



# NEWSLETTER

We have a new sponsor!

## Packexe® SMASH

ARRO is pleased to announce that Packexe SMASH has joined our team of sponsors.

Packexe is a UK based company that produces packaging materials. They have developed a glass management tool that will assist in more efficient and safe management of glass during motor vehicle extrications.

For more information about Packexe SMASH visit their web site at:

<http://www.packexesmash.com>

Packexe will be attending iRescue 20 10, the 2010 Australasian Rescue Challenge to be conducted in Melbourne in July. Please make sure you visit their trade display stand.

Packexe SMASH tools will also be available in each of the scenario pits and the workshop pit. This will be an ideal opportunity for teams participating in the challenge as well as other ARRO members to see the product in use and to trial it.

Packexe will have full details of the cost of the product and consumables at their display stand.

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AUTUMN, MAY 2010

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*"ARRO - Advancing the science of road rescue"*

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## From the President....

With this being our first newsletter for 2010 and with the festive season behind us we now turn our attention to this year's Australasian challenge, iRescue 2010 which will be held in Victoria and hosted by the VICSES. As seasoned campaigners, VICSES are applying their knowledge and expertise not only off their past hostings of the ARC but also as an extension to their own State challenges to ensure the 2010 challenge will be a quality event. Their planning team in collaboration with our Technical committee are focussed on not only delivering an educational and practical symposium/workshop but are also focussed to ensure that the challenge scenarios reflect 'on road' incidents that are designed to test the participating teams. I am confident that this ARC will prove to be an outstanding success.

I reported in our last newsletter (Dec 09) that ARRO had strategically partnered with the Queensland Fire and Rescue Service to develop a DVD that conducted technique evaluations on the Holden VE Commodore. A number of these DVD's were sent to our agency member CEO's for their reference material. We knew that we had developed a valuable training tool but under estimated the 'take up' offer of additional DVD's. I am pleased to say that, to date, over 1700 DVD's have been ordered on

a cost only basis by the agencies where we now see these DVD's assigned to individual stations educating rescue practitioners throughout Australasia. As an extension to this partnership, ARRO has once again engaged with QFRS to develop a heavy vehicle awareness and techniques DVD that will hopefully be progressed this calendar year. With the ever-increasing number of heavy vehicles on our road and highways, I am sure that this DVD will also prove to be an outstanding success that will take pride of place in the rescue-training regime.

I am pleased to report that ARRO has structured a new sponsorship look offering up a range of opportunities to prospective sponsors/supporters across categories of Bronze, Silver, Gold and Platinum. As you will have read, Packexx SMASH has just joined our long term sponsors; Chubb, Holmatro, Holden and Gore. In addition, the Executive are in discussion with a number of other potential sponsors and as ARRO's future depends upon sponsorship, I once again ask for your support in identifying potential sponsors that ARRO could approach that would further support our cause.

Until next time, keep safe and take care.

Steve Rothwell

## Promoting ARRO, Recognising Sponsors



ARRO has recently commissioned Active Display, a Melbourne based graphics art company, to design and produce some promotional banners. Recognising the work of ARRO in improving road rescue standards Active Display supplied the materials and artwork design for free! The banners represent the member organisations and the learning we provide. Lookout for them (and yourself in the images) at your next challenge.

Thanks Active Display for your support.

The 2010 Australasian Rescue Challenge is to be known as 'iRescue 20 10'. It will be conducted in conjunction with the Victorian State Challenge at the Royal Agricultural Showgrounds, Melbourne from 23 to 27 July.

The overall program, which includes challenge management team activities, is detailed below.

Members of the ARRO Challenge Management Team (CMT) for the challenge should note that the event hotel will be the Crowne Plaza, Spencer St, Melbourne. Accommodation will be block booked as usual for the CMT. If you have any special requirements please contact CMT Coordinator, Dave Stackhouse.

The Challenge will include an interesting and practical program. Some of the sessions include:

# iRescue2010

*cutting edge*

- Practical demonstration of a tanker rollover and recovery
- Electric vehicles
- Case studies on recent complex rescues
- Extrications from vehicles with increased strength metals
- Medical considerations in extrication

Members of teams that register for the challenge will receive a ticket to the symposium as part of their registration package. Individuals are welcome to attend the symposium. Entry will cost AU\$77 (incl GST). This includes morning and afternoon tea and lunch.

iRescue 20 10 will also include

a trade expo. A number of companies and the ARRO sponsors will have displays at the challenge. In addition ARRO will have an information stand. We will be promoting ARRO membership and also selling event shirts and other merchandise. Details of the design and costs of the shirt will be made available through the web site closer to the challenge.

Entry to view the challenge is free and all members are encouraged to bring along your colleagues.

Full details of all aspects of the challenge are available on the iRescue page of the ARRO web site.

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## iRescue 20 10 Program:

Mon 19 July - Scenario vehicle preparation

Tue 20 July - Scenario vehicle preparation

Wed 21 July - Scenario vehicle preparation

Thu 22 July - Challenge Management Team workshop

Fri 23 July - Vic. State Challenge, Expo day 1

Sat 24 July - Learning Symposium, Team's Briefing, iRescue 2010 Welcome Function, Expo day 2

Sun 25 July - Australasian Challenge day 1, Expo day 3

Mon 26 July - Australasian Challenge day 2, ARRO Annual General Meeting

Tue 27 July - Australasian Challenge day 3, Presentation Dinner

### Team Registrations:

At the time of production of this newsletter, we have already received 11 team registrations from 7 agencies.

**Reminder:** Registrations close on 19 May 2010.

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## VE Commodore DVD – A QFRS initiative supported by ARRO and Holden

The VE Holden Commodore forms the basis for a crash simulation and technique evaluation program. With vehicle design continually evolving, the primary aim is to improve the crash performance of vehicles during collisions; thereby improving the overall safety of vehicle occupants.

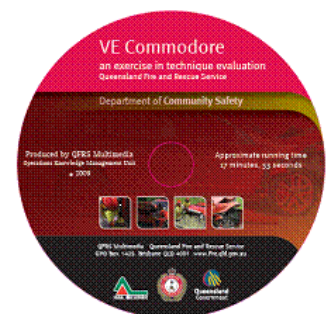
At a road traffic crash, rescuers determine the most appropriate technique and equipment required to perform the disentanglement and extrication of casualties. A reduction to the amount of deformity and intrusion of a vehicle during a crash can greatly assist rescuers.

Holden Australia in partnership with the Australasian Road Rescue Organisation (ARRO) have donated a number of evaluation and test vehicles for use at the annual Australasian Rescue

Challenges held in Australia and New Zealand.

As a result of the Department of Community Safety, (lead agency QFRS), hosting the Australasian Rescue Challenge in May 2008, a left-hand drive evaluation VE Commodore sedan was held over for research purposes; and it forms the basis of the crash simulation and technique evaluation program.

### *The VE Holden Commodore DVD*



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## VE DVD Continued

At its most basic level, the exercise in question aimed to replicate crash damage to the Commodore ... in this case to simulate as closely as possible a head-on collision with a solid object by dropping the car from a prescribed height.

Assessment of the application and performance of standard techniques followed, namely the B-pillar Rip, using the standard equipment available to the QFRS.

The outcomes identified by QFRS through this program will be of benefit to all Queensland Emergency Services, and all other agencies that provide road rescue services to Australian and New Zealand motorists.

ARRO member agencies have received copies of DVDs for use within their jurisdiction.

## World Rescue Organisation Research Project

Since the early days of the WRO there has been a desire to prove the effectiveness of the Rescue Challenge Concept (RCC) to Organisations within Rescue and Medical Professions and external organisations such as government departments (national and local), NGO's and a wide range of associated organisations.

Anecdotal evidence has shown that the utilisation of the RCC and associated training can and has reduced occurrences of secondary injuries on scene, and death in two of the three death distribution phases e.g. the pre hospital and hospital phases.

Unfortunately the understanding of the immense benefits derived from this concept is held by relatively a small group of organisations and individuals. As such, the ability to promote the implementation and development of the concept into other regions and countries has been difficult. This has resulted in a less rapid expansion of the RCC, which in turn has slowed the development of rescue teams and therefore the opportunities to minimise occurrences injury and death.

In the past ten years the WRO and its regional members have undertaken substantial advances in promoting the RCC. As part of the WRO's ten year anniversary celebrations what better way to build upon these achievements by providing member organisations with a tool which will demonstrate the benefits to individuals, organisations and countries that the RCC can bring.

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### *Web site update and links*

By now all members would be aware that the ARRO web site has undergone a major upgrade and refresh of the look and feel. Not only do we have more up to date software in the back ground to assist with content and member access management, but a range of images to promote what we do.

One of the planned new pages is a technical links page and **we need your help!**

Do you have some favourite web pages that have technical information about rescue, vehicle design, pre-hospital care and intervention? If so, please pass on the links so we can add them to the web site so all ARRO members can benefit from the learning opportunity.

The links need to be to free web sites that all ARRO members can access, so please don't include your secure agency intranet sites unless it is available to everyone.

WRO Research Project

Aims:

- Identify and review existing research undertaken in this area.
- Identify the scope and areas for research.
- Agree a mechanism to undertake the required research.
- Report findings to the WRO committee.

In turn the WRO hopes to be able to prove that this specialised area has a significant benefit to organisations and countries, no matter the level of income or development of each country. The aim is not to sell the RCC for financial gain but to provide an understanding of an effective tool that countries/regions can utilise to ensure that Rescue and Medical services are able to deal with road collisions, where persons are trapped or injured, with the resources they have available.

For more information on the Research Task Group and to find out ways in which you can contribute, go to the WRO web site (<http://wrescue.org>) or contact the project leader, Peter Guard, WRO Vice Chair [Peter.Guard@telecom.co.nz](mailto:Peter.Guard@telecom.co.nz) or Cameron Black, WRO secretary, [secretary@wrescue.org](mailto:secretary@wrescue.org)

# Decision making - The I.C.'s Challenge

Decision Making in High Pressure, Time Critical Situations, by Tim Fox

As emergency workers, we are often called to situations where split second decisions need to be made the officer in charge. Many studies have looked at the decision making process to discover how some people make good decisions and to find out why some people make bad decisions during emergencies.

Dr Gary Klein has studied decision-making in high pressure, time critical situations. He has studied decision-making in many industries, but looked at two main groups for the bulk of his research, aircraft pilots and fire fighters.

It was originally thought that experienced decision makers had five or six different ways of tackling any situation (plan a, b, c, d etc.) and they evaluated which plan would work best in each situation.

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## Decision making the I.C.'s challenge (continued)

Klein discovered that this was not the case. He found that during an emergency, experienced decision makers were able to recognise that a dangerous situation existed, and they had one or two workable solutions, chose one that would work and rapidly executed the plan.

Klein called this process recognition primed decision-making.

The key to this process is being able to recognise that a problem exists. Decision makers are able to recognise problem situations by building up a bank of knowledge through on the job experience and realistic training.

As emergency workers, there is very little we can do to alter the amount of on the job experience we get, but we can control the amount and quality of training we do.

The key to good decision-making is recognising the problem or dangerous situation, but this is not as simple as it sounds.

One small illustration of how experienced rescue practitioners can misread a situation and not recognise a dangerous situation occurred recently when I was conducting a series of training exercises.

I had set up a scenario, simulating a car running over a pedestrian. A dummy was placed under the rear wheel of a car, with the centre of the wheel on top of the dummy's knee. The dummy's lower leg was under the vehicle, no other part of the dummy was trapped. I have encountered this situation on the road and have used it in training session many times.



There are a number of potential problems that the rescuer must recognise and a number on actions that will negate these problems.

The first problem is that if lifted incorrectly the load may tilt onto the patient causing further injury. To prevent the load from rocking onto the patient lift the load from one side and pivot the load away from the patient. Avoid lifting from a central point of the vehicle such as the differential housing, because it is difficult to judge which way the car will lean as it rises.

The second problem when lifting any vehicle (car, truck or train) wheel off a patient is that as you lift, the compressed suspension will elongate keeping the wheel pressed against the patient. The rescuer must take steps to prevent suspension travel during the lift. This can be done in two main ways. One way is to lift from a point that will compress the suspension as it raises the wheel. These points include the axel and the lower suspension arm. In many cases the position of the patient prevents access to these good lifting points.



If you are forced to lift from the body of the vehicle, you must take steps to prevent the suspension from elongating as you lift. One way of achieving this is to compress the suspension using a chain pull set, a winch or a ratchet strap. If you want to lift the driver's side rear wheel of a car, place a sling under the suspension of the driver's side wheel, and another sling around the

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### ARRO Merchandise!

ARRO now has a range of merchandise available and this will expand in 2010.

Great as gift to reward team members for their efforts or to acknowledge your participation as a member of ARRO!

Polar fleece beanie..... \$12.00  
Designed to fit under a helmet for those cold wet nights!



Gift boxed key ring..... \$8.00  
"ARRO - Advancing the science of road rescue"

Engraved pen..... \$5.00



"ARRO - The peak body for road rescue"

In time for ARC10 we will also have a range of event shirts, ARRO shirts and caps. The ARRO shirts will be restricted to members only!

All prices are GST free and include postage. Contact ARRO to place your order today.

### Decision making the I.C.'s challenge (continued)

suspension of the passenger's side wheel. Place a winch across the boot of the car and connect it to the slings. As you tension the winch, you will compress the car's suspension. Now when you lift the car body, the wheel lift and the suspension will not extend.

By reading this article you have taken a small step towards adding this scenario to your bank of problem situations. To cement the solutions into your memory bank of successful outcomes you must practice and ensure all members of you team know how to solve this problem.

The most effective way you can increase the number of dangerous or problem situations you can recognise is to conduct realistic drills and practice the most effective ways of solving the problems. Aircraft pilots, ships captains and train drivers all use computerised simulators to give them experience at recognising and solving realistic emergency situations.

One of the best ways a road crash rescue crew can increase their ability to recognise problem situations is to train for and attend the ARRO rescue challenges. Watch other teams and discuss with your team members what the main problems are in the scenario and how you would solve these problems.

Recognition primed decision making is the processed used to solve complex problems in high-pressure time critical situations. The ARRO challenge scenarios are complex and realistic and the challenge itself is a high-pressure time critical situation. I believe that training for and competing in a road crash rescue challenge is the best training you can do, and will help you make better decisions on the road.

