

REPORT

A View of V.A.R.
in South Australia

Emergency Services
Foundation
Bursary.

James Doyle.
September 1988

FORWARD.

This report outlines the studies, the experiences, the discussions and the knowledge gained during my visit to South Australia on the 26th May to the 1st April 1988.

The visit was under the auspices of the Combined Emergency Services Foundation who kindly provided the financial resources in this the inaugural scholarship of the Foundation, for the study of Road Accident Rescue Skills and Techniques.

The bursary was conceived due to changes in Government Legislation when early in 1987, the Foundation perceived the need for a change in their role as benefactor, thus the concept of this bursary was established. It is intended that this bursary be made available to both permanent and volunteer emergency workers to further their knowledge and skills in their identified areas of interest.

South Australia was chosen as venue for this investigation because of the similarity of Emergency Services in that state with those existing within Victoria.

Mr Brian Lancaster, Director of S.E.S. in South Australia was kind enough to host this visit, and with the unstinting help of both his permanent and volunteer staff, arranged for a week of memorable activity on which this report is based.

Wangaratta,

20th September 1988.

ACKNOWLEDGEMENTS.

There were far too many people who gave of their time and expertise for me to thank individually, but to those people I thank you collectively, for without your help, my visit would not have been as memorable nor as illuminating as it was.

There are some people that I want to thank individually. To you all, may I express my appreciation for your time and energies that you gave unstintingly, which in most instances took you away from your normal work load and especially when it was not really convenient for you to do so.

Rhyss Maggs. Director, Vic.S.E.S.

Brian Lancaster. Director, S/Aust.S.E.S.

Nat Cooke. Deputy Director, S/Aust.S.E.S.

Keith Harraway. Divisional Officer, (Murray), S/Aust.S.E.S.

Noel Hodges. Divisional Officer, (Northern Suburbs and Barossa),
S/Aust.S.E.S.

John Hynes. Divisional officer, (Yorke Peninsular),
S/Aust.S.E.S.

South Australian State Emergency Headquarters Staff.

Commander, C. Benson, South Australian Police Force.

Superintendent, Rod Hagan, South Australian Metropolitan Fire Service.

Regional Officer, R. Grear, South Australian Country Fire Service.

Mick Gordon, C.F.S. Training Centre, Thebarton.

The Vehicle Accident rescue Training Team.

Trevor Hyteman, Controller (Murray Bridge Unit), S/Aust.S.E.S.

Controllers and volunteer members of the:-

Sterling C.F.S. Fire/Rar.

Eden Hills C.F.S. Fire/Rar.

Northern Districts.	S.E.S.
Meningie.	S.E.S.
Coonalpyn C.F.S.	Fire/Rar.
Athelston C.F.S.	Fire/Rar.

To my family who encouraged me throughout the selection interview; during my week in South Australia and for their patience during the compilation of this report.

The members of the North East Regional Office of the Victoria State Emergency service and members of the Wangaratta unit for filling in behind me while I was away.

My ever ready, patient Commodore word processor.

You all receive my sincere and heartfelt thank you.

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Jim Doyle.

SUMMARY.

The purpose of this report was to review a number of issues relating to Road Accident Rescue within the State of South Australia.

The relationship that exists within the Emergency Services of South Australia have certain similarities with those that exist here in Victoria, with South Australia S.E.S also being the "Cinderella" service that it is here.

One of the main differences that exists in the South Australian system is that S.A.S.E.S. reports directly to the Chief Commissioner of Police, not to the Minister for Emergency Services as in Victoria, this enables S.E.S. to have access to resources, both human and equipment that does not exist here in Victoria.

S.A.S.E.S. have total responsibility for the state wide Operations Centre located at the Police complex in Adelaide, bringing together all of the Emergency Services including Government Departments responsible for Forest, National Parks and Water Resources.

There are also a lot of positives within those relationships that we might emulate to the advantage of the Emergency Service offered to the public of Victoria.

Some of the issues that will be covered in this report include :-

- * Consideration of South Australian legislation, regulations and operational directives.

- * A review of equipment, tools, protective clothing etc.

- * An evaluation of the training processes, the accreditation of individuals and groups. The training of those involved in alerting and despatching accident rescue crews, and the training and accreditation of the road accident rescue crews themselves.

- * An evaluation of rescue vehicles, prime movers, trailers and specialist rescue equipment.

- * Communications structures in place to support road accident rescue operations. Also the unit operational structures to support the rescue team.

INTRODUCTION.

Prior to leaving for South Australia, I attended the State Headquarters for Vic.S.E.S., where I received a briefing of current issues relating to the S.E.S. here in Victoria. During this briefing I spoke with Rhyss Maggs, (Director), Gareth Davis, (Acting Deputy Director), Jim Pilmore, (Assistant Director of Corporate Services).

Many of the issues raised related to the staffing arrangements which are currently in a state of flux due to Government directives. Funding and the methods of allocation of financial resources to permanent staff support and to the local Units. Allocation of equipment on a needs basis to build up the more poorly equipped units. And finally an indication of the direction of Vic. S.E.S. within the new framework to be instigated with a greater degree of liason between the Victoria Police and the S.E.S.

The new Legislation in the State Emergency Service Act and the implication for S.E.S. in it's operational and emergency management role as well as the need for a change in the present Governments attitude toward financial support to the Service was also discussed.

Previously to this meeting, an agenda for the week had been prepared, outlining the various S.A.S.E.S. Units that I was to visit along with a list of the Fire Services that would assist in my investigations. Every area that has some influence on the operational role of S.A.S.E.S. was included with a visit to the Senior Police and Ambulance Offices.

With this background information in hand, my investigative visit to South Australia began.

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1.0. General Training.

1.1. The issue that impressed me most about the South Australian State Emergency Service was their committment to long range planning. This committment is evident at all levels from the Director down through the Divisional Officers to the local Controllers to the general membership.

1.2. Long range planning included all aspects of S.E.S. operations. Organisational structures, inter service relationships, methods of communication, support of one service to another both operational as well as organisational, sources of future funding, identification of and allocation of future resource requirements of the service in general and most importantly to the general training needs of the service.

1.3. As part of this long range planning, no fewer that twenty three training packages have been identified with eleven having been developed to various levels of completion. Four have been issued to Units for their use, three are in draft for critique, this includes the Vehicle accident rescue course, and four are in rough draft.

1.4. As this report is to deal primarily with vehicle accident rescue, I will include a listing of these general training packages in addendum No.1.

1.5. The development of Training Manuals for Vehicle Accident Rescue and all other training is based on four very simple but vital principles:

1.5.1. that all SASES skills are complex, but that V.A.R. rescue is highly technical in its own right;

1.5.2. that all SASES personnel must be trained to the same set standard in each skill area;

1.5.3. that all SASES courses must be structured to provide progressively more difficult and technical training in all skills;

1.5.4. that the programme of State-standard course management must be rigidly controlled by State Headquarters to ensure that standards are maintained at a level similiar to other professional seivices.

1.6. This principle is quite simple in that it recognises that Vehicle Accident Rescue is highly technical and it is not for the casual or half hearted SES personnel or the non-SES person. A casual approach is unacceptable and professionalism can only come from systematic and professional training. All personnel must strive for a degree of professionalism or fall by the wayside.

1.7. In a similiar manner, Vic.S.E.S. has now recognised the need for State-standard training with the introduction of accreditation for all Road Accident Rescue Teams.

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2.0. RESPONSIBILITY FOR ROAD ACCIDENT RESCUE.

2.1. At this time, I feel that I must point out, that South Australia S.E.S. seems to have a much lower level of involvement in V.A.R. than Units within Victoria. There are 50 C.F.S. units within the state with primary V.A.R. responsibilities, add to this the M.F.S. municipal and regional units, S.A. Police Metropolitan Response Team and we find that S.A.S.E.S. responsibility is very limited.

2.2. A moratorium has been set in place to support this control by the Fire Services, with an understanding that no new units may purchase V.A.R. equipment without approval of a committee consisting of St. Johns, M.F.S., C.F.S., S.E.S., and the Police under the control of Cdr. Benson. This moratorium is in place for the next 18 months and if a C.F.S. Fire Tender is the primary response for a particular area, permission from this committee will have to be obtained before any other service may acquire a dedicated V.A.R. system.

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3.0. VEHICLE ACCIDENT RESCUE TRAINING S.A.S.E.S. STATE WIDE ACCREDITED SYSTEM.

3.0. During the first two days of my visit, I attended the S.A. Police Training Centre at Echunga where the first of a two weekend training program was to be held. This was a validation program for the final trial of a Train the Trainer program in Vehicle Accident Rescue.

It is a pity that I was not able to attend the second weekend of the program as it has left a gap in my understanding of the effectiveness of the course and any remarks that I make must be tempered with this situation in mind.

The following points are my response to that course and to the content of the material that would eventually be delivered to the volunteer member.

3.1. The hand out notes were developed especially for the Unit's Volunteer Training Officer, for the delivery of Vehicle Accident Rescue techniques.

The notes were amazingly complete in their content ensuring that even the most novice of Training Officer could deliver a complete and meaningful course to Unit members.

The text was written in complete lecture form and if need be could be read straight from the manual thus ensuring that a State wide standard presentation would result.

In turn it was demonstrated that individual styles could be employed and still maintain the integrity of the course by retaining the important elements.

3.2. As this was the final trial of this course, the notes were also undergoing final appraisal. There were some errors of information present which were identified for correction at the conclusion of the second weekend. This in turn meant that I was not able to procure a set for reference.

3.3. The Training Team showed an extremely high level of professionalism in their approach both to the presentation of the course and also in demonstrating to the participants that professionalism of all involved in vehicle accident rescue should be the prime aim.

Emphasis of this point was maintained throughout the course with an eagerness by all to accept this responsibility, thus complying with the premise in 1.6.

3.4. At the conclusion of this training program the comprehensive notes previously mentioned will be issued to the participants of the Train the Trainer Course. Each participant will then be expected to embark on a program of presenting Vehicle Accident Rescue Training within their own region, passing on the skills required within the course.

4.0. VEHICLE ACCIDENT RESCUE TRAINING S.A.S.E.S. LOCAL UNIT LEVEL.

4.1. As in Victoria, there are Units in South Australia who are heavily involved in V.A.R., also like Victoria there are those Units who have very little involvement. I will deal firstly, with the Units that I observed on my visit who had little involvement with V.A.R., outlining their equipment resources and their training.

4.2. Meningie

Was the first of the smaller S.A.S.E.S. Units that I was able to visit. This Unit had only been operating for a period of 4 1/2 years and had been involved in V.A.R for 4 of those years. With a membership of 32 and an active group of 15 this Unit had achieved wonders in their short history.

4.3. This Unit had been involved in some 40 odd incidents in the last year, most of these being Lake Rescues with their Flood Rescue Boat, much involvement with providing welfare to the Fire Services throughout their fire area and some V.A.R. work.

4.4. Like most country S.E.S. Units, Meningie's involvement in providing welfare is exactly that; Red Cross are not involved in supplying welfare to the Fire Service, so this is an area that Meningie S.E.S. have developed as one of their prime responsibilities. They have acquired an old Bedford school bus which is currently being modified to provide meals for 200 plus fire fighters.

4.5. V.A.R. response vehicle is a 1976 Ford F250 single cab and chassis fitted with a home made body and equipped with a wide range of rescue equipment. This includes 4.5 KVA Generator for lighting, 7 CFM Air Compressor to power Air/Hydraulic Lukas Cutter. This unit has no spreading facilities with exception of basic issue Alligator Jaws of 1 tonne capacity.

A secondary response vehicle in the form of a 1971 Land Rover short wheelbase personnel carrier compliments the other equipment with an estimated value of \$50,000 raised by the local Government and community.

4.6. Meningie S.A.S.E.S. service a population of approximately 4500 people.

4.7. As stated earlier, V.A.R. is a low priority on this Unit's training priorities and as such the impression I was given was that skills were at a basic level, probably to accreditation standard, but only just.

4.8. Coonalpyn S.E.S. /C.F.S.

This is one of a number of combined S.E.S and C.F.S. units that exist throughout the state. Both of these units share the same building and resources but are staffed by two separate

administrations; some members belonging to both S.E.S. and C.F.S and some members remaining involved with only one of the two organisations.

4.9. Coonalpyn is resourced at a lower level than Meningie with a membership of ten members and a rescue trailer towed by a very tired four wheel drive Toyota utility.

4.10 The tow vehicle is also a fire fighting unit shared by both the S.E.S. and the C.F.S. thus creating a dilemma when the tow vehicle is at a fire and the rescue trailer is required for a V.A.R.

4.11. The members of this unit of S.E.S. have shown great imagination with the limited resources that they have available. Like most S.E.S. and C.F.S. units, Coonalpyn have followed a historical line in their approach to types and powering of their rescue equipment by using air over hydraulics for cutting and spreading tools. (see reference 8.0. for comment on equipment.)

4.12. Training in V.A.R. is also very low key. The members are all from the local farming community and their involvement in S.E.S. is of course secondary to their livelihood. The establishment of this units and its involvement in V.A.R. was deemed necessary as the community is established on the busy Dukes Highway, between Murray Bridge and Bordertown. This is the main Adelaide to Melbourne route. Much of their V.A.R. response is to high speed truck and car accidents.

4.13 Murray Bridge S.E.S. Unit.

Was a breath of fresh air; for here was a highly motivated, exceptionally trained, professional team of volunteers who have developed and equipped a first class facility and rescue resource, both equipment and personel.

4.14 The headquarters and operations centre of this unit are comparitively new and form the basis for an operation centre that is utilised by the Murray Bridge Police in large incidents involving more than one emergency service.

4.15. This unit has designed and had built professionally, a vehicle that is mainly dedicated to Vehicle Accident Rescue but is flexible enough to be used for all other forms of rescue.

4.16. The vehicle built in 1984 cost the unit \$40,000 with an additional \$40,000 to equip it with the necessary gear. Powered by a 351 petrol motor, the chassis is a 1981 F250 Ford.

The main external power supply is an electric start 5 KVA generator which is wired to external plugs around the vehicle.

All motorised equipment is powered by petrol motors to reduce the complexities of multi fueled components. A 10 cfm air compressor supplies air for power saws and air bags that may be used in a gaseous environment. Hurst hydraulic spreaders, cutters and ram are powered by

a petrol-hydraulic pump.
(see reference 8 for detail on equipment.)

4.17. The policy of the Murray Bridge unit is that each member must undertake twelve months of general and V.A.R. specific training before being involved on actual road accident rescues tasks. This was the first mention of such stringent requirements to training that I had heard, in the light of the very lay back attitudes that the fire services had displayed, I believe that this should be the formula for all V.A.R. crews. It displays a professional approach and a concern for the welfare of road accident victims, only the best trained personal are appropriate for vehicle accident rescue.

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5.0. VEHICLE ACCIDENT RESCUE. OTHER EMERGENCY SERVICES.

In reviewing the Vehicle Accident Rescue Training state wide in South Australia, an understanding of the role and authority of the other Emergency Services needs to be understood.

5.1.

The Police and the Metropolitan Fire Service have the agreed to responsibility of V.A.R. in metropolitan South Australia.

5.2. The Police have the investigative responsibility at all road accidents, therefore, instead of arriving at the scene in a normal patrol car they utilise the services of an extremely well equipped V.A.R. vehicle complete with all rescue, communications and lighting that may be required.

This vehicle is dedicated to V.A.R. and is mounted on a highly manouverable F250 Ford cab and chassis. (see reference 8.0. for comments on equipment

5.3. The Metropolitan Fire Service have negotiated a forty kilometer response radius from any of their metropolitan or regional Fire stations thus allowing for an expansion of their territorial rights as justification for additional Stations is established.

5.4. The prime responsibility for the preservation and protection of life in South Australia is that of the St. Johns Ambulance Brigade. Essentially manned by full time professional officers, this organisation utilizes volunteers to staff its operation during night time and weekend. From all reports this system works reasonably well but is developing symptoms that existed here in Victoria a decade ago when the full time officers objected to the use of volunteers and the restrictions that they placed on career opportunities for the professional officer.

5.5. On viewing the vehicle layout, the type of equipment carried, the level of training and understanding by members of the various C.F.S. units that I observed, especially those who had primary response to V.A.R., it is quite apparent that fire fighting and fire suppression is the main concern of these units.

V.A.R. being a minor consideration did not receive the due importance that it should; the Atholston Brigade was a typical example of this attitude, with only one of their fifty odd members being trained and supported by three other untrained persons. A small rear locker was allocated for the storage of specialist equipment which consisted of "Enerpac" hand operated hydraulic rams, alligator spreader and .25 tonne wedge spreader and cutter.

5.6. As in Victoria, it is very apparent that funding to the fire services is designated on the generous side of the necessary requirements.

All vehicles were of a very expensive nature when compared to the majority of those owned by S.E.S. and were designed specifically for fire fighting.

5.7 As in Victoria, there exists in South Australia, a professional group of fire fighters who have designs in bringing V.A.R. completely under the umbrella of the Fire Service. To my observation, the only group sufficiently dedicated to this area of emergency operation was the Metropolitan Fire Service. Although their rescue vehicle was multi purpose, V.A.R. and Fire support equipped, the training of crews was dedicated to road accident rescue.

This level of commitment was not displayed within the Country fire Service.

5.8 Certainly there are exceptions to this last statement, the Sterling C.F.S. Unit was just that. Their level of specialist vehicle and equipment left nothing to be desired in its layout and variety. (see addendum for detail.)

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6.0 RESCUE RESOURCE DIRECTORY

6.1. A Rescue Resource Directory has been established to ensure, "that all rescue resources available to the community of South Australia, are utilised and co-ordinated to provide an immediate effective response rescue service during emergencies, or when persons are trapped in a motor vehicle after an accident, or arising from fire, or the escape of a dangerous substance, or a situation that involves imminent danger from such an escape."

6.2. The rescue services co-ordinated in South Australia by such a plan are:-

- S.A. Police Department,
- S.A. State Emergency Service,
- S.A. Metropolitan Fire Service,
- S.A. Country Fire Service,
- S.A. St. John Ambulance/Brigade.

The Aim is to provide an effective coordination of the participating services which have a 24 hour response capability.

6.3. The overall responsibility to this plan is the S.A. Police Department to develop procedures to maximise local resources in accordance with the Rescue resource Directory.

6.4. As in Victoria, the Fire Services have seen fit to manipulate their legislated role to attend all incidents. This is on the basis, that they shall respond to and assist other emergency services in all instances.

Their legislated role is to provide immediate protection against fire or the threat of fire and "to initiate rescue procedures if not already commenced."

6.5. The nearest Specialised Rescue resource shall be called as indicated in the directory. In metropolitan South Australia this does not include S.A.SES except in some minor areas because of the proliferation of the Fire services.

6.6. The Rescue Resource Directory is divide into six fields of reference:-

- (1) Township or location.
- (2) S.A. Police District.
- (3) Ambulance response.
- (4) Fire response.
- (5) First specialised rescue response.

(6) Second specialised rescue response.

6.7. Each of these fields gives the contact telephone number and where appropriate, a second alternate contact point. This is especially efficient organisationally for S.E.S. units where a single 24 hour contact number may not be available.

6.8 The instructions outlining responsibilities under this plan finally places S.E.S. in perspective with the statements that, "the S.E.S. shall assist all other services in accordance with its legislative functions".

(For further information see addendum 2.)

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7.0. R.A.P.I.D. Rural Areas Property Identification Directory.

Another initiative taken by the Emergency Services of South Australia which is of immense assistance to all services and would ideally suit the location of vehicle accident sites with pinpoint accuracy is the system being developed throughout the state called R.A.P.I.D., Rural Areas Property Identification Directory.

This system is currently being established through the efforts mainly of S.E.S. Divisional Officers.

7.1. The aim of R.A.P.I.D. is to provide a current directory which will enable Emergency Services and Government Agencies to easily identify the location of rural properties by a map grid reference.

7.2. The objectives of R.A.P.I.D. are to:-
identify each rural property in a given district,

determine the location of properties on the appropriate scale map,

record the location of properties, using the recognised six-figure Grid Reference System,

supply at no cost to the occupier, a determined Grid Reference Number on a key tag to be attached to the occupiers phone(s),

produce a directory containing the appropriate maps and a list of property occupiers and their determined Grid Reference Number,

notify the Emergency Services and Government Agencies that the a directory of the district is available,

maintain an up-to-date record of property occupiers and their Grid Reference Number and revise these records at least once each year.

7.3. This system would be of invaluable assistance to Ambulance, Fire and S.E.S. in country Victoria.

Local place names and property owners or occupiers names are the most common reference point given in the country to identify the location of an emergency.

This is very confusing for emergency service use as place names and owner names are only accurate when used in the context of a small community, this creates doubts as to their accuracy when considering the response agencies have the over-view of a much larger region.

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8. O. EQUIPMENT REVIEW.

As in any organisation, tradition plays a large part in what we do and in the decisions that we make. The selection of appropriate and necessary equipment is no exception. It was quite apparent that what one organisation had obtained, others had followed suit.

Two main systems where tradition seemed to influence the equipment being used was (a) compressed air to power hydraulic equipment and (b) the wide use of the very heavy and bulky "Hurst" hydraulic Rescue Systems.

"Hurst was used predominantly by S.E.S. and both M.F.S. and C.F.S.

8.1. Air over hydraulic equipment used to power Spreader and Cutting equipment can create a low weight, portable piece of equipment and some units used this technique to advantage. The two disadvantages to this system is:-

(a) the need for an Air Compressor of adequate size to supply air in sufficient volume to operate the air/hydraulic pump (10 cfm seems to be the minimum requirement of most units to provide an even steady supply to hydraulic rams and spreaders).

(b) all rescue operations are then tied to the rescue vehicle.

8.2. This system works most admirably for the Units operating in the suburbs where the rescue vehicle can locate along side of the accident area, but I was rather surprised to see this tradition had found it's way into the majority of rural Units who at most times must move off the road to facilitate the rescue.

Unfortunately this practice does not allow flexibility of operation.

8.3. All V.A.R. Units were equipped with Air operated Sabre Saws and the very noisy Air Chisel systems. Once again it appears that historically these tools were purchased because every one else had them not based on practicality as by their admission all members questioned replied that it was seldom used and held in reserve for emergency when all other equipment was non operational.

8.4. Vehicle design and equipment storage was extremely varied in both sophistication and cost. Some units using the very basic rescue trailer whilst others, such as the Murray Bridge Unit having designed and built a vehicle with a wide range of applications yet still essentially dedicated to V.A.R. (see Adendum No. 3).

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9.0. FINAL SUMMARY.

9.1. As the time has passed since my visit to South Australia, I have become progressively aware of the value of the visit. As this report was meant to deal primarily with Vehicle Accident Rescue, I must admit that it has been difficult if not impossible to refrain from including some of the wide range of knowledge and information that I gathered during those seven days.

9.2. There have been many changes that have occurred in the last 5 months to Victoria S.E.S., many being politically as well as economically motivated. Much of what has occurred I can now relate to the organisational structures and the political motivations of the various Emergency Services in South Australia. Vic.S.E.S., like S.A.S.E.S. is under threat from the Fire Services for their very existence. Maldon being a prime example, with two Emergency Services competing for the same territorial right regardless of the Statutory role and responsibility for Road Accident Rescue.

9.3. Regardless of the Units that I visited, Victoria S.E.S. does not need to lower its head in shame to any other Service. I have observed the performance of both professional and volunteers in South Australia and if training is any measure of performance in the field (which it is), the Units of Vic.S.E.S. operating in the North East Of Victoria certainly measure up with the best that I observed.

9.4. The full time professionals of both the South Australian Police and the Metropolitan Fire Service were as would be expected the most advanced in training and operational skills that I observed, but disappointingly were no better than the Road Accident Rescue Team from the Wangaratta Unit here in Victoria.

As it was not always evident by the demonstrations that I observed to really evaluate in depth, the knowledge and the level of performance of these professionals, I was forced to ask questions of techniques used.

9.5. The areas of concern dealt with were:-

(a) What techniques were used to deal with windscreens held in place with polyurethane adhesives?

The resultant answer indicated a distinct lack of awareness and research that manufacturers of Camira, Toyota, Falcon and Laser and other vehicles used this technique to fasten windscreens in place; and that removal of this highly sophisticated material was not simply a matter of using brute force to dislodge a windscreen from its bed.

(b) What methods were used to move an "A" pillar forward that had been forced by collision impact back toward the rear of the vehicle?.

There appeared to be little appreciation of the major strength

areas still remaining in the lower half of the "B" pillar or the strength remaining in the "Dog leg" pillar.

Instead the reaction seemed to be to cut regardless. The reverse impact technique used by Panel Repairers was ignored, including the benefits that other attached panels and structural members would simultaneous return to their original position, thus making access easier for the Rescuer.

9.6. In all, the benefits to myself and to Vic S.E.S. from this visit will be felt for a long time to come. My next step is for attendance at a state wide "Train the Trainer" program which will enable me to pass knowledge gained on to other Volunteers, both within this Region and across the State.

9.7. Finally, to all involved,

"Thanks for the opportunity".

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Jim Doyle,
Wangaratta Unit,
Victoria State Emergency Service.

20th September 1988.

PREREQUISITE COURSES

PLANNED ATTENDANCE	PREREQUISITE COURSES
01. Light Rescue	18 14
02. Heavy Rescue	18 14 01
04. Search Techniques (a) Searcher	18 14 01
(b) Search Leader	18 14 01 04a 10 11a 12 19
05. Vehicle Accident Rescue	18 14 01 02
06. Cliff Rescue (a) Phase 1	18 14 01 02
(b) Phase 2	18 14 01 02 06a
(c) Phase 3	18 14 01 02 06a 06b
07. Underground Rescue (a) Phase 1	18 14 01 02 06a
(b) Phase 2	18 14 01 02 06a 06b 06c 07a
08. Storm & Salvage	18 14 01 02
09. Rescue Boat Operations	18 14 01 11a 12 19
10. Emergency Team Leader	18 14 & either 01 11a 12 or 16
11. Communications (a) Operators	18
(b) Comms. Officer	18 10 13
(d) Div. Instructor	18 10 13 17 21
12. Reconnaissance	18 14 01 04a 11a 19
13. H.Q. & Ops. Control	18 11a
14. First Aid	18
15. Bushfire Survival	18 14 01
16. Welfare	18 14 11a
17. Instructional Techniques	18 14 10
18. SASES Induction	Optional Course 14
19. Map Reading & Navigation	18
20. Chainsaw Operations	18 14 01 02 08
21. Training Management	18 14 10 17
22. Driving Emergency Vehicles	18 14 11a

ADDENDUM NO. 1

LIST OF GENERAL TRAINING PACKAGES (1.5)

08. THE SASES MANUAL OF TRAINING

- 8.1 SASES Manual of Training is an all-encompassing term used to describe the complete collection of State-standard training courses and notes. Within the framework of the Manual, each course is then made up as a single package, referred to as a Book.
- 8.2 The various books currently planned for inclusion in the Manual are listed here.
- 8.3 It must be stressed that these books are listed in the order in which they are to be developed and issued, and not in an order of training progression. The key to sorting the list into a progressive training programme is contained in section 9 - Standard Course Prerequisites.

Book 01 Light Rescue
Book 02 Heavy Rescue
Book 03 Special Rescue Techniques

(This Book does not form a course, but contains a number of precis on limited subjects as Air Lifting Bags which may be used to augment a Heavy Rescue Course.)

Book 04 Search Techniques

(This Book will be broken to two phases (courses), 'Searcher' and 'Search Leader'.)

Book 05 Vehicle Accident Rescue
Book 06 Cliff Rescue

(Book 06 is being developed initially in three phases (courses) of progressive difficulty.)

Book 07 Underground Rescue
Book 08 Storm and Salvage
Book 09 Rescue Boat Operations
Book 10 Emergency Team Leader
Book 11 Communications (In four phases of progressive training)
Book 12 Reconnaissance
Book 13 S.E.S. Headquarters and Operational Control
Book 14 First Aid

(This Book will be developed as a brief guide to the SASES requirements in first aid, for training by Red Cross and St. John accredited instructors/examiners.)

Book 15 Bushfire Survival
Book 16 Welfare
Book 17 Instructional Techniques
Book 18 SASES Induction Course
Book 19 Map Reading and Navigation
Book 20 Chainsaw Operations
Book 21 Training Management
Book 22 Driving Emergency Vehicles
Book 23 The Rescuers Technical Handbook

- 8.5 Book 23 is not currently planned as a standard course, but has been included here as part of the Manual for reference purposes. In time, this may be a special course for Rescue Officers and Team Leaders.

- 8.6 The list of Books/courses should not be considered as final, and additional subjects will be added on a needs basis as suggested by State or local observation of a special training requirements.
- 8.7 At the present time (August 1986), the development of the Manual of Training has reached the following status:
- 8.7.1 Issued to Units
- 01 Light Rescue
 - 02 Heavy Rescue
 - 06 Cliff Rescue (Phase 1 & 2)
 - 11 Communications
- 8.7.2 In Draft For Critique
- 06 Cliff Rescue (Phase 3)
 - 17 Instructional Techniques
- 8.7.3 In Rough Draft
- 03 Special Rescue Techniques
 - 05 Vehicle Accident Rescue
 - 13 SES HQ & Ops Control
 - 19 Map Reading & Navigation
 - 23 Rescuers Technical Handbook
- 8.8 In principle, draft material on any skill subject will be accepted by the State Training and Development Officers, and taken for consideration to the State Training Advisory Committee. This Committee comprises State, Divisional and Local volunteer personnel, and acts as an advisory team to the Director on all training matters.

PREREQUISITE COURSES

PLANNED ATTENDANCE	PREREQUISITE COURSES
01. Light Rescue	18 14
02. Heavy Rescue	18 14 01
04. Search Techniques (a) Searcher	18 14 01
(b) Search Leader	18 14 01 04a 10 11a 12 19
05. Vehicle Accident Rescue	18 14 01 02
06. Cliff Rescue (a) Phase 1	18 14 01 02
(b) Phase 2	18 14 01 02 06a
(c) Phase 3	18 14 01 02 06a 06b
07. Underground Rescue (a) Phase 1	18 14 01 02 06a
(b) Phase 2	18 14 01 02 06a 06b 06c 07a
08. Storm & Salvage	18 14 01 02
09. Rescue Boat Operations	18 14 01 11a 12 19
10. Emergency Team Leader	18 14 & either 01 11a 12 or 16
11. Communications (a) Operators	18
(b) Comms. Officer	18 10 13
(d) Div. Instructor	18 10 13 17 21
12. Reconnaissance	18 14 01 04a 11a 19
13. H.Q. & Ops. Control	18 11a
14. First Aid	18
15. Bushfire Survival	18 14 01
16. Welfare	18 14 11a
17. Instructional Techniques	18 14 10
18. SASES Induction	Optional Course 14
19. Map Reading & Navigation	18
20. Chainsaw Operations	18 14 01 02 08
21. Training Management	18 14 10 17
22. Driving Emergency Vehicles	18 14 11a

ADDENDUM NO. 2

RESCUE RESOURCE DIRECTORY

NOTE % = Continuous Manual Exchange (STD Access)
 \$ = Non Continuous Manual Exchange (STD Access)
 * = Non Continuous Manual Exchange

28 August, 1986.

SOUTH AUSTRALIA - RESCUE RESOURCE DIRECTORY

1	2	3	4	5	6
TOWNSHIP/LOCALITY	S.A. POLICE DISTRICT	AMBULANCE RESPONSE	FIRE RESPONSE	SPECIALISED RESCUE RESPONSE FIRST RESPONSE	SPECIALISED RESCUE RESPONSE SECOND RESPONSE
ADELAIDE RESPONSE ZONE	POLICE 000 OR 08-11444 OR 08-218 1212	ST JOHN 000 OR 08-223 2044 OR 08-272 8822	S.A. MFS 000 OR 08-223 3000	S.A. MFS 000 OR 08-223 3000 OR S.A. POLICE 08-11444 OR 08-218 1212	S.A. MFS 000 OR 08-223 3000 OR S.A. POLICE 08-11444 OR 08-218 1212

NOTE

1. If difficulties are experienced in contacting any of the emergency services listed, ring 000 or 011 and seek operator assistance, or refer to respective State Communications Centres, viz; Police/SES 08-11444, St. John 08-223 2044, S.A. MFS 08-223 3000, S.A. CFS 08-297 9111.
2. For all areas adjacent to the boundaries of M.F.S. Fire Districts, the Fire Services Mutual Aid Plan shall apply.
3. The Fire Response (Column 4) shall respond to ALL non-fire rescue incidents, with the nominated specialist unit/s (Columns 5 & 6).

NOTE % = Continuous Manual Exchange (STD Access)
 \$ = Non Continuous Manual Exchange (STD Access)
 * = Non Continuous Manual Exchange

SOUTH AUSTRALIA - RESCUE RESOURCE DIRECTORY

1	2	3	4	5	6
TOWNSHIP/LOCALITY	S.A. POLICE DISTRICT	AMBULANCE RESPONSE	FIRE RESPONSE	SPECIALISED RESCUE RESPONSE	SECOND RESPONSE
AGERY	MOONTA 088-25 2200	MOONTA 088-25 2548 088-25 2146	AGERY 088-25 6233	MAITLAND CFS/SES 088-32 2500	ARDROSSAN CFS 088-37 3000
ALAWOONA	LOXTON 085-84 7283	LOXTON 085-84 7565	MERIBAH 085-87 3015	LOXTON SES 085-84 6080 085-84 7662	RENMARK SES 085-85 7287 085-85 3371
ALDGATE	STIRLING 08-339 2422	METRO 08-272 8822 08-223 2044	ALDGATE 08-339 2441	STIRLING CFS 08-297 9111 and MFS 000 or 08-223 3000	BELAIR CFS 08-297 9111
ALDINGA WEST	CHRISTIES BEACH 08-382 1144	METRO 08-272 8822	ALDINGA PLAINS 085-56 5000	ALDINGA BEACH CFS 085-56 5200 and MFS 000 or 08-223 3000	MFS 08-223 3000 or 000
ALDINGA EAST	WILLUNGA 085-56 2222	08-223 2044			
ALDINGA BEACH	CHRISTIES BEACH 08-382 1144	METRO 08-272 8822 08-223 2044	ALDINGA BEACH 085-56 5200	ALDINGA BEACH CFS 085-56 5200 and MFS 000 or 08-223 3000	MFS 08-223 3000 or 000

NOTE % = Continuous Manual Exchange (STD Access)
 \$ = Non Continuous Manual Exchange (STD Access)
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SOUTH AUSTRALIA - RESCUE RESOURCE DIRECTORY

1	2	3	4	5	6
TOWNSHIP/LOCALITY	S.A. POLICE DISTRICT	AMBULANCE RESPONSE	FIRE RESPONSE	SPECIALISED RESCUE FIRST RESPONSE	SPECIALISED RESCUE SECOND RESPONSE
ALFORD	KADINA 088-21 1200	KADINA 088-21 1029	ALFORD 088-24 2200	BUTE SES 088-26 2116 088-26 2025	SNOWTOWN SES 088-65 2200
ALLENDALE EAST	PT MACDONNELL 087-38 2216	MT. GAMBIER 087-25 2244	ALLENDALE EAST 087-38 7274	MT. GAMBIER SES 087-25 3378 087-25 1667	MT. GAMBIER MFS 087-25 3600
ALLENDALE NORTH	KAPUNDA 085-66 2266	KAPUNDA 085-66 2007	KAPUNDA 085-66 2222	KAPUNDA CFS/SES 085-66 2222	NURIOOTPA CFS/ SES 085-62 1000
ALMA	HAMLEY BRIDGE 085-28 2169	HAMLEY BRIDGE 085-28 2276	OWEN 085-28 6000	HAMLEY BRIDGE CFS 085-28 2000	PT. WAKEFIELD ST. JOHN 088-67 1200
AMBLESIDE	WOODSIDE 08-389 7277	MT. BARKER 08-391 1060	BRIDGEWATER 08-339 4000	STIRLING CFS 08-297 9111 and MFS or 000 08-223 3000	MT. BARKER CFS/ SES 08-391 1000
AMERICAN RIVER	KINGSCOTE 0848-22018 0848-22037	KINGSCOTE 0848-22028	AMERICAN RIVER 0848-33000	KINGSCOTE SES 0848-22028	KINGSCOTE CFS 0848-22200

ADDENDUM NO. 3

PHOTOGRAPHIC COLLECTION

IDEAS

NEW & OLD

POLICE ACCIDENT RESCUE/INVESTIGATION UNIT.



Note that this vehicle is a rapid response vehicle, neatly designed with all rescue equipment conveniently at hand.

Great detail has been given to the visual markings, with reflective tape all round, revolving lights on all corners and a Stem Light centrally mounted on the roof.

FIRE PROTECTION AT THE ACCIDENT SCENE.



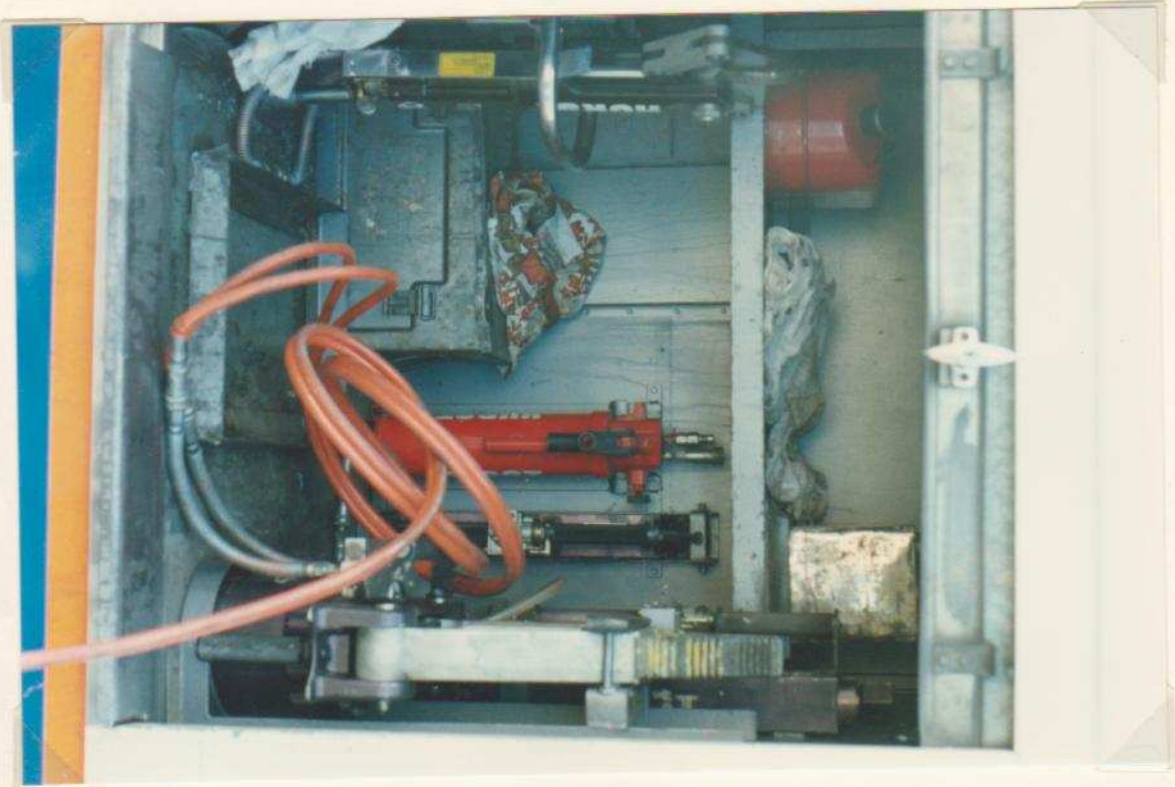
Even with the support of the Metropolitan Fire Service, it is vital that all Rescue Vehicles carry adequate fire suppression.

Note that variety of systems available, water, dry powder and B.C.F.; ready for anything.

HYDRAULICS. The necessities for Vehicle Accident Rescue.



Interesting to note, the variety of manufacturers represented in equipment, Lukas, Hurst and some Enerpac.



Rescue Power. Note the Two Stroke powered hand lantern.



Portable Air. For use on air bags and air chisels (seldom used).



SA S.E.S. VEHICLE MARKING. Standardised markings used on all vehicles,
Unit and Divisional.



STATE WIDE VEHICLE ACCIDENT RESCUE COURSE.

One of the evaluation sessions, with participants evaluating and assessing the requirements at the scene of a "mock" accident.



Goodness, "what do we do now".



SOUTH AUSTRALIAN - METROPOLITAN FIRE SERVICE.

These 13.9 tonne monsters are V.A.R. response vehicles. Although fitted out with V.A.R. equipment they are still equipped for fire support with breathing apparatus and splash suits.



As can be seen, the two pods at the rear are demountable and are used to carry a variety of fire fighting equipment.



AIR OPERATED RESCUE EQUIPMENT.

All rescue tools are operated on air supplied by an under floor mounted compressor. 160 cfm is available through two 100 metre hoses. This limits all operations to close proximity to the vehicle and cannot be removed.



EXTRA LIFT. This Palfinger has a maximum lift of 1400 kg. Mainly used for loading fire appliances onto the vehicle. Has had limited use in Road Accidents.



READY FOR IMMEDIATE ACTION.

Hydraulic cutter and spreader being unloaded, along with the air/hydraulic pump.



Familiar sight, the new recruits under instruction from one of the seasoned members. Training occurs every day, for one half day. Practice car bodies are supplied by local councils for M.F.S. use.



AIR/HYDRAULIC PUMP. This unit, fitted with self oiler for the air driven pump was highly portable within the 100 metre length of the air hose.



This system was incredibly noisy, with no muffler on the exhaust. Any petrol driven unit, two or four stroke would have been far quieter.



THE ENVY OF ALL. When money is of little concern, the results are always impressive.

Metropolitan Fire Service Headquarters, Adelaide.

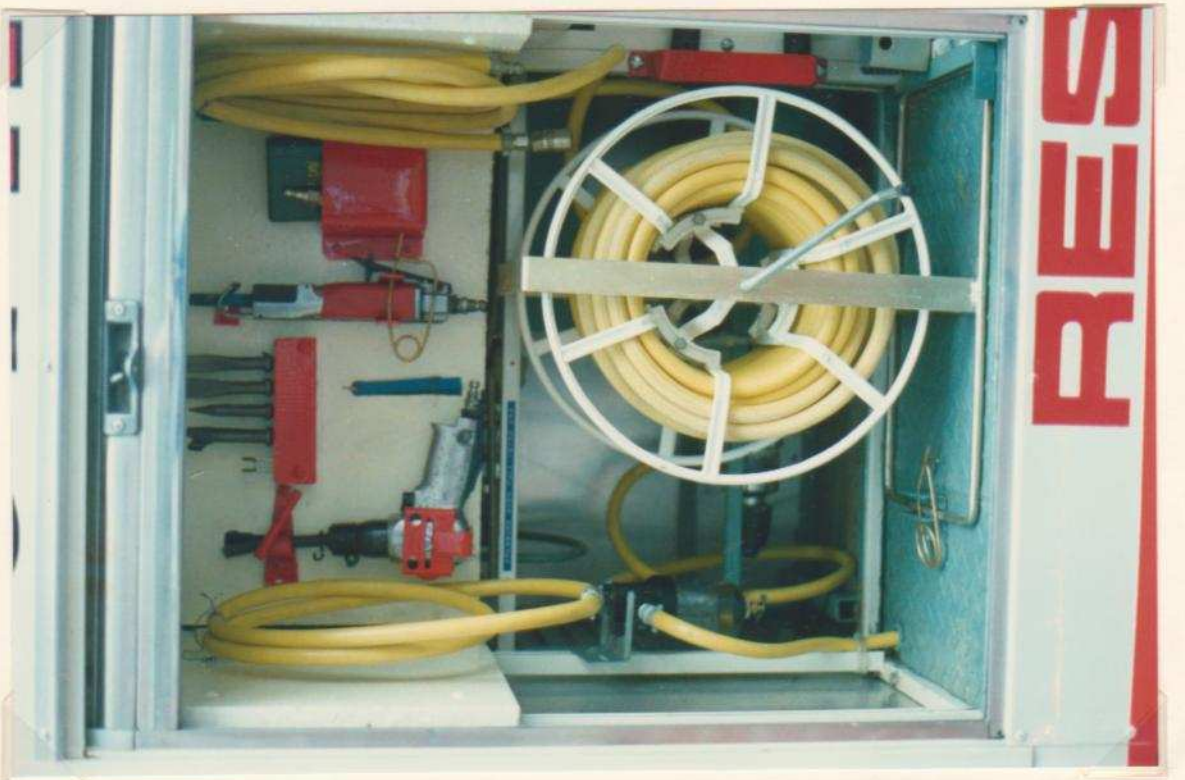
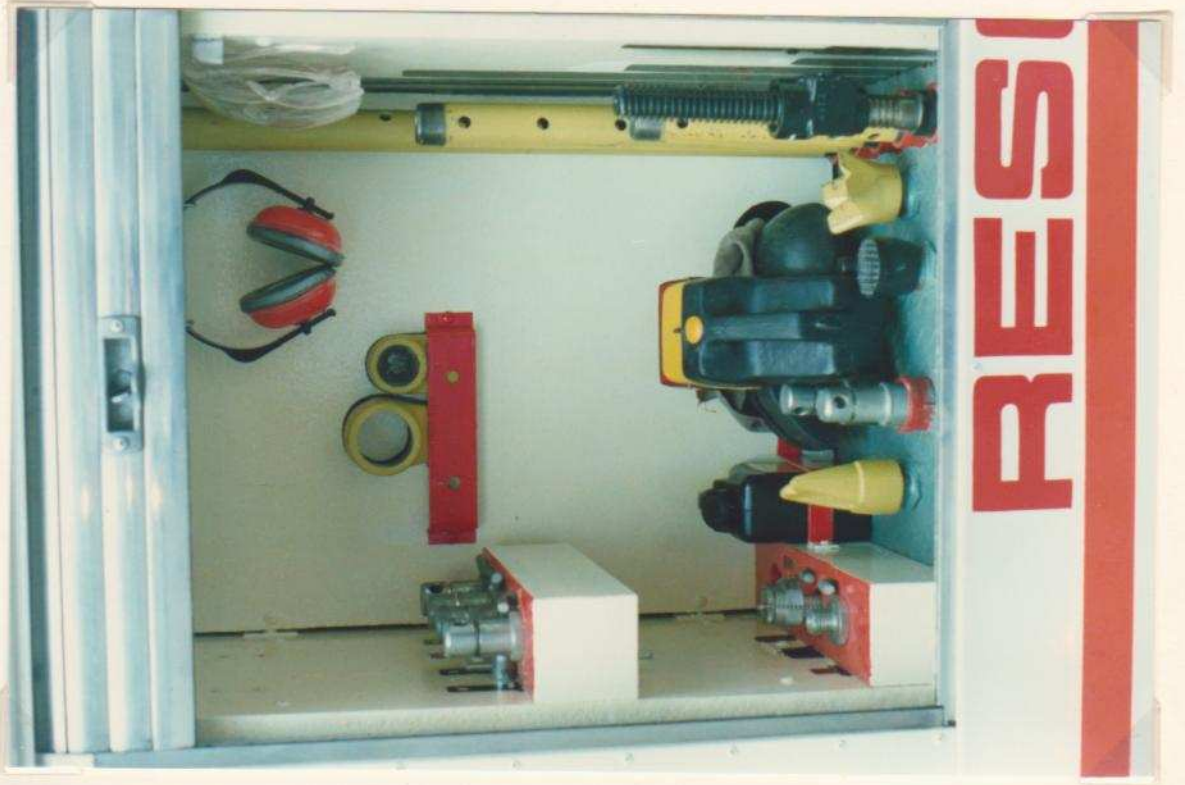


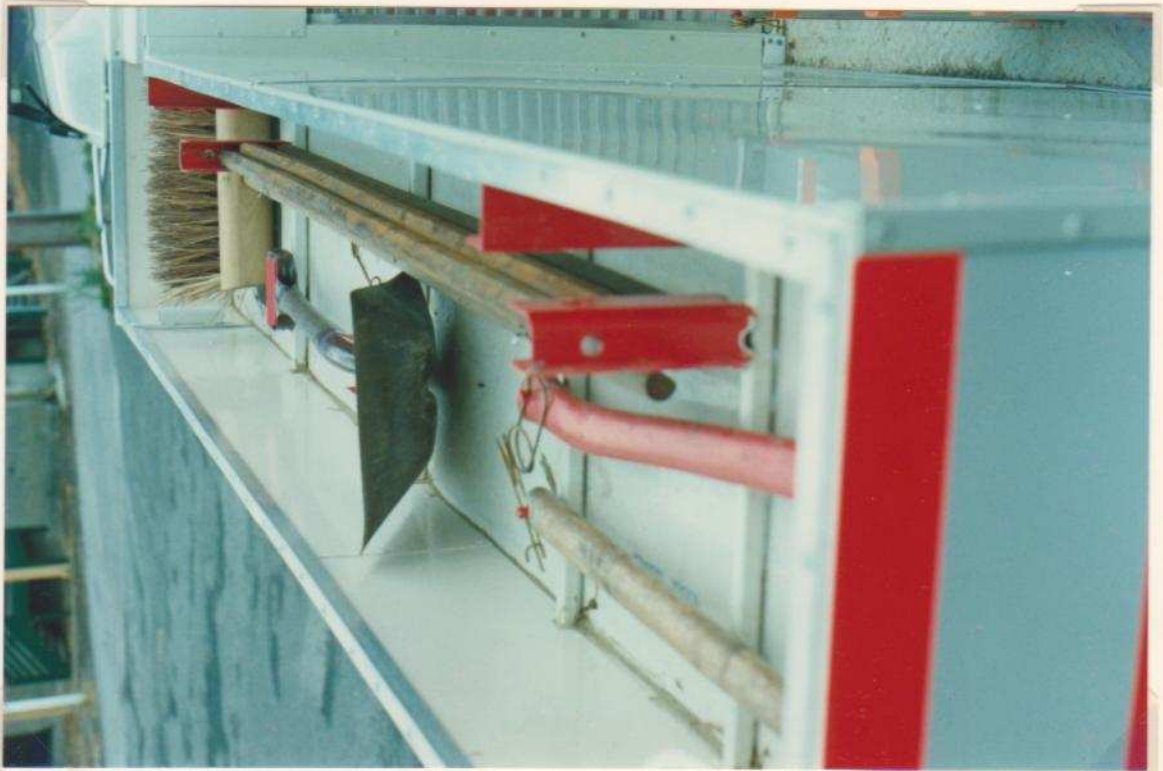
STIRLING C.F.S. VEHICLE ACCIDENT RESCUE UNIT.

One of the few dedicated V.A.R. vehicles that exist in the C.F.S.
Beautifully designed and fitted out, this must rate as a classic response
vehicle.

A pity that it only rolls with two persons on board.







THE DILEMMA OF SOME C.F.S. UNITS.

Do we fight fires or carry out vehicle accident rescue? Because there are fewer S.E.S. Units than there are C.F.S., a major number of vehicles attending road accidents are multi purpose in nature and must carry equipment accordingly.



COONALPYN combined S.E.S./C.F.S. Unit.

This S.E.S. Unit was established to meet the need for Vehicle Accident rescue in this area. Attached to the local Fire Service, S.E.S. is certainly the Cinderella Service as can be seen by the enormous difference in the type and cost of equipment displayed.



SELF HELP OF DEDICATED MEMBERS.

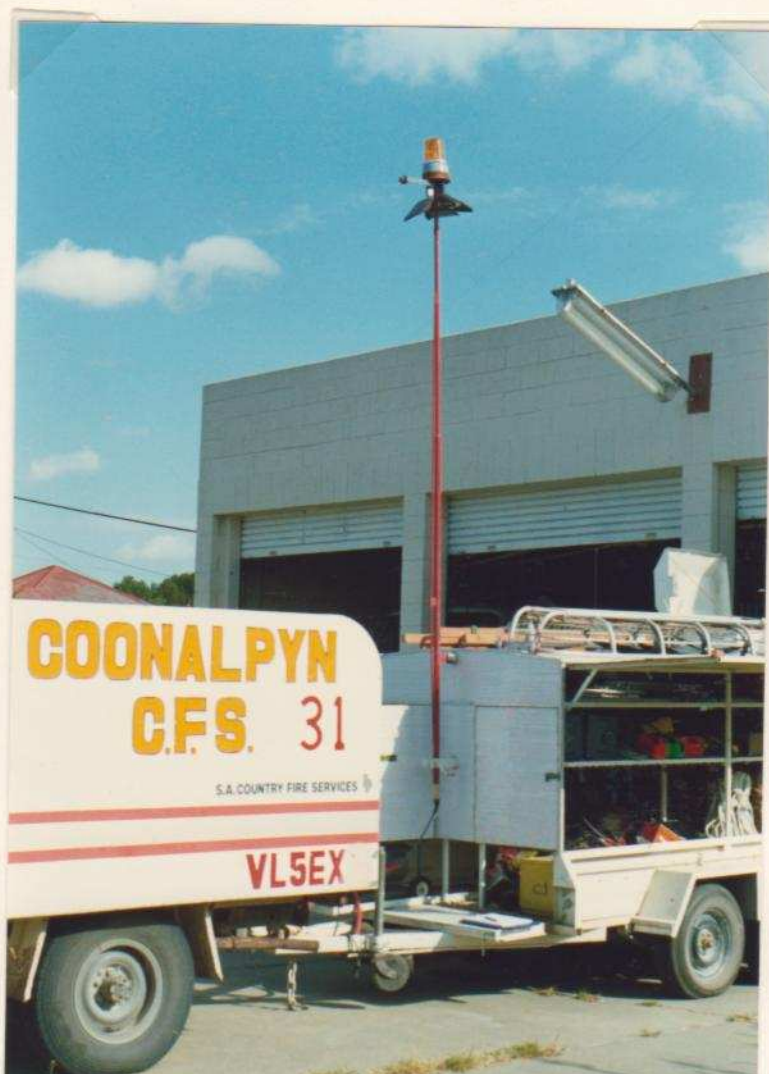
It is quite evident that like all S.E.S. members anywhere, this rescue trailer has been put together with lots of enthusiasm and little money. Although this unit has grown "like topsy", it displays lots of ingenuity.



COONALPYN. Not very beautiful, but all the necessary gear has been obtained and has somewhere to fit.



COONALPYN. Note the ingenious use of easy to obtain 500 watt, domestic flood lights, the poor man's version of the "Stem Light". This one pivots on the front of the trailer and fits into a self closing, waterproof box.



COONALPYN. It seems to be the South Australian syndrome, no matter how big or small the Unit is, the majority of Vehicle Accident Rescue hydraulics are restricted to close proximity to the vehicle with the Air/Hydraulic pump.



MENINGIE. A small S.E.S. Unit also trying to get it all together on a shoe string budget.

Note once again, the trend toward air compressors mounted on the vehicle to power air/hydraulic equipment.



MURRAY BRIDGE S.E.S.

This would be the show piece Unit especially designed for V.A.R. and yet still able to carry the additional equipment required for general rescue inside the vehicle.



MURRAY BRIDGE. This vehicle was designed from the ground up as a rapid response V.A.R. unit.

Front mounted winch and long range aluminum step tanks allow this vehicle to move well away from home base, over a variety of terrain.



Even the interior, with communication equipment neatly installed and the wide range of electrical switches has been well considered for this vehicle.



MURRAY BRIDGE. Note the large access doors that hinge up and are held in place with magnets, all designed to give clear uncluttered entry to tools and equipment.



MURRAY BRIDGE. Pivot mounted to swing out for good ventilation as well as ease of servicing, both air compressor and generator are powered by their own petrol engine which make the independent of each other in the event that one should become disabled.



MURRAY BRIDGE. General rescue gear is stored inside the vehicle, this also has workbench space as well as providing for weather protection on protracted operations.



MURRAY BRIDGE. Easy access and neat stowage of equipment are the main features of this very professional unit. The cost in 1984 was \$40,000 for cab, chassis and body as well as a further \$40,000 for all the equipment required to fit it out.

