Auto Instrument Services, 11 Dequetteville Terrace, Kent Town, 5067. Telephone (08) 42 4881.

### Kit Contents



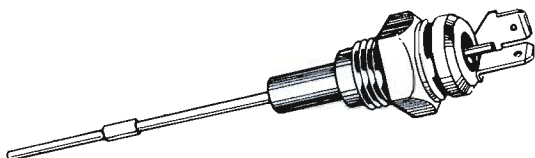
#### Electronic Box

12 volt:	410 009	Width:	110mm
24 volt:	410 010	Depth:	75mm
Height:	35mm	Output:	5 Amp



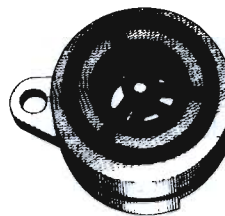
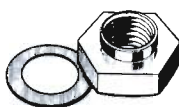
#### Warning Light

12 volt:	240 064
24 volt:	240 065
Diameter:	52mm



#### Water Level Probe

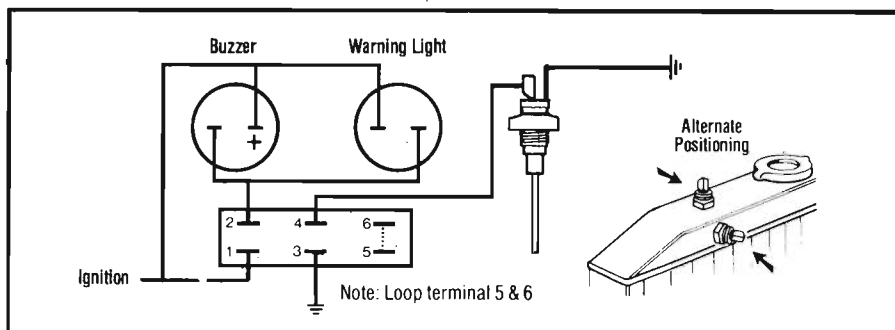
Part No.	230 056
Thread:	M14 x 1.5
Length:	115 mm or 80 mm
Operation:	AC to prevent electrolysis.



#### Buzzer

12 volt:	240 021
24 volt:	240 022

### Installation





## OTHER FIRE VICTIMS

by Lorna P. Dempsey, Port Lincoln.

**There are many forgotten victims of fires! Wildlife is seldom considered when fire losses are mentioned, and yet birds and animals suffer just the same.**

They lose their homes, their families, mates, suffer burns, smoke inhalation, exhaustion, shock and often lose their lives, or are left totally confused.

The fire in Hincks National Park in 1983 must surely be one of the worst disasters suffered by our wildlife, particularly as birds were in the middle of an excellent nesting season, the best we have had for years.

It was a chance to build up the lagging populations, after some years of poor seasons when few birds bred.

Hincks Park was also one of the last known breeding places for the unique mallee fowl on Eyre Peninsula.

Crops can be grown again next year but it will take years for the recovery of trees and wildlife to return to normal.

I don't think it was "lucky" that the park was in the line of the fire, as it has been reported!

### INCINERATED

Nest of baby birds would have been incinerated. Animals have feelings too!

Australia has many species of ground birds which all are easy victims to fire and man's introduced predatory pests such as cats.

Very few fires are started by lightning, so almost all fires are man's fault, caused by his interference with nature.

Many birds are still confused from the Ash Wednesday bushfires.

Yellow tail black cockatoos have formed into a large flock, this being very unusual as they are usually in small groups of up to ten.

The bushfires destroyed the homes and food supplies of these birds, and it is most unlikely that they will breed this year as there are no hollow trees for them to nest.

Black cockatoos lay only one egg a year, so it will be very disastrous if no birds breed.

Sugar gums are the best trees for providing nesting hollows for these birds, but many valuable trees fell victims to the fires too.

Black cockatoos are not destructive birds as they feed on hakeas and banksais, but have acquired a taste for pine cones too.

These disturbed birds are seeking new areas and are disrupting other species.

### CHARACTERS

Parrots are one of the great characters of our wildlife, and they all are in great danger on every front. Several species are rare or endangered.

Some remaining nesting hollows have been taken over by feral bees.

It is time Australians turned to putting up artificial nesting boxes for birds, as these have proved extremely successful overseas.

Koalas are a species which fall easy victims during fires.

In Victoria's Ash Wednesday bushfires, many koalas were fire victims.

Of all those rescued, all had severely burnt feet. One with head injuries, was found under a burnt tree, five days after the fire!

Tiny ring-tailed possums, wallabies and an echidna were among those rescued and all had severely burnt feet.

### SEA RESCUE

Most animals suffered severe shock and many took to the sea. Fishermen were bringing in animals which they found out to sea, days after the fire.

Koalas in particular, suffer severe shock.

Animals which survive fires are still in great danger, as the areas for which they rely on food supplies are burnt out.

Food should be supplied where and when possible.

Natural vegetation is our most valuable asset, and because of indiscriminate clearing, much of our wildlife is in danger of early extinction, especially the wonderful mallee fowl.

Much land which has been cleared, should never have been cleared, as I know from experience on our own farm.

With the loss of trees the world's climate will become increasingly warmer within the next 10 years, as the result of a build-up of carbon dioxide in the atmosphere.

The melting of ice-caps will raise sea levels and already the sea level has risen.

Higher temperatures will also increase droughts as the seasons will become drier.

### STRATEGY

A whole new strategy for agriculture will need to be worked out if Australia becomes drier.

We must act now, to save the remaining native vegetation and trees, as these are the means for survival.

Less than 5% of our bushland remains, whereas the safety level is considered to be 30% of cover.

It is gratifying to know that some landowners are planting native trees and fencing them off, therefore allowing the area to return to natural grasses and vegetation.

### CLEAN AIR

It is well known that trees bring higher production from crops and livestock, providing them with shelters, cooling the land, cleaning the air particularly of carbon dioxide on roadsides, and bringing better seasons.

Roadside trees are so very necessary and are also often the last habitat for much bird life.

Trees also control salinity in the water, and soil, and soil erosion. We cannot live without trees.

Let's save the rare flowering gum at Meadows Creek. Not only is it rare, but historical. It took over 100 years to grow. It is farcical to plant replacements for this tree!

Article reproduced courtesy Port Lincoln Times.

(Photograph of Ash Wednesday 11 bushfire, reproduced courtesy "The Advertiser".)



## THREE CHEERS FOR SMOKEY

The occasional rain showers did nothing to dampen the enthusiasm of some two thousand children who attended Smokey's annual Birthday Party at the zoo on Wednesday 25th January, 1984.

"Smokey The Koala", S.A. Country Fire Services life-size character joined with the Cudlee Creek C.F.S. brigade members, media friends, and TV personalities from childrens programmes to teach the children some simple rules about fire safety - with the aid of pantomimes.

Acknowledgement is made to the support given by the many organizations and individuals involved with Smokey's Birthday Party. Special thanks is conveyed to compere Mr. Ron Sullivan; Cudlee Creek C.F.S.; Coca-Cola Bottlers (Adelaide) for supplying a truck tray top as the stage with trailer dispenser unit and drinks; Streets/Amscol for donating ice confectionery; the Streets Paddle Pop Lion; St. John for First-Aid with Mrs. Barbara O'Daniel; S.A. Police for maintaining crowd control; Balfour Wauchope for the specially decorated Smokey's Birthday Party Cake; Mr. Gerald Crowhurst for musical accompaniment; Westpac Banking Corporation for children's Helicopter Rescue Games; Adelaide Zoo and staff; Public Buildings Department and Mr. Darrell Hadley, Communicator Public Relations. ADS 7 TV personalities Adriana Xenides (Wheel of Fortune Hostess) and Steve Whitham (News Reader) and pre-promotion on State Affair; SAS Channel 10's Fat Cat and Ian Wilson; NWS Channel 9's Wendy Patching (Kid's Television) with Humphrey B. Bear; Radio 5AN's John Ovenden and 5DN's Bob Byrne.

The C.F.S are most grateful to all radio/TV stations for the media time given to the pre-promotional announcements on Smokey's Birthday Party, and for the Advertiser's support with a contest for free party/admission tickets.

### BIRTHDAY PARTY SURPRISE

"Smokey the Koala", called into the Newlands Ward of the Adelaide Children's Hospital to cut his birthday cake with his young friends, following the annual Smokey's Birthday Party on Wednesday 25th January, 1984.



Pictured above hospital patient Tony Crilly aged 6 of Largs North received a special slice of cake from Smokey. Another patient Tracy Goodrick of Salisbury North said:

"I've seen Fat Cat and Humphrey B. Bear, but Smokey is the best".

(Photograph reproduced courtesy Messenger Newspapers.)

### FOOTNOTE

Since the 1983 Ash Wednesday Fires "Smokey The Koala", symbol of fire prevention in S.A. has spent a lot of time comforting children who suffered in the disaster.

©Smokey The Koala has been the C.F.S. bushfire prevention symbol since 1961, although Smokey as a life size character is only two years old.

## THANK YOU MEDIA

If I may reiterate on the recent comments from the CFS Director, Mr. Lloyd Johns and the Country Fire Services Board.

*We are indebted to all the media and staff for the commendable community service provided, in alerting the public to the serious danger experienced in South Australia during the bushfire season just ended.*

*Once more the public's positive response to the Country Fire Services "Fire Prevention" programme, has been most gratifying and was in no small measure, due to the media's generous involvement".*

Would you please convey our thanks to your personnel, reporters, camera crew, editor(s), journalists, and compositor(s) for their assistance throughout the season. We are most grateful for your continuing support and co-operation.

Yours faithfully,

Peter Mills, CFS Publicity and Promotions Officer

## FIRE FIGHTING DRILL COMPETITIONS 1984

Final arrangements have now been made for the 1984 Fire Fighting Drill Competitions and the venues and dates are as follows:-

Region 5	24th June	Millicent
Region 1	8th July	Murray Bridge
Region 2	22nd July	Tea Tree Gully
Region 4	5th August	Sevenhill (Clare Oval)
Region 7	19th August	Lameroo
Region 6	16th September	Minnipa
State Finals	30th September	Balaklava

It is the intention to conduct the Best and Most Efficient Appliance and Crew Competition in a similar manner as last year with the exception that there will be a winner for each Region who will then compete for the State Championship.

The Competitions Sub-Committee are hopeful that they will be able to get a sponsor(s) to provide a suitable prize for each region in the form of fire fighting equipment.

Inspections and exercises for the Regional Competitors will take place between the 1st of June and the 31st of August 1984 and the winners from the Regions between the 1st and 30th September 1984 to decide the State Championship.

There has also been some changes in the rules for some events as follows:-

### "C" Grade Dry Hose Drill

Cadets must be under the age of 16 years on the 1st of July of each year to participate in this event.

The Director, Mr. Lloyd Johns is donating individual prizes for the fastest cadet team in each of the Regional events and a perpetual trophy for the fastest cadet team in the State Championships.

### "B" Grade Dry Hose Drill

The "B" Grade Teams will be invited to also run in the Wet Drill as a practice in preparation to participate in "A" Grade in the future. The Wet Drill time will not count in the "B" Grade results.

### Portable Pump Alarm Race

- Participating teams must display their Brigade name and team number on the side of the vehicle.
- The off side front wheel of the vehicle must pass over the pressure pad at the finish line to actuate the timing equipment.
- The wearing of leotards and trouser legs may be tucked into socks.





Pictured above the State Rescue Helicopter being fitted with the 300 litre capacity tank for its "water bombing" role in the fire fighting operations at Mount Remarkable National Park Fire of January 1984 . . . story next issue.  
(Photograph supplied courtesy The Transcontinental, Port Augusta.)

## RETARDANTS IN VITAL FIRST ATTACK

by Jeff Lomas, Publicity/Promotions, Woods & Forests Department.

**Fire retardants will play an important role in the Woods and Forests Department's future fire fighting strategy.**

Specialised equipment for the use of chemicals is being installed on all South-east forest reserves in time for the next fire season.

The retardant chosen by the Department, Amgard DSB, comes as a dry powder and will be mixed with water in special storage tanks installed on each reserve.

From these tanks the retardant can be pumped to individual fire trucks on days of high fire danger in readiness for the vital first attack on an outbreak.

The mixture can be sprayed directly onto a fire to smother the flames or it can be sprayed ahead of the fire to form a wet firebreak. Should the water evaporate the retardant still remains active and inhibits the spread of fire by chemically reacting with the by-products of combustion and forming a non-combustible layer around the fuel.

The retardant can be mixed to different concentrations for different uses. For instance, a weaker solution could be used in mopping up operations to control re-kindles.

No matter how good, the retardant is not the total answer to the Department's fire fighting requirements, rather than just another component of what is a highly professional and effective fire fighting system.

Where the retardants will prove their worth is in that vital first attack by crews on a fire before it has the chance to take hold – if a fire can be stopped at this stage it will prove a big saving.

Special techniques are being developed for mixing and handling the retardant. As it is an ammonium based chemical the normal precautions in hygiene and chemicals handling are required but once mixed with water in the storage tanks no special handling precautions are needed.

A red dye will be added to the retardant for ease of identification and to assist fire fighting crews in providing an effective spread. The dye fades within weeks on exposure to light.

## WETTING AGENTS

The relatively high surface tension of plain water slows its ability to penetrate burning combustibles and to spread throughout closely packed materials. A wetting agent is a chemical additive which when mixed with water will lower the surface tension. By decreasing the surface tension of the water it tends to increase the amount of free surface available for absorption of heat by increasing its penetrating and spreading qualities while reducing run off.

The greatest use of the "Wet Water" is to penetrate porous surfaces to allow the solution to reach hidden areas of burning combustibles. Thus it can be used most effectively when fighting fires in stacked hay, heavy clover stands, heavy improved grass lands and thick stubble. No particular advantage is gained when "Wet Water" is applied to finely divided fuels such as grasses. It is especially useful when mopping up, for extinguishing logs, stumps and fence posts, as penetration into wood and charcoal can be up to five times greater than plain water. The chance of a rekindle can be greatly reduced when used in this way.

One of the main problems associated with many wetting agents is metal corrosion. Those used in fire fighting will have little effect on brass, bronze or copper, but will tend to accelerate corrosion of such metals as cast iron, aluminium, zinc, galvanised steel, and die cast alloys. Another disadvantage is that it can also cause pump problems by degreasing of pump glands and bearings. The use of wetting agents in knapsack sprays is not generally recommended as the degreasing of the pump quickly makes pumping very difficult. These problems can be minimised by using a non ionic wetting agent and only adding the agent to the tank when proceeding to the fire. Additionally both pump and tank should be washed out with clean water after the fire, and the pump regreased. Also take care! Water with wetting agent added should not be used as drinking water.

Most commonly used products are Seaguard Chemicals Wetting Agent and the Shell Co. Nonidet WK100. Mixing ratios differ between brands and the manufacturers' recommendations should be checked and closely followed.



# COMMUNICATIONS – 1984 . . .

by R.O. Trevor Conlon, Communications.

## GENERAL INTRODUCTION TO RADIO NETWORKS

- S.A. is divided into seven fire fighting regions.
- Each region is divided into districts – local government boundaries.
- Each district has a main "Control Centre" which may vary considerably in standard from one to another.
- Each district has its own base station, mobile and portable equipment. (Some districts have a second or third sub-base.)
- The main base may have several remote control points which have facilities to operate the main base.
- There are 21 frequencies available to CFS for fire fighting (and other CFS related activities.)
- The frequencies used in Ch 2 and 3 are the same in all CFS radios and are known as "State Channels".
- One other frequency is allocated to CFS Headquarters for its operational and administrative use.
- The other frequencies are allocated to districts as "local frequencies" to meet their operational needs.
  - they are not "given" or intended to be solely used by only one district and may be shared with other districts.
  - the sharing is sometimes arranged with an adjacent district or with a remote district.
  - the "adjacent district" plan relies on districts normally working with each other, and is based on the total number of fire units on the frequency.
  - the "remote district" plan relies on sufficient geographical separation that undue interference does not occur.
- Base stations are normally fitted with Ch 1 local, Ch 2 State, Ch 3 State, and sometimes Ch 4 Council frequency. (In 1984 Region 5 (South East) networks will have an additional frequency for "Regional" use).
- Mobiles have Ch 1 – 3 the same, and it has become accepted practice to install in all mobiles the frequency of each neighbouring district, (making 6 – 8 channels in some districts). This has not been followed in some areas, complicating operations involving multiple districts.

With changes in licencing policy, and with the introduction of modern technology, future replacement equipment will allow for all mobile radios to have fitted the 21 frequencies, and the use of standard channel numbering.

## USE OF STATE FREQUENCIES

- The use of any frequency needs tight control and supervision for maximum effectiveness during fire operations.
- Ch 2 – used for high priority control/co-ordination traffic, especially in multi-frequency operation. Ch 2 may be used base to base for urgent traffic, but telephone used if possible.
- Ch 3 – for fire fighting purposes i.e., appliances and forward controls only, in preference to bases as well. Ch 3 is best used as a second sector frequency at one fire, or as an alternative frequency when a second fire occurs in close proximity to the first within one Channel 1 area.
- IT IS ESSENTIAL THAT BASES MAKE MINIMAL TRANSMISSIONS ON CH 3 & 2 (or any frequency for that matter).

## PERMISSION FOR USE

Proper use of state frequencies in accordance with these guidelines does not need approval – however, it is suggested that a check with CFS Headquarters, Adelaide, or Regional Office will –

- (a) provide the maximum protection for a network from being overcome by another "lower priority" network.
  - (b) provide information on who else is already on air, thereby affecting your decision to use a particular frequency.
- However fragmented the statewide network may seem, CFS is all **one organisation with one aim** – effective fire fighting.

No one party has more right to any frequency than the other and it is essential that the way frequencies are used is aimed at maximum effectiveness on the fire grounds firstly, followed by the broader network. On days like 16th February, 1983, this is the only policy which will work. If to achieve one district's effectiveness one causes another's to fail – all fail.

## TYPICAL OPERATIONS SEQUENCE

The following is a basic description of the sequence of events which typically occur as a fire develops. (Actual occurrences may vary according to local circumstances at the time, and overall effectiveness will depend on the expertise of the officers concerned).

1. Fire is reported via telephone. This is usually done through an F.A.C.U. (Fire Alarm Control Unit) installed by Telecom in the local exchange and allows several persons to answer the call using their private telephones.

The source of the call may be the public direct or police, 000, via CFS HQ Control Room.
2. Having received the call a button on the phone is pressed and the siren started. As a result crews attend station and respond to the call. During this process other members are alerted by their phone bells ringing.
3. Base station radio is manned. (In some cases where base facilities are not immediately available, CFS HQ acts as base to support responding brigades.)
4. One officer on an appliance, or in a separate command vehicle (which is preferred), takes charge of the fire fighting operations, and becomes in effect the forward control.
5. Up to about 5 appliances on a small fire can be readily controlled by an officer with a portable radio, in which case the "forward control" may consist of one man on foot, or mobile. Beyond 5 appliances it is more essential that a vehicle with a mobile radio be available for the fire commander.
6. Up to about 10 appliances the command vehicle can remain mobile as a roving forward control, but as the fire becomes larger and more appliances become involved, a fixed forward control needs to be established. This is a suitable location adjacent to the fire easily found and relatively safe from fire, where other services and back up support can assemble to allow "on the scene" liaison and co-ordination.
7. Having established such a control and provided a CFS liaison vehicle and officer(s), the command vehicle(s) may assume again the roving role, directly co-ordinating groups of units on specific sectors of the fire, but maintaining communications with the forward control for overall co-ordination.

Such an arrangement is expandable to major fires with multiple forward controls, command vehicles, and multiple frequencies in use.

It may be necessary to relocate forward controls as the fire progresses.

It should be noted however, that some districts do not have a dedicated "Command Vehicle" available, or may choose not to operate in this manner. Instead they may prefer to use the main base to direct appliances and control the fire from a remote location. This generally results in disruptive communications, and poor operational performances.

By operating in the recommended manner operating effectiveness is more readily achieved. Fire control is exercised from the fire ground with the base station maintaining a listening watch, and directing information to a command point rather than individual appliances. This reduces base transmission and thus long range interference.

In addition by using such a scheme loss of base (or "rear link" communications) from the command vehicle does not mean that the fire fighting must stop, since command is fire ground sector based.

There are various combinations of command structure and communications which may be used and are employed as seen fit at the time, by the officers involved.

Committees across the state have contributed to the formulation of recommended practices. Training notes will be available shortly to aid in their understanding and implementation.

## OBITUARY



Mr. Peter BUNGAY  
Cherryville C.F.S.

The Volunteer pays tribute to the memory of Peter Bungay killed in a tractor accident on 15th November, 1983.

Mr. Bungay was a tireless community worker, particularly in the areas of fire fighting, sport and recreation.

To Mrs. Betty Bungay, daughters Meryl and Julie, son Colin and grandchildren we extend our sincere sympathies.

Mr. Peter James CLARK  
Aldgate C.F.S.

The Aldgate Country Fire Service pays its respects to the memory of Peter Clark, who passed away on 25th November 1983, aged 19.

"We will always remember Peter as we knew him best, as a good mate, a willing worker and a dedicated volunteer. Time will pass and life goes on but in our hearts Peter will always be with us. A part of our crew and the fire service." Requiescat in pace.

Mr. Howard J. COCK  
Blackwood C.F.S.

The members of the Blackwood Country Fire Service pays its respects to a past member of the service, Howard Cock, who passed away on 14th February 1984.

Our sincere sympathies are extended to Robert, Margaret and their families.

Mr. Philip COCKS  
Robertstown C.F.S.

A devoted brigade member, Philip Cocks sadly passed away on 21st November, 1983.

Mr. Cocks was a very active young CFS member well liked and respected in the brigade and community.

Sincere condolences are extended to Group Captain Cocks and Mrs. Val Cocks from brigade members/friends.

Mr. Robert G. DARWIN  
Blackwood C.F.S.

First lieutenant Robert George Darwin passed away on 20th April 1984.

A valued member and good friend of the Blackwood C.F.S. Robert will be remembered for many things, but most of all for his willingness to help others.

To Maxine, Ronald, Joanne and family we extend our heartfelt sympathies.

Mr. Anthony Bruce GEBHARDT  
Norton Summit/Ashton C.F.S.

A young volunteer fireman Anthony Gebhardt aged 18 years, passed away 9th October, 1983.

Sadly missed by his family and fellow CFS members and friends.

## OBITUARY



Mrs. Betty J. WELDEN  
EFS/C.F.S. Member

It is with sadness that we note the untimely death of Betty Welden, who was a member of the staff of CFS Headquarters from 1958 until 1972.

Betty was widely known throughout the country areas of the State, attending and assisting at countless EFS Competitions, Conferences and meetings, and the annual Smoke Social at the Glenelg Town Hall, the success of which, in no small measure, was due to her untiring efforts and her renowned talent for "organizing".

EFS members visiting Headquarters from near-City brigades and remote areas alike, were unfailingly treated to a "Royal welcome" and unstinting hospitality from Betty, and the Welden family home was always open to any country visitors requiring a hot meal or a bed for the night.

Betty Welden will always be remembered for this genuine caring hospitality, her effervescent and optimistic personality, her selflessness, her wonderful sense of humour, and last but not least, her devoted loyalty to the Emergency (Country) Fire Services of South Australia.

Sympathy and condolences are extended to Betty's husband Doug, and to her two daughters, Annette and Julie, and their respective families.

## OBITUARY



MR. R. (Ray) D. ORR, O.A.M., J.P.  
Mt. Barker C.F.S.

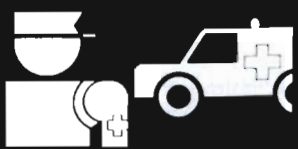
It is with a saddened heart the Country Fire Services and The Volunteer pay its deepest respects to the memory of Mr. Raymond Donald Orr who passed away on 24th May, 1984.

Ray Orr's distinguished career of 36 years' dedicated service won him the sincere friendship of countless C.F.S. members, firefighting associations and local government bodies.

*"His name will be remembered forever in the annals of our E.F.S./C.F.S. history."*

The Volunteer will pay tribute to Mr. Raymond D. Orr in the next issue.



**EMERGENCY CALLS****FOR  
MOUNT GAMBIER  
CUSTOMERS ONLY****DIAL  
000 FREE  
CALL**When 000  
answers, ask  
for POLICE,  
FIRE OR  
AMBULANCEWhen  
Emergency  
Service  
answers, be  
prepared to  
provide the  
following:Nature  
and exact  
location of  
emergencyIf any  
injured -  
how many?  
Your  
location**FOR ALL OTHER CUSTOMERS****AMBULANCE**

Beachport	Micent 33 2222
Bordertown Dukes Hwy	Brdtrwn 52 1166
Keith	Keith 55 1555
Kingston S.E.	KngstnSE 67 2477
Lucindale	Nrcrte 62 1777
Millicent	Micent 33 2222
Mount Gambier	MtGmbr 25 2244
Nangwarry	MtGmbr 25 2244
Naracoorte	Nrcrte 62 1777
Penola	Pnola 37 2494
Robe	KngstnSE 67 2477
Tintinara	Keith 55 1555

**FIRE**

Brimbago	Keith 55 1000
Bunbury	Laffer 57 4075
Cadgee	Nrcrte 62 1000
Callendale	LcndleS 69 6000
Cangara	Cngra 54 7020
Cannawigara	Mndula 53 4000
Cape Jaffa	KngstnSE 67 2000
Carpenter Rocks	PtMcDnl 38 2000
Colebatch	Cltbch 56 0010
	Cltbch 56 0014
	Cltbch 56 0048
If no answer ring	
Comaum	Glnry 36 5000
Compton	MtGmbr 25 1629
After hours	Mrak 26 6229

Lochaber	Lchbr 65 2200
Lucindale	Lcndle 66 2101
Lucindale South	LcndleS 69 6000
Mahoupe	Cnara 36 3300
Makin	Keith 55 1000
Marcollat	Mcllat 57 3000
Mil Lel	MtGmbr 25 1629
After hours	Mbool 39 8262
Millicent	Micent 33 2000
Mingbool	MtGmbr 25 1629
After hours	Mbool 39 8262
Monkoora	Keith 55 1000
Moorak	MtGmbr 25 1629
After hours	Mrak 26 6229
Mount Benson	Robe 68 2000
	KngstnSE 67 2000
Mount Burr	MtBurr 34 8200

Nelson Vic	Nlsn 38 4000
O.B. Flat	MtGmbr 25 1629
After hours	26 8213
Padthaway	Pdthwy 65 5000
Penola	Pnola 37 2777
Petherick	Wlooka 57 8214
Piccaninny	Thnlea 35 2015
Port MacDonnell	PtMcDnl 38 2000
Reedy Creek	RdyCk 68 7055
Reedy Creek South	KngstnSE 67 2000
Rendelsham	Rndlshsm 35 4210
Robe	Robe 68 2000
Senior	Cngra 54 7020
Sherwood	Shrwd 56 4200
Short	Short 36 6000
If no answer ring	Pnola 37 2777
Southend	Micent 33 2000
Spence	Lcndle 69 6000
Stewarts Range	StwtsRnge 64 8100
Struan	Nrcrte 62 1000
Tantanoola	Tantnla 34 4000
Taratap	Taratp 67 7200
Tarpeena	MtGmbr 25 1629
After hours	Trpena 39 6282
Tilley Swamp	TillSwmp 67 8087
Tintinara	Tintnra 57 2000
Wangolina	KngstnSE 67 2000
Wattle Range North	MtBurr 36 6000
Western Flat	WestnFlt 58 2000
Willalooka	Wlooka 57 8214
Wirrega	Wirrega 54 6000
Wolsley	Wolsly 53 2300
Woolumbool	Lcndle 66 2101
Wrattobully	Nrcrte 62 1000

**ALARM CALLS ONLY**For general  
business, see  
Alphabetical Listings.

Allendale East	PtMcDnl 38 2000
Avenue Range	AvRnge 66 0010
Bangham	Bngbm 58 4010
Beachport	Bchpt 35 8000
After hours Base	Bchpt 35 8038
	Bchpt 35 8110
	Bchpt 35 8189
Benara	Mrak 26 6214
Binnam	Nrcrte 62 1000
Biscuit Flat	BscfFlt 68 9000
Blackford	Bkfrd 67 6088
Bordertown	Brdtrwn 52 1000
Bray	Robe 68 2000
Brecon	Keith 55 1000

CITY	MtGmbr 25 3600
After hours	MtGmbr 25 1330
COUNTRY FIRE CALLS (OFFICE HOURS)	MtGmbr 25 1629
After hours	
Supvsrs	
R G Beck	Mbool 39 8262
R G David	OBFl 26 8213
D F A Kilsby	Mrak 26 6229
R J Telford	Cmptn 39 9265
Mount Schank	PtMcDnl 38 2000
Mundulla	Mndula 53 4000
Mundulla West	Mndula 53 4000
Nangula-Vyrie	Micent 33 2000
Nangwarry	Nngwry 39 7000
Naracoorte	
Town	Nrcrte 62 2000
Country	Nrcrte 62 1000
Naracoorte North	Nrcrte 62 1000

**POLICE**

"FOR POLICE ASSISTANCE IN TOWNS OTHER THAN THOSE SHOWN BELOW PLEASE CONTACT YOUR NEAREST POLICE STATION.  
URGENT MATTERS - IN URGENT MATTERS WHERE YOUR LOCAL POLICE STATION DOES NOT ANSWER CALL THE NEXT NEAREST POLICE STATION OF CENTRAL POLICE HEADQUARTERS, ADELAIDE ON (08) 218 1212 AND ASK FOR THE COMMUNICATIONS CENTRE."

**POLICE STATIONS**

Beachport Chamber St	Bchpt 35 8009
Bordertown 79 North Tce	Brdtrwn 52 1355
Kalangadoo John St	Kingdo 39 3045
Keith McBain St	Keith 55 1211
Kingston S.E. Hanson St	KngstnSE 67 2009
Lucindale Musgrave Ave	Lcndle 66 2200
Millicent 48 George	Micent 33 3622
Mount Gambier Bay Rd	MtGmbr 25 9333
Naracoorte 66 Smith	Nrcrte 62 2066

Penola 24 Church	Pnola 37 2315
Port MacDonnell 8 Charles	PtMcDnl 38 2216
Robe Smilie St	Robe 68 2118

**OTHER SERVICES**

**Crisis Care Centre** (08) 272 1222  
**Drug Intelligence Reporting Service**  
 Canberra (062) 73 3677  
 (Free call—STD or Reverse Charge)

**Hospital**  
 See 'Hospitals' entries in Alphabetical Section  
**Life Line South East** **Mount Gambier 25 9111**  
**Living Hope (24 Hour Christian Counselling Service)**  
**Adelaide (08) 277 4033**

**Poisons Information Centre**  
 (Adelaide Children's Hospital) **Adelaide (08) 267 4999**  
**State Emergency Service (Major Disasters)**  
**Contact Police Department**

A copy of the Emergency Call Page featured on the inside front cover of the 1984 South Australian Telephone Directory for the south east. Supplied by courtesy logo Telecom Australia.

A new inside front cover for the South East Telephone Directory has been developed in conjunction with Telecom Australia and the Regional Associations of the South East, to provide for better reference in finding emergency numbers in telephone directories.

The inside front cover as illustrated above, has been funded initially by CFS Headquarters for this year, to evaluate the effectiveness of the new layout.

Initial indications are very pleasing.

Acknowledgement is made to Mr. Archie McArthur, President Lower South East Fire Fighting Association and CFS Headquarters Regional Officer Trevor Conlon, Communications Officer, for initiating the programme; with special thanks to Telecom Australia for their support.

# REGIONAL NEWS

## Profile of Region 1.

by R.O. Russell Grear

Region One consists of 15 District Councils and Corporations within the Southern Mount Lofty Ranges protected by 88 registered Country Fire Services brigades with 203 fire appliances.

The terrain varies from flat grass land to rugged gorges of native bush/scrub land with the Country Fire Services volunteer brigades providing protection to urban rural and farming communities that number in excess of 185,000 people within an area of approximately 6,400 square kilometres.

Region One extends south of the River Torrens through East Torrens and Onkaparinga Districts to Victor Harbor, east to the Murray Bridge district council and west to the tip of Fleurieu Peninsula.

Major productivity is from sheep and cattle grazing, poultry, pigs, cereal crops, vegetables with vineyards predominantly south of Adelaide.

The region has one of the states most popular tourist routes, early examples of architecture from homes built in the 1800s and some 32 conservation/recreation parks.

With increased development, settlement and activity in the Adelaide Hills comes added responsibility for local government to provide adequate fire fighting protection to one of the most fire-prone and potentially disastrous areas of the state.

In just over 12 months, 9% of all fire appliances in Region One have been replaced.

There has been an ongoing programme of training, lectures and meetings coupled with the building/commissioning of over 15 new brigade appliances and improvements in communications. We have had our share of fires too!

Four "Hazchem" related incidents that occurred at Milang, Sellicks, Victor Harbor and Mount Barker have further emphasised the need for training CFS volunteers on combatting dangerous substance spillages.

Some of the most recent events in Region One are recorded below:-

**March:** Willunga CFS new fire appliance (type IHA specification on International 1810 4 x 4 cab chassis with a mid-mounted Darley HM350 pump) delivered; Hazchem lecture for 125 personnel held at Stirling (well represented by Stirling Group Brigade - with acknowledgement to Group Captain Geoff Knight); Hazchem lectures conducted for Nairne/Mount Barker, Goolwa, Happy Valley Group, Iron Bank and Oakbank/Balhannah CFS., 6 lectures on CFS operations/hazchem requirements to Stirling and Darlington police division personnel; Summertown CFS presented with \$1,000 by NP & WLS Director Mr. Bob Nichols on behalf of Cleland Conservation Park (\*donations received following Ash Wednesday II).

**April:** Meadows CFS Carnival/Benefit; Retirement Dinner at Eden Hills fire station for Group Captain John Penno (John Penno's distinguished career covers 28 years in the fire service - as Group Captain Mitcham Hills Inc. for the past 8 years, past Captain Eden Hills CFS, honoured with Life Membership of Eden Hills CFS and holder of Australian National Medal and clasp); attended official opening of Willunga Fire Station and commissioning of new appliance.

**May:** Hazchem lecture for Burnside CFS; Annual Goolwa CFS dinner; New Brukunga Fire Station official opening.

**Fire Group:** The recent discontinuance of the Meadows District Council resulted in the Strathalbyn, Mount Barker and Happy Valley District Councils taking over responsibility. Macclesfield, Meadows, Greenhill and Echunga CFS brigades now come under the Mount Barker District Council. This in turn had led to the formation of a new Fire Group for the Mount Barker District Area.

The new organization will co-ordinate the requirements of local fire brigades. The executive headed by Mr. Ray D. Orr with Mr. Peter Mew as secretary comprises of delegates from Brukunga, Nairne, Littlehampton, Mount Barker, Hahndorf, Echunga, Flaxley-Greenhills, Macclesfield and Meadows CFS.

Objectives of the new district group committee are: To improve overall efficiency of the fire services in the district; Establish financial requirements of the district brigades (short and long term); Create procedures for ground communications and control in the event of a major fire and develop a compatible policy in fire control with neighbouring councils.

## Region 1 continued . . .

**Radio Room:** Mount Barker CFS in March upgraded their radio facilities to be more effective in local fire situations. The new radio/control room utilises the previous radio room and the old ambulance bay/store room. The area comprises of the radio control room and a carpeted meeting room as an extension to control room for major fires. Built by Mount Barker CFS volunteers and funded largely by the S.A. Young Liberals statewide, the local Murray branch and Henley Rotoract, the new radio room was officially opened by the member for Murray, Mr. David Wotton on Sunday 25th March.

### Future Programmes:

Hazchem Lectures: 15th June - Blackwood.

18th June - Port Noarlunga.

Breathing Apparatus School: 29th - 30th June & 14th July - \*Yankalilla.

\*Includes personnel from Yankalilla District and Goolwa CFS.

20th August - Aldgate.

Regional Fire Fighting Drill Competitions: 8th July - Murray Bridge.

## Region 3 info . . .

by R.O. David Batten.

C.A.B.A. School held at Yorketown on 26th April, 10th, 17th and 26th May 1984, was attended by ten CFS Volunteer Officers.

Stage I Training School to be held at Pt. Vincent on 1st, 2nd and 3rd June. Still has a few vacancies.

C.A.B.A. School to be conducted at Maitland commences 7th June, 1984. Enrolments required.

Don't forget the 9th September, 1984 at Edithburgh. More information about this day will be sent to Brigades.

A weekend Training School is being planned for Kangaroo Island, on 2nd, 3rd and 4th November.

Do not forget the A.G.M. of the Yorke Peninsula F.F.A. to be held at Maitland 23rd July, 1984 commencing 2000 hours. All office holders due for re-election.

In the past few weeks a very disturbing situation has been brought to my attention in regards to subsidies. In this case a sum of nearly \$5,000 was incorrectly allocated. To prevent a re-occurrence of this anomaly in future I will be conducting spot checks on all subsidies received from Region 3.

## Region 5.

by R.O. Murray Sherwell.

The new Regional Headquarters complex at Naracoorte is proving its worth to the South East.

Associations, brigades and councils now relate to their own Headquarters.

Regional conferences have been held, and the office also doubles as a training centre. Special courses have been conducted covering Air Observer training and supervision training in man management.

Combined field exercises have involved all Country Fire Services brigades in council areas and Country Fire Authority brigades along the S.A./Victorian border.

It is also pleasing to see that our local clubs are including the Regional Headquarters in their own "places to visit" programmes. A special evening was arranged for the South East Disability Action Group.

### Spare time jobs?!

Mrs. R.O. (Rita Sherwell) has planted native shrubs in front of the building and willows along the creek. The Naracoorte Corporation are considering beautifying the creek frontage, thus creating a most attractive site, that a few months earlier was just wasteland.

Continued page 25



# REGIONAL NEWS

Region 5 continued . . .

## Diary Dates

June 1, 2 & 3	Regional School - Stage 1 at Karingal, Wrattenbully.
June 12	S.E. Regional Fire Advisory at Regional Headquarters.
June 24	Region 5 CFS Competitions at Millicent.
July 3	S.E. Regional Communications Advisory at Regional H/Q
July 10	S.E. Regional Conference at Regional Headquarters.
July 22	Regional 2 CFS Competitions at Tea Tree Gully.
July 27, 28 & 29	Regional School - Stage 2 at Wrattenbully.
August 7	S.E. Regional Fire Advisory at Regional Headquarters.
August 16 & 17	Regional Breathing Apparatus School at Naracoorte.
August 24	Regional Breathing Apparatus School at Naracoorte.
September 4	S.E. Regional Communications Advisory at Regional H/Q.
September 9	Robe CFS Exercises — Robe District.
September 14, 15, 16	Regional School - Stage 3 at Wrattenbully.
September 23	Penola CFS Exercises.
October 14	Meningie CFS Exercises.
October 21	Millicent CFS Exercises.
October 28	Naracoorte CFS Exercises.
November 4	Tatiara CFS Exercises.
November 6	S.E. Regional Communications Advisory at Regional H/Q.
November 13	S.E. Regional Fire Advisory at Regional H/Q.
November 23, 24 and 25	Regional School - Stage 4 at Karingal, Wrattenbully.

*"The experience one gains by attending fire training schools is invaluable. We cordially invite as many volunteer CFS members to register as possible."*

## Region 6.

In a brief interview with "The Volunteer", Councillor Leon Murray from North Shields (former President of Eyre Peninsula F.F.A.), member of Region 6 Training Committee and CFS Board member summarized events in Region 6:

On Eyre Peninsula the summer period has generally been a mild, cool and fairly quiet one with no major outbreaks of fire.

Burning off operations of late have gone off very smoothly, with property owners being more responsible observing 'the rules of burning off'.

Regional Officer Kevin May, wife Cheryell and sons Damian, Breandon and Ryan have settled well at Port Lincoln.

Kevin has been busy circulating among brigades and councils throughout the region. Many brigades have already expressed more than a passing interest in replacement of appliances and equipment for the next season.

The Corporate Review is the current talk among brigades and councils and a number of meetings have been arranged to discuss the findings. With some 60 brigades and 9 district councils involved it is the intention of Kevin or myself to attend the meetings. Whenever possible we will both attend.

Stage 2 and 4 training schools were recently completed at the Lions Club Hostel at North Shields (ex old North Shields School).

The first complement of 20 trainees have passed the Stage 4 course and our congratulations are extended to all. A couple of trainees unable to attend stage 4 will now qualify at the Crystal Brook School in October, thanks to R.O. Kevin May.

We believe that curriculum will greatly benefit those who attend the full course.

The intention is to complete each Stage 1 to Stage 4 training programme within an 18 to 24 month period. Qualified members can then circulate within their own areas and instil the training skills and knowledge learnt to fellow CFS volunteers.

Acknowledgement is made to the CFS H/Q Regional Officers who took part as course instructors.

Charlton, Cummins and Iron Knob have commissioned their new fire appliances.

R.O. May has also been busy with other related services involving the State Emergency Service, St. John and Police on regional and local disaster planning; with visits to the Whyalla corporation and district councils.

## Region 7 News.

by R.O. Peter Ferris.

It is pleasing to note that a number of CFS brigades in Region 7 have taken the initiative to prepare their training programmes for 1984.

A Compressed Air Breathing Apparatus (C.A.B.A.) Operators Course is planned for 2nd, 3rd, 4th and 10th November 1984 - venue to be determined.

Details on the Stage 1 and Stage 2 Regional Training Schools to be held in Region 7 are recorded on page 14.

There is an increasing need for brigades to advise their Regional Officer, or in their absence CFS Headquarters of any likely significant incidents - fire situations or otherwise. Such as, any fires likely to become major fires; any major structural fires; situations involving suspicious circumstances; spillages of hazardous materials or any incident requiring CFS Headquarters assistance.

Accompanied by S.A. MFS Senior Country Inspecting Officer Mr. Garry Cooper meetings were attended at Loxton on 5th March, Renmark on 6th March and Berri on 7th March, with CFS Brigades and local MFS crews in each respective town. The meetings set in motion the preliminary arrangements for the "Mutual Aid Plan" between those respective towns and the surrounding CFS brigades.

It is proposed that more defined planning will take place in those areas in the near future.

**ALDGATE C.F.S.** - Received \$7,700 in donations from residents towards cost of Ford F350 cab chassis. Additional funds are still needed to cover cost and fitting out.

**BEACHPORT C.F.S.** - Township has a new \$57,000 fire unit. The former Beachport unit was transferred to Mt. Burr central.

**BLACKFELLOWS CREEK C.F.S.** - Replaced old Studebaker truck with an International C 1600 Perkins Diesel and Darley 1½ AGE high pressure pump for \$23,000.

**BORDERTOWN C.F.S.** - Commissioned new \$50,000 unit purchased by Tatiara F.F.A. Darley pump produces more than 100 gallons/minute through each 4 hoses.

**BRUKUNGA C.F.S.** - Has its first 4 wheel drive \$12,750 quick attack command vehicle fitted with 450 litre (100 galls) tank and 5 hp pump. Brigade plans a two bay fire station with radio room, amenities and control room thanks to a Commonwealth Employment Building Programme "Job Creation Scheme".

**CADELL TRAINING CENTRE** - Trainees operate three fire fighting units with numerous other vehicles. Latest acquisition is a "Hino" 24 horse power fire unit, capable of pumping 350 gallons/minute. Trainees undertake a weekly fire drill involving hose drill, basic first aid, ladder drill and checking fire fighting equipment & fire extinguishers.

**CLARE C.F.S.** - New fire unit commissioned. Lions district donated \$8,000 with \$500 from Local Lions Club; \$4,000 from S.A. Council for the Aged - for pump and hose reel. Funds from S.A. Baptism Union and local people purchased a new pump for the Dodge truck worth \$7,400.

**CHERRY GARDENS C.F.S.** - Received \$250 along with Eden Hills, Iron Bank & Coromandel Valley C.F.S., the result of a Fair Day held at Blackwood High School in Sept. '83.



Pictured above from left Heather Bowley, President of Students' Rep. Council makes presentation to Messrs. Graham Adams, Captain Eden Hills CFS and Mr. Kevin Phillips, President of Cherry Gardens CFS.

**COLEBATCH C.F.S.** - New unit is based on an ex-Army Acco 1800 four wheel drive truck equipped with a Darley 1.5 AGE pump with a pressure rating of 300 PSI at 30 gallons/minute and 600 gallon tank. Total cost of truck was \$12,000. Volunteers put in 650 hours of labour on the vehicle.

**DUBLIN C.F.S.** - Commissioned \$30,000 International DI6-10 fire unit to replace the old Austin Gypsy. Unit complete with special rescue equipment of lights, hydraulic rams etc. ...took four months to construct. C.F.S. member Mr. Pontt was honoured with life membership for 21 years service.

**GOOLWA C.F.S.** - Received \$350 from the Goolwa Hotel/Social Club.

**GUMERACHA DISTRICT** - Have received strong support from the farming community to provide organised back up facilities. 43 people attended a meeting to discuss setting up a communications network for privately owned fire fighting vehicles.

**HAHNDORF C.F.S.** - Extensions have doubled the area of the station. Voluntary labor effectively saved about \$6,000. The extensions will provide for a separate radio-operations room, meeting room, kitchen, store and enlargement of unit bays to cater for a third fire unit.

**HAMLEY C.F.S.** - New Nissan Patrol rescue unit was commissioned in November 1983. Brigade membership had steadily grown to 20 members including a full fire crew of women.

**KINGSCOTE C.F.S.** - Spent over 340 voluntary man-hours to build up their new unit.

**LAMEROO C.F.S.** - Recognised Past Brigade and District Fire Control Officers years of service. Brigade recipients were: Messrs. Bob Pocock (21 years), Brian Broadstock (25), Brian Hayward (25), Bob Huddleston (17), Frank Best (20), Don Christie (13) and Ian Cox (10 years of service). District Fire Control Officers Mel Hamann (25 year service), Charlie Steer (30), Rolly Gregurke (23), Reg Kernich (28), and Ray Mead (14 years of service).



Pictured above Lameroo District Officers-Messrs. Bob Pocock, Rolly Gregurke, Ray Mead, Frank Miller, with John Fitzgerald (CFS H/Q Superintendent Operations), Mel Hamann, Brian Hayward.



Lameroo CFS Brigade members-Messrs. Brian Broadstock, Don Christie, Frank Miller, with John Fitzgerald, Frank Best, Bob Huddleston and Ian Cox.

**LITTLEHAMPTON C.F.S.** - Although not yet 12 months old has received outstanding support from residents in town/district. have purchased a fire truck & trained a crew of 19. Building of the new fire station is now underway. The Great Easter Darts and Social Club recently presented its second cheque for \$500 to the brigade.

**LOBETHAL C.F.S.** - Bought its first two fire units from the proceeds of beer tickets, raising a total of \$7,551 in 3 years.

**LUCINDALE C.F.S.** - Took in donations of \$400 each from Lions Club and Lucindale Hotel Social Club.

**MOUNT COMPASS C.F.S.** - Purchased a second hand International Acco 4x4 for \$3,000 and fitted it out with equipment from the Blitz.

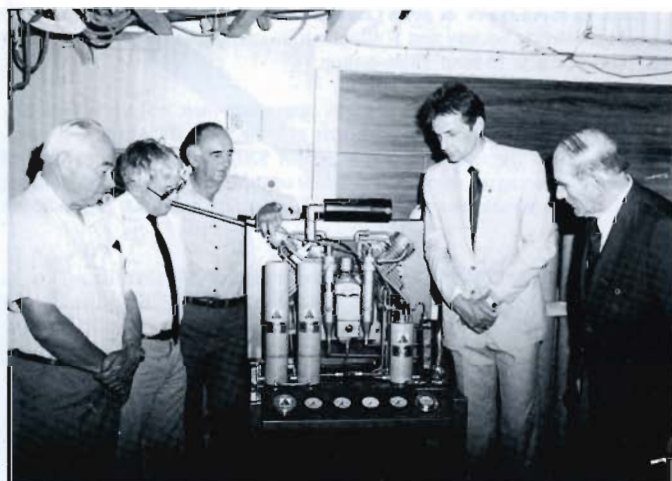


**MT. GEORGE C.F.S.** - Stalwart John Driver has retired from active duty after 27 years. At a farewell for John and his wife Pat brigade president Mr. Les Johnson presented John with a framed certificate and paid tribute to his fire fighting ability and knowledge of the district. John Driver was also nominated as a life member which will make him only the second in the unit with life membership - the first being his father, one of the foundation members of the brigade.

*The C.F.S. thanks John and wife Pam for their valuable contribution and wishes them the very best for the future.*

Following approval by Stirling and East Torrens councils, Mt. George C.F.S. brigade members are in the process of drawing up plans to replace the old fire shed with a more adequate building at Woodhouse.

**MOUNT LOFTY TRAINING CENTRE** - Were given a \$15,000 air compressor unit (one of the largest single units made by a private citizen to the C.F.S.), by retired Adelaide businessman Mr. Don Schultz of Glen Osmond. The air compressor will be used for recharging C.F.S. breathing apparatus cylinders, providing support to the greatest number of C.F.S. brigades throughout the Adelaide Hills who are called on to fight fires and attend other emergencies where highly toxic materials are involved.



Pictured above from right to left; Mr. Don Schultz inspects the main compressor unit with C.F.S. Board Chairman Professor Peter Schwerdtfeger, Messrs. Alan Blight, Jim Fitzgerald (in charge of technical support section - Mt. Lofty Centre) and Charlie Rosewarne (officer-in-charge of training school - Mt. Lofty Centre.) The British made compressor with ancillary equipment made in Victoria services a storage bank of 4 cylinders with a total of 2,000 cubic feet of air, enabling 12 B.A. units to be recharged without starting the compressor. When switched on, the 4 stage compressor can rapidly replenish the storage units with the highest possible pure air.

Donations from members of the Stirling Chamber of Commerce raised \$1,200 for a new breathing apparatus kit for the Mount Lofty Training Centre. The kit comprises of an air cylinder, with back pack, face mask and reserve cylinder.

**MT. MCINTYRE C.F.S.** - Will receive new equipment thanks to a \$1,000 donation from Commercial Hotel Social Club at Naracoorte.

**MT. PLEASANT DISTRICT COUNCIL** - Plans to buy 4 new Toyota Land Cruisers in the next 12 months & base them at Mount Pleasant, Springton, Eden Valley and Palmer.

**MILLICENT C.F.S.** - New F100 command vehicle cost over \$25,000. Also has a new trailer for the rescue unit. Contributors were Lions District 20151 - covering 60 clubs, Millicent High School, Baptist Church, Millicent D/C, The Presbytry of the Coorong (S.E. District of the Uniting Church), Leos, Apexian and Millicent Community Club.

**MEADOWS C.F.S.** - A benefit carnival at Meadows Ski Resort raised about \$5,000 for the brigade from 3,000 people in attendance.

**MYLOR C.F.S.** - Will get a new fire station costing \$74,025. The result of an approved Job Creation Scheme. The Job Scheme provides \$52,250. Council \$10,00 and Mylor C.F.S. contributes \$5,000 of cost.

**MURRAY BRIDGE C.F.S.** - Received a donation of \$450 from Apex Club.

**NAIRNE C.F.S.** - Latest acquisition is a new \$31,900 long wheel base Ford 350 with 900 litre (200 gallon) tank town/country unit with an area for crew protection.

Life membership was awarded to Mr. E.M. Schmidt by member for Murray Mr. David Wotton.



Pictured above Nairne's newest fire fighting appliance.



Mr. Jeff McKenny (centre) received the honour of accepting the keys of the new unit (in recognition of brigade devotion and involvement with new unit), from C.F.S. Board Deputy Chairman Mr. Ray Orr, flanked by Captain Lyall Strout (left), R.O. Russel Gear (Region 1) and David Wotton member for Murray. Photograph supplied courtesy The Courier, Mt. Barker.

**NEALES FLAT C.F.S.** - The result of years of hard work, fund raising and countless hours of voluntary labour - the commissioning of a new fire appliance. Over 100 people attended the ceremony organised jointly by Committee of Neales Flat Agricultural bureau and C.F.S. Special guests included C.F.S. Director Lloyd Johns, R.O. Brian Menadue (Region 2), Bill Goodwin Deputy Director of Northern Territory Bushfires Authority and Bruce Eastick M.P. Brigade Captain Paul Schiller accepted the unit's keys from Mr. Johns. Words of encouragement and support were expressed by local Eudunda Council Chairman, Mr. Ralph Carter.

Continued page 28

NEALES FLAT C.F.S. continued . . .



Pictured above Neales Flat C.F.S. members and volunteers, who spent many hours constructing the new unit.

**NURIOOTPA C.F.S.** - Fire Control Officer Mr. Ron Schubert was paid tribute on his retirement from office, by Council and members for his 40 years valuable service to the C.F.S. and community.

The brigade is to have a 4 wheel drive fire truck to replace the present 13 year old unit. Cab/chassis will cost approx. \$33,000.

**ORROROO C.F.S.** - Newly acquired four wheel drive supervisors' vehicle fitted out as a command vehicle includes a 400 litre tank 1½" water pump, radio and is equipped with high sides to protect fire fighters.

**PENOLA & DISTRICT F.F.A.** - New \$14,000 rescue unit is based on a two wheel trailer towed behind a fire appliance. Equipment - hydraulic rescue gear, spreaders, cutters powered by an electric over hydraulic power supply. A 5 Kv alternator provides 240 volt power for hydraulics and lights. An extendable 4 metre high tower, ropes, chains, chainsaw and extensive tool kit. Apex Club of Penola/Kalangadoo contributed over \$4,000, other donors - Nangwarry Social Club, Heywards Social Club and Penola D/C.

**PENNESHAW C.F.S.** - Raised over \$700 from bottle/can collection, \$193 at a beach carnival and \$400 from trading tables.

**PORT BROUGHTON C.F.S.** - Commissioned new fire appliance. . . story to follow next issue. Pictures needed?

**ROBE C.F.S.** - District units have installed UHF radios to become part of a standard radio service in the area. The network now includes C.F.S., Police, St. John Ambulance, fishermen and aircraft.

**ROBERSTOWN C.F.S.** - Presentation ball was the venue for C.F.S. service presentations. Recipients were N.T. Cocks (20 years service), with 14 years service to A.H. Farley, J. French, M.H. Jenke, M.R. Lehmann, F.M. Mosey, M.E. Neindorf, J.H. Noske, D.R. Ruediger, K.I. Ruediger, M.A. Ruediger, R.W. Schmidt, R.E. Schutz, D.G. Semmler, S.G. Voigt and R.H. Werner and 10 years service to S.T. Cocks, A.D. Heinrich and D.B. Keller. Life Membership was made to Mr. Angus Farley former Council Chairman at time of formation of the late E.F.S. Proceeds of \$400 from a C.W.A. street stall were presented to the brigade.

**SELICKS C.F.S.** - Recent art exhibition turnover of \$23,000 resulted in a \$5,000 profit to the brigade. Despite strong gales before the official opening and a mid week fire involving hazardous chemicals where a number of the C.F.S. volunteers were treated after inhaling poisonous gases, the programme was most successful.

**SEVENHILL C.F.S.** - Latest support has come from Lions S2 District with a cheque for \$3,200 towards cost of new Sevenhill/Penworthan C.F.S. unit. A radio is still needed and a shed is to be built to house the new truck.

**SPOTSHILL C.F.S.** - Unit was commissioned Jan. 1984 at a barbecue tea for Spotshill, Greenways and Mt. Benson C.F.S. brigade members and families. Keys to the unit were presented by Robe D/C Deputy Chairman Mr. D. Stanhope to C.F.S. Director Lloyd Johns who presented them to Captain M.A. Ogilvie. Official recognition was given to the Mt. Benson C.F.S. unit which has been in service for the past 12 months. The Greenways C.F.S. unit has undergone major repairs, refitting and repainting.

**STRATHALBYN & DISTRICTS C.F.S.** - With co-organisers the Royal Life Saving Society and Strathalbyn Swimming Club will benefit from \$2,500 raised at a 10 hour swim-a-thon.

**SUMMERTOWN C.F.S.** - Plans upgrading their brigade with a new \$70,000 unit, \$10,000 in repairs to their existing 1940 Blitz unit and extensions/repairs to the fire station at a cost of \$20,000. East Torrens Council have reported to agree to provide \$45,000 towards cab chassis and building up unit to compliment their quick attack 1 ton utility and 1,000 gallon tanker unit.

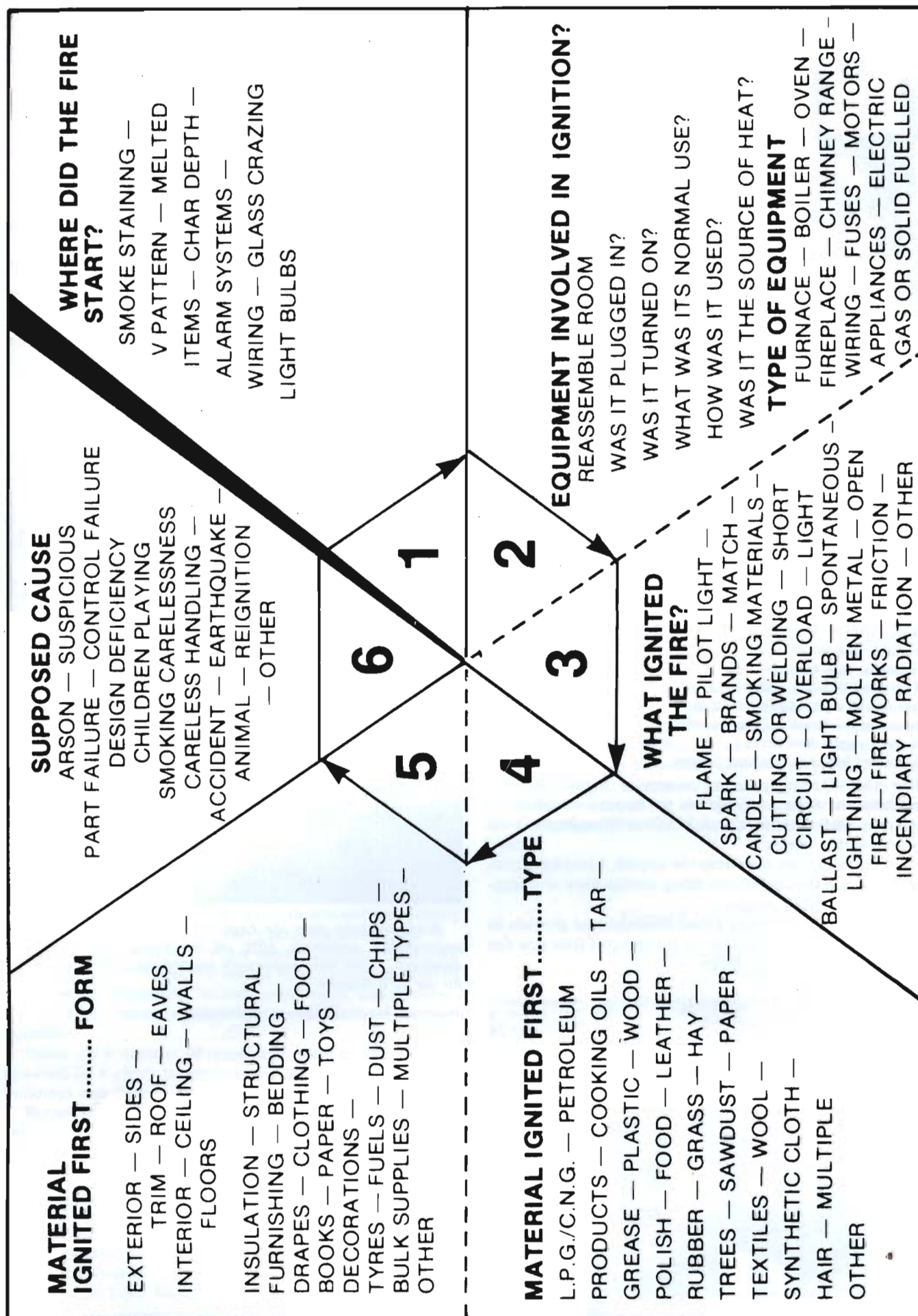
**WILLUNGA C.F.S.** - Took delivery of its new \$78,000 fire unit at its commissioning on April 29 during official opening of the brigade's new premises. The new fire station was supported by the Job Creation Scheme.

**WOODSIDE C.F.S.** - Brigade members have built their own fire truck for approx. \$50,000. The truck is a similar type to those manufactured for \$65,000 to \$70,000. Members organised bottle drives, auctions and raffles to help pay to fit out the truck.

**WUDINNA** - Emergency Services complex on central Eyre Peninsula has been built/funded under the Job Creation Scheme. The building is to contain accommodation for C.F.S., S.E.S. and St. John vehicles in addition to various offices, meeting and lecture rooms, kitchen and other facilities.



# FIRE CAUSE ELIMINATION PROCESS



## FROM THE RUBBLE OF "THE EAGLE" RISES A UNIQUE FUND-RAISER

### Lions International – C.F.S. "Brick" Appeal.



Following the destruction of the Eagle on the Hill Hotel in the Ash Wednesday II bushfires last year, the Lions Club of Mitcham developed the idea that through salvaging pieces of bricks from the demolished building, members of Lions could embark on a statewide fund raising appeal for the CFS.

Members of the Mitcham Club spent many hours late last year salvaging some 18,000 pieces of brick from the rubble. All were cleaned and bagged for storage.

Earlier this year the bag of bricks were distributed to clubs throughout the State where local members applied clear varnish to the pieces and affixed the special plaque which reads:

#### THE EAGLE ON THE HILL HOTEL

Built in 1855, was twice damaged by bushfire and finally burnt beyond repair on 16th February, 1983.

This piece of brick, taken from the remains of a previously rebuilt area, marks appreciation of your donation to the Country Fire Services.

A Lions Clubs International project.

The Shell Company made its service station facilities throughout the State available for the appeal, on Saturday 14th April, 1984. For donations of \$5.00 or more donors were presented with a "brick".

With the bricks left over from the appeal, Lions have continued their fundraising efforts along similar lines at shopping centres and other venues.

Funds raised by the three Lions International districts in South Australia will go towards the purchase of four new fire units for the CFS.

South Australia's Minister for Emergency Services, Mr. Jack Wright who officially announced the appeal on 19th March at the "Eagle" site, is pictured above holding the "brick" presented earlier to him by Lions' Chairman of Multiple District Councils Dr. Bob Coulthard.

Mitcham Lions' President, Jock Bourne, left, and David Cain, right, a past district governor and chairman of the appeal organising committee, are pictured with CFS Director Lloyd Johns and the Minister.

Lions gratefully acknowledge the generous co-operation of many companies and organizations involved in setting up the Appeal project. In particular, the owners of the Eagle on the Hill Hotel and licensee, Mr. Peter Bowley, and the Shell Company and its service stations for use of the facilities on the Appeal day, Saturday 14th April.

The Appeal will attract a State Government \$1 for \$1 subsidy. All donations of \$2 or more will be tax deductible, with official receipts being given where requested.



*Brick souvenirs from the Eagle on the Hill Hotel make ideal paperweights, ornaments, gifts, are a "talking point" wherever displayed . . . but most importantly support the Lions Club appeal for our CFS brigades.*

(Photograph reproduced courtesy "The Advertiser".)







## ROTARY'S REPLY TO ASH WEDNESDAY



Further details are now available regarding the \$¼ million donated by Rotary Club in Australia and overseas towards the "Rotary District 950 and 952 Bushfire Relief Fund" following Ash Wednesday II.

It must be said that it was a tremendous effort by the Rotary Club members to raise such an amount considering the many other bushfire appeals operating at the time.

The Country Fire Services are most grateful to Rotary for the donation of \$99,366.00 from the fund, towards the cost of replacing and upgrading fire units, equipment, and construction of a fire station which otherwise would not have been possible.

Some 150 Rotarians, 40 trucks and front end loaders were involved in a clean up programme to remove demolished buildings and debris throughout the devastated area.

Rotary District 950 and 952 gave financial assistance to the farming community to rebuild sheds and fencing, provided help for widows of firefighters and made sure that injured fire fighters were not forgotten.

Minda Incorporated even supplied trees to Rotary, to help in the process of replanting.

The Rotary Clubs are to be congratulated on the amount of money raised, to assist the rural community in recovery from their financial losses, and the substantial donations made to the Lord Mayor Relief Fund and Barossa Flood Relief.

G.A. KEAY Acting C.F.S. Deputy Director.

## Training grants to C.F.S. men

The first C.F.S. Training and Research Foundation Trust grants were announced by the Minister for Emergency Services Mr. Jack Wright, at a ceremony at C.F.S. Headquarters on Tuesday 1st May 1984.

The grants will cover travel and accommodation costs for three Adelaide Hills C.F.S. volunteers (attached to the Mount Lofty Training Centre), to enable them to attend the Vehicle and Accident Rescue Techniques Course to be held by the New South Wales Police Accident Squad, later this year.



Pictured above from left: Foundation Trust Chairman Mr. Len Frankham congratulates recipient senior fireman John Meikle of Bridgewater C.F.S. with Minister for Emergency Services Mr. Jack Wright and recipients senior fireman John Wright of Greenhill C.F.S. – formerly of Summertown C.F.S. and Lieutenant Michael Franson of Brukung C.F.S. The fourth grant was made to Dr. Alexander McFarlane (refer page 8 ).

The C.F.S. Training and Research Foundation was established in 1983 by the "S.A. Great" Committee with the \$107,000 proceeds from the special lottery conducted after the Ash Wednesday II bushfires. The C.F.S. Board boosted the total capital to \$134,000 which was invested. The grants have been met from interest generated from the investment.

Application forms for 1985 grants are now available from the Campaign Office of S.A. Great, 121 Greenhill Road, Unley.

## Farewell John Penno



Mitcham Hills Fire Supervisor John Penno has retired after 28 years of dedicated service with the C.F.S. to take over a newsagency in Alice Springs.

John and his wife Yvonne will be remembered by their many friends in the service for their "friendly nature". Support and encouragement was always readily offered to fellow firefighters and cadets during extensive training programmes involving fire procedures, firefighting drill competitions, and during actual emergencies, by John; from knowledge that comes only from experience.

We wish John and Yvonne Penno well, in their new vocation.



Young and old paid their respects to the fallen at the C.F.S. Memorial Service at Mount Lofty on the anniversary of the 1983 Ash Wednesday Bushfires. (Photograph reproduced courtesy "The Advertiser".)

#### ROYAL GREETINGS

Prince Charles sends greetings and good wishes to Country Fire Service personnel.

In an audience with His Royal Highness on 23rd May, 1984 the C.F.S. Director, Lloyd C. Johns passed to Prince Charles appreciation for the concern shown by their Royal Highnesses last year, following the Ash Wednesday Bushfires. Prince Charles was pleased to learn of the recovery of South Australia and asked especially that the good wishes of himself and Lady Dianna be conveyed to the Country Fire Services Volunteers for whom they had so much admiration.

