



NEWSLETTER

Australasians, Worlds and New Zealand – a recipe for excitement, learning and making new friends!

The Australasian and World Rescue Challenges are heading back to New Zealand in 2011, where they were last hosted in 2005 in Hamilton. For this year's event, taking place from 13th to 16th July, the United Fire Brigades' Association (UFBA) has selected Christchurch as the location.

"It's a city that offers all the features to make it a world-class event," says George Verry, UFBA Chief Executive Officer. "Christchurch is easy to get to, the venue itself is absolutely fantastic, there are many options for accommodation, and there is no shortage of things to see and do for our overseas guests."

The Challenges will be held in Addington, Christchurch at the CBS Canterbury Arena (formerly Westpac Arena), an impressive and well-appointed indoor venue.



SUMMER, JANUARY 2011

In this issue:

President's Message.....	3
iRescue Results	4
Mistaken for Dead	6
Research Award	9
Trauma Challenge.....	10
Challenge feedback.....	11
World Rescue Challenge 2010.....	12
Case Study.....	15

Proudly sponsored by



We are pleased to be partnered with



"ARRO - Advancing the science of road rescue"

ARRO Newsletter is a publication of the Australasian Road Rescue Organisation Incorporated (Vic). Association No. A0042189P. All correspondence to PO Box 902 Lutwyche QLD 4030 Australia or arro@arro.org.au

ARC11 & WRC11 together in Christchurch

A Staying Alive Expo will run next to the Challenge events to promote road safety to the public, specifically geared toward the 'boy-racer' (*Kiwi for 'hoon'*) culture – the detrimental trend of young drivers engaging in dangerous street races and drifting.

Planning for these events is well underway, and the UFBA organising committee has scheduled monthly meetings to keep preparations ticking along. In addition a joint UFBA and ARRO meeting will be held in March, and monthly teleconferences are being held with the WRO to ensure all aspects are fully addressed.

Sarah Taylor, the UFBA Events Manager, says she will be making status updates through the UFBA website as they come up and advises any interested teams to check the event pages regularly.

Teams can also go online and register their interest to receive information and updates on the Challenges via email.

The UFBA is running the event with support from the New Zealand Fire Service, and George Verry says everyone involved is looking forward to “putting on a great event for our guests from around the world.”



Earthquake update: As many would be aware, Christchurch suffered a significant earthquake in September 2010 with more than 1000 aftershocks since then, some quite large. Despite this the city is recovering well and the UFBA have assured ARRO that the challenge won't be affected, other than perhaps the added challenge of the occasional aftershock during a scenario! How real is that?

For more information go to the UFBA web site:

ARC:

http://www.ufba.org.nz/events/list/category/australasian_road_rescue_challenge

WRC:

http://www.ufba.org.nz/events/list/category/world_road_rescue_challenge



Those that attended the ARC 10 hosted by VicSES would have been exposed to a professionally run challenge that was not only technically and educationally rewarding but was also logistically resourced to meet the needs of the participants. I am confident that everyone who attended, be they participants, assessors, sponsors, supporters or interested locals walked away with a little to a lot more knowledge and this is primarily what ARRO and the ARC is all about. Naturally the social interactions were, as always, well received and many new friendships were formed. Thank you to the planning committees and VicSES for staging such an outstanding event that was certainly well received by those who attended.

At the time of writing this piece for our newsletter, I am drawn to think of the region of extremes that we live within where at this time we have major flooding in along the east coast of Australia, bushfires in WA and earthquakes in New Zealand not to mention the recent threat of locust and mice plagues in Qld, NSW and Vic. At this time of year we usually see most agencies positioning themselves for the fire season either directly as a firefighting force or indirectly in a support capacity. Despite the ever changing environment in which we live and respond to we must also deal with the 'day to day' and from a rescuers perspective we are still required to respond to road crash rescues where we see the numbers still rising, the configuration of crash scenes becoming more complex, lives are still being lost and trauma is still being experienced. With all that, it is imperative that we continually reassess what we do as ARRO so that we provide and share the combined knowledge, research and expertise that is within 'our ranks' and disseminate out to our members and into

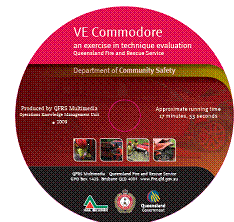
From the President ...

their respective agencies. ARRO's strength is being the conduit for the transfer of information from one to the masses and with this statement could I encourage any member who can contribute to this sharing of information to bring their ideas, knowledge, solutions, application, etc to the attention of our technical committee. It is through this sharing of information that we will continue to be recognised as the 'peak body' within Australasia.

Can I also ask that members continue to promote the ideals of ARRO and encourage their peers and others with a vested interest in our cause to join as an individual member as it is through our individual membership base that we can greater influence agencies and continue to promote the ARC concept. We believe we have a good product and for an annual fee of \$50 (tax deductible) it's not a bad deal. As we all know, the strength and diversity of ARRO is in our membership base.

VE DVD wins ACSA!

All members would be familiar with the training DVD developed by QFRS and supported by ARRO and Holden. This was based around the evaluation of a crash simulation involving dropping the VE from a crane and then exploring rescue options.



The DVD was "Highly commended" in the 2010 Australian Safer Community Awards. QFRS Project Manager and ARRO Research and Education Officer, Daryl Rush says "I am pleased with the success of the project, as the outcome that has been generated by the grass roots approach taken, developed by rescuers for rescuers; has seen this information spread across Queensland, across Australasia and into the UK.



Rescue equipment

The power of innovation

**New from Holmatro:
The Extendo ram**

This ram saves valuable time combining manual and hydraulic extension. You simply pull it out and start spreading.

Bridge gaps quicker and with more precision than ever before!

The power of innovation

For more information about the Extendo ram and other new Holmatro products, see www.holmatro.com/rescue

www.holmatro.com

holmatro
mastering power

Sales & Service Australia: Chubb Fire & Security | T +61 (0)2 9581 6357
E andrew.loftus@chubb.com.au | www.chubb.com.au

Sales & Service New Zealand: Chubb Fire & Safety | T +64 (0)9 270 7234
E fireandsafety@chubb.co.nz | www.chubb.co.nz

Sales & Service Hong Kong: Ableslink Co., Ltd. | T +852 2466 4568 | F +852 2466 4569 | E ableslink@yahoo.com

iRescue2010

cutting edge

Congratulations to the 2010 Australasian Rescue Champions, Werribee CFA! The team also won the Victorian State Challenge, which was hosted as part of iRescue 2010 by VICSES. In addition Werribee CFA picked up awards for Best Team Leader for Rob Mitchell and Best Medic for Michael Wells, plus placed in the top 3 of two of the event classes.

Other winners include:

Immediate Class 3rd – FESA Dunsborough

Immediate Class 2nd – NZFS Whitianga

Immediate Class 1st – Morrinsville

Entrapped 3rd – QFRS Lowood

Entrapped 2nd – CFA Werribee

Entrapped 1st – QFRS Cairns

Controlled 3rd – CFA Werribee

Controlled 2nd – NZFS Whitianga

Controlled 1st – NZFS Greytown



2010 Champions – Werribee CFA with ARRO President, Steve Rothwell and Holden Executive Director, Samantha Reed

Spirit of the Challenge – Hong Kong FS

Best Technical Team – NZFS Morrinsville

SES Director’s Shield – NSWSES Coffs Harbour

Overall 3rd – QFRS Cairns

Overall 2nd – NZFS Morrinsville

Overall 1st – CFA Werribee

There is also a gallery of over 1100 images on the ARRO web site under the iRescue page.

Dunsborough Team's Advanced Skills Help Save Life

The team from Dunsborough Volunteer Fire & Rescue Service (VFRS) have returned from the Australasian Rescue Challenge iRescue 2010, held in Melbourne with greater enthusiasm than ever before. Dunsborough is located 260km south of Perth in the upper reaches of the Margaret River Wine Region. The Dunsborough VFRS team had four new team members this year and received a third placing in the Immediate Event.

To attend the Challenge in Melbourne, the Team received some sponsorship but also financially supported themselves with the major supporters including St John's Ambulance Dunsborough Sub Centre, Shire of Busselton, Stocker Preston and Simmo's Ice creams. Their support has been greatly appreciated by the Team.



Team leader John Glasspool, said, their first Challenge was the Sun State Rescue on the Gold coast in 2008 and the skills and techniques they learnt leading up to and during the challenge were put into practice only weeks after returning home.

John reflected on this Road Crash Rescue they responded to, in which the vehicle had rolled and in an unrecognisable mess, with the patient trapped inside and pinned under the upturned vehicle. John believes the extrication skills and techniques they had learned assisted in saving that person's life.

John and his team's experiences are shared by many teams that participate in the Australasian Road Crash Rescue Challenges, their continued eagerness to learn benefits the communities they care for.

With the continued support of the Dunsborough local community and the VFRS, his team are encouraged to work towards participating in Christchurch New Zealand in 2011.

ARRO web site a popular spot

A recent review by the ARRO Executive of the web site hit rate has revealed some interesting stats.

During July 2010 when iRescue 2010 was on the web site received 12,348 visits and over 119,000 hits. Of these over 3400 visits were in the week of the challenge. This represents a 600% increase on hits for the same period previously.

Most popular pages include those detailing information about the challenges. While the most popular documents to download are presentations from the symposium and technical bulletins, followed by the challenge rules.

2012 Challenge planning to start

The ARRO Executive is pleased to announce that the 2012 Australasian Rescue Challenge will be hosted by the Tasmanian Fire Service in Hobart from 26 to 29 April 2012.

Looks like the CMT will be off to an ANZAC dawn service Tassie style!

More details will follow in the coming months.

Mistaken for dead – how our training can be seen by others...

This article appeared in a recent Qld paper.

“Life-like ... a crash test-dummy has been mistaken for a dead body.

It was the battered crash-test dummy that looked so real it sparked a short-lived police investigation.

A baffled Sunshine Coast-based truckie yesterday reported seeing a dead body in the driver's seat of a smashed-up blue car being towed along the Bruce Highway.

The man, who has driven trucks for nearly 20 years and is no stranger to crash victims, made the strange sighting while driving south near the Pine Rivers Bridge about 10.30am.

"I looked twice and I was in shock and I slowed down a bit, and thought: 'Nope, someone's stuck a mannequin in there.' But I then I put my foot down and sped up and became pretty sure," said the man, who did not want to be named.

"It looked like real. No little bolt holes in the neck, no little stickers."

The truckie said he phoned the Roma Street police headquarters, worrying that children might see the "dead body".

The first woman he spoke to "didn't know what to think" about the alleged sighting.

He then spoke to a man in the communications section.

"I had a call back saying they might get in touch with me to get a statement," the truckie said.

Meanwhile, over at Caboolture, the operators of the tow-truck company responsible for the job fielded a most unusual call from a concerned police officer.

BAS Towing owner Barry Shoesmith said his wife answered the phone about lunchtime and was asked whether the company had

[Continued page 7](#)



GARMENTS | FOOTWEAR | GLOVES

MEETING THE DEMANDS OF RESCUE AND RECOVERY

CROSSTECH® Fabrics provide the ultimate in performance for recovery and rescue. Demand the best of your PPE. Demand CROSSTECH® Fabrics.

If a risk assessment requires the need for durable protection against blood and body fluids, CROSSTECH® Products provide the solution.

For more information visit gore.com



©2011 W. L. Gore & Associates. CROSSTECH®, GORE® and designs are registered trade marks of W. L. Gore & Associates.

Mistaken for dead....



towed a blue Toyota Seca with a body on board.

But she immediately "cracked up" at the line of questioning, explaining that the body was just a dummy used in a fire service training exercise. The cop joined in the laughter.

Mr Shoesmith said he towed the badly-damaged car from the Enviro Metal scrapyard site at Caboolture to the Ashgrove fire station as officers needed to practise cutting victims from vehicles.

But he could sympathise with the truckie who thought he saw a real body because the dummy featured a realistic-looking face.

"That's the only one of their dummies I've seen that's had a face," he said.

"[When I went to pick up the car] I looked at it and thought, what's that bloke doing sitting there? Then I realised it was a dummy."

Mr Shoesmith said he had done jobs for the fire service in the past but the dummies were usually removed before the tow truck was required.

"It was the first time they had a dummy in there when I've taken it," he said.

The man who reported the sighting said the dummy face-painter belonged in Hollywood.

"I tell you what, whoever made that dummy should be in the movies cause it was pretty good," he said.

"I was 100 per cent sure it was a real body. I'm not going to forget that picture."

No photos of the dummy were available.

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"

We will also have a range of event shirts, ARRO shirts and caps at the 2011 challenge in Christchurch. The ARRO shirts will be restricted to members only!

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

Australasian and World Rescue Challenges 2011
Christchurch, NZ - 13 to 16 July
Put the dates in your diary today!

The value of the challenge – a participant’s perspective

The ACT Fire Brigade attendance at ARC10, which for the first time included an ambulance paramedic, was a huge success in terms of i) lessons learnt, ii) experience gained and, iii) the networks and contacts that were established.

The symposium held prior to the challenge was of great interest to our team and was ideally aimed at our day-to-day role, “the responder”. The simulated fuel tanker rollover demo provided by BP/Shell was excellent and, although we have conducted this training for our crews some time ago, it is probably something that the ACTFB should consider undertaking once again, not only to catch-up on our newer members but, to also refresh our older ones.

Probably one of the biggest eye-openers was the presentation by Holden showcasing the latest innovations in vehicle manufacturing. It quickly became clear why some of the RAR techniques we have taught and relied upon

for years and years will now have to change or be modified to keep pace with these advancements. This was reinforced when our team were introduced to these modified techniques at a workshop conducted by Daryl Rush.

The ACTFB team from B Platoon improved dramatically, from their first event to their last, as they became more familiar not only with the ARC format, but also with new car technology techniques. It probably would have been great if we could have done Daryl’s session beforehand. I think this learning reinforces the management decision to send a new team each year to expose as many of our staff to this experience as possible. We will now be putting together a road show package to demonstrate the experiences we learnt across all four of our Platoons in the very near future.

I also recommend that we look at including a

Continued page 9

Innovative Technology Time Critical Glass Management®

Strengthens and holds glass for controlled vehicle extrication

- One person application
- Double roller dispenser for smooth finish
- Perforated for ease of use
- Excellent in wet conditions

Contact PT Hydraulics Australia

Tel: (03) 9562 8800 Web: www.pthydraulics.com.au



PATENT PENDING

www.packexesmash.com

Packexex®
SMASH

Proving the value of new techniques and ideas offered at the challenge – ARRO member wins research award

Over the last couple of years the ARRO challenge has presented teams with the opportunity to explore new ways of improving extricating trapped casualties. One of the most interesting and controversial has been the concept of relocating the vehicle with the live casualty still trapped. One argument is by removing the vehicle from the obstacle (tree, pole, barrier, etc) improves rescue efficiency because the rescue team can access the damaged side of the vehicle. The counter argument is that moving the vehicle, even under controlled conditions puts the casualty at greater risk of increased spinal injury. But where is the evidence one-way or the other?

A project to find the best extrication techniques for patients injured in road accidents has been awarded the 2010 KJ McPherson Education and Research Foundation's \$15 000 Patron's Research Grant. The grant was awarded to the QAS South West Region entrant, Oakey Officer-in-Charge Brad Setch. Brad's project aims to reduce the time spent on the management of road crash patients at the scene. He plans to conduct a series of relocation and controlled-roll techniques on vehicles with mannequins to recreate several extrication scenarios, and have the techniques and conduct agreed to by QAS paramedics as the best practice approach for those types of incidents. This research can be conducted at the Queensland Combined Emergency Services Academy, and the results from these evaluations would benefit QFRS and QAS in improving their road crash response. QFRS and QAS also work with the Australasian Road Rescue Organisation (ARRO). ARRO can communicate the results of these findings and practices broadly across Australasia and through further rescue networks into the World Rescue Organisation. As well as improving patient care, Brad's project is breaking new ground in the road crash rescue field. There are no reliable figures



available to validate the extrication techniques, so a primary intent of the research project is to facilitate evidence-based practice in road accident rescue.

Congratulations Brad, we look forward to the results with interest!

**Registrations for the 2011
Australasian and World Rescue
Challenges and the Trauma
Challenge close soon. To register
go to
http://www.ufba.org.nz/events/australasian_and_world_road_crash_rescue_challenge**

A participant's perspective

paramedic on all of our in-house rescue courses so that we become more familiar with each other's needs to RAR scenes.

As a shadow assessor I was able to view close-hand the large variety of techniques from many different rescue teams, all of which can be transferred from the competition arena to our daily operations. With the knowledge I was able to glean I am looking forward to assisting our team next year prepare for ARC11.

Des Falconer
ACTFB and ARRO Assessor in training

Trauma Challenge comes down under!

The Trauma Challenge has been operation for about 3 years at the World Rescue Challenge and will be making its first appearance in our region at the 2011 combined Australasian and World Rescue Challenges.

The challenge is entirely separate to the extrication challenge and has attracted a lot of interest overseas. Some agencies send teams just to participate in this challenge, while others encourage their extrication teams to enter the trauma challenge as well.

The event scenarios runs for 10 minutes and teams of two personnel undertake the challenge. It is medically focused and teams can only bring whatever equipment they can carry, usually a first aid kit, collar and back board, maybe sometimes O₂ as well. When they enter the scene they are confronted by 1 or more casualties who have suffered some sort of trauma, generally not road crash related, but could be. It may be an electrocution in the office, or a fall from heights. The rescue team has 10 minutes to take charge of the scene, triage, diagnose and treat the injuries they find. Depending on the scenario, there may also be bystanders at the scene. They are untrained but will help under direction, so great for immobilising, lifting, etc. At the end of the 10 minutes the



A UK Fire Rescue team in action at the 2009 Challenge

rescue team has a debrief with 2 medical assessors who use exactly the same medical score sheet as is used in the extrication challenge. The debrief starts with the rescue team giving a hand over of what they have discovered with their patients and what they have done for them, as though handing over the patients for transport. Participants have come from Ambulance services, first responder programs and dedicated rescue services. All have reported excellent value in the learning and skills development achieved through participation in the event.

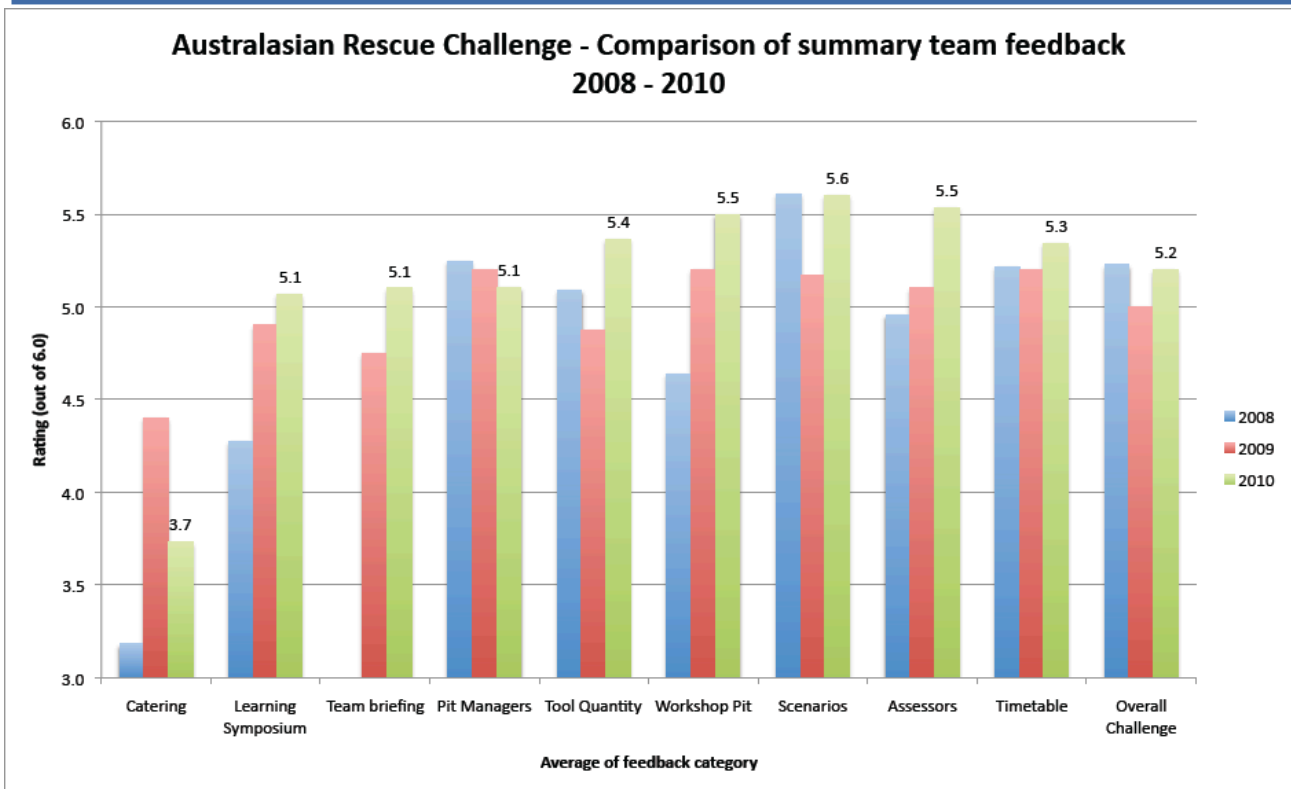
In Christchurch this challenge will run concurrently with the extrication challenges. Teams wishing to participate in both will be accommodated in the timetable so why not have a go while you are there?

The challenge concept shows good improvement over the years ...

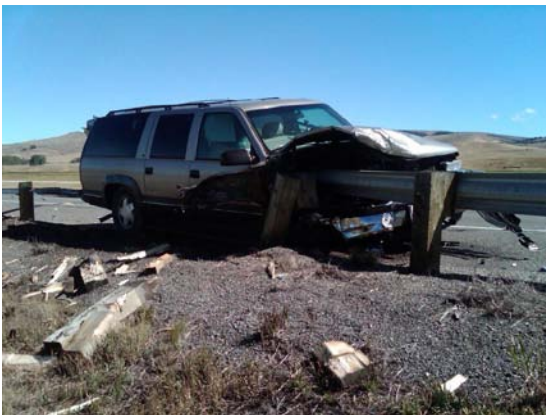
Part of the annual challenge process is seeking feedback from the participating teams on the design and execution of the challenge as an event. The survey seeks feedback on issues the quality and range of topics in the symposium through to the equipment in the pits and types of scenarios presented. Each year the ARRO Executive and Technical committee's use this information to shape and improve the design of future challenges and most importantly to help identify best practice in the field. The graph below shows a summary of the ratings from the part 3 years

of challenges in various categories of questions asked of participating teams. Clearly ARRO is on the right track. The general trend shows improvement in all areas where we have control, and generally the scores exceed 5 out of 6. Overall a great result, however if you have a suggestion as to how we can improve, please drop ARRO an email or contact a committee member.

See the graph below for comparative results.



We might do this in training scenarios, but here is a graphic example for real....



The moral of the story here is don't text and drive!

If you have interesting operational experiences like this one that might be of value to other ARRO members, please send them in for inclusion in the newsletter.

World Rescue Challenge 2010, Ireland



Although no ARRO teams were able to make it to the World Challenge this year, Dave Stackhouse reports on his experiences.....

The World Rescue Challenge 2010 - Dúshlán na Laoi Corcaí - Cork Ireland.

In September 2010 I had the privilege of representing ARRO as an assessor in the WRO challenge hosted by Rescue Organisation Ireland, (ROI). Glen Maule was also attending as the ARRO executive while also assessing in the Trauma challenge, which is a new event that ARRO will introduce at



this year's ARC/WRC challenge to be held at Christchurch NZ.

During my stay I was treated to the full manner of traditional Irish hospitality by the local chaps from Rescue Organisation Ireland (ROI) who ran a very effective challenge considering it was their first at this level.

The actual event was held at Customs House Quay on the banks of the River Lee in the centre of Cork City. The event was well located with all the entertainment and accommodation within walking distance.

30 teams competed in this year's WRO challenge from all over the UK and Europe including Russia, Spain as well as a team from America. The rescue challenge involves fire crews rescuing entrapped casualties from the three events. Which are the Rapid, Standard, and the Complex.

These event classes are similar to our ARRO classes however the scenario objectives and operational outcomes are different in scope; as it turned out it was easy to adjust to the assessing process thanks to the joint working parties from ARRO and UKRO who have

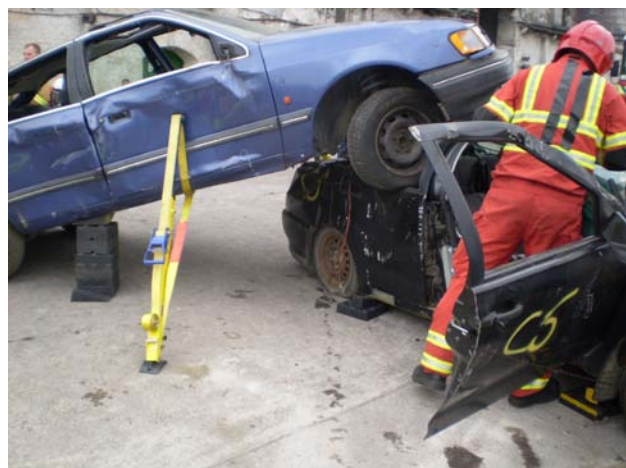
aligned the Command and Technical assessment criteria and score sheets. It will be great to see if the medical assessment criteria can also be aligned in the near future!

The other major difference is that teams arrive in appliances to 'get to work' which although provides some operational realism and affords some time efficiencies in team's gear checks for the pit managers, it can prove problematic if the pit and access areas lack sufficient size to accommodate this.

The standard of rescue was very high in most teams and it was very pleasing to see the consistent approach to systematic rescue with both extrication and medical personnel working toward a suitable patient/s focused outcome within the timeline of the event regardless of the team's nationality. This proves to me that these events although very logistically and financially heavy to the host organisation truly complement our agency training and operational rescue processes.

It was also lucky for this monolingual Kiwi assessor that most teams had an interpreter who was either a team member or accompanied them for this purpose - it also helped that one of my assessor panel was Spanish!

The funny thing about this is that most European competitors have learnt English as a second language however getting to grips



Continued page 13

World Rescue Challenge 2010 ...



with my kiwi language peculiarities was a challenge in its own right for most!

During the 3 days of the challenge the competitors also had the opportunity to discuss different techniques and rescue tool options with several workshops being conducted.

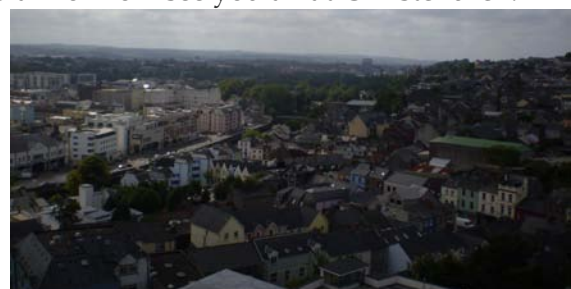
Glen and I also attended the WRO AGM held in the Harbour Masters boardroom which was a very historically decorated nautical venue. One of the highlights of the meeting being the presentations from the various member countries that make up the WRO.

Almost 400 fire & rescue personnel attended the Closing Ceremony on the Sunday night where the results of the challenges were announced. The overall winners of the Extrication Challenge were Bridgend, South Wales, 2nd West Midlands, England, and 3rd Badajoz, Spain.

The winners of the Trauma Challenge were also announced and these were Hampshire F&RS, England, 2nd Bridgend, South Wales, 3rd West Yorkshire F&RS. 18 teams took part in this challenge which involves a 2-person emergency team treating a seriously injured casualty within a set 10min timescale.

Well done to all the competitors and well done to Rescue Organisation Ireland for a very enjoyable challenge.

Slán for now see you all at Christchurch.



New Series II. The very clever Commodore. We've made sure these cars look smart, but more importantly, we've made sure these cars are smart. The new touch-screen Holden-iQ System has Bluetooth® to let you search contacts and make phone calls without touching your mobile. It's also a rear camera¹ for parking, and you can rip, store and play CDs with its built-in flash drive.² What's more, the future friendly 3.0L SIDI and 6.0L V8 engines are so clever, they can run on both petrol, or Bio-ethanol.³ The only smart thing left to do, is take one for a test drive. See your Holden Dealer or visit holden.com.au. Go better.

New Series II Commodore. The smartest cars we've ever made.



Holden*iQ*®

Holden. **Go better.**



WIN a new Series II Commodore. Take the Holden-iQ test today at HoldeniQ.com.au

Things you need to know: 1. Standard on SS V-Series and Calais V-Series models. Optional on all other models (not available on Ute). 2. Built-in flash drive to rip and store CDs is not available on Omega. 3. Bio-ethanol – a blend of up to 85% ethanol and 15% petrol. Bluetooth® is a registered trademark and logo of Bluetooth SIG, Inc. Telephone, iPod®, USB, Bluetooth® and auxiliary functionality of Holden-iQ will depend on the level of compatibility of your device. Visit holden.com.au for a list of telephone and iPod® compatible devices. HBR0554

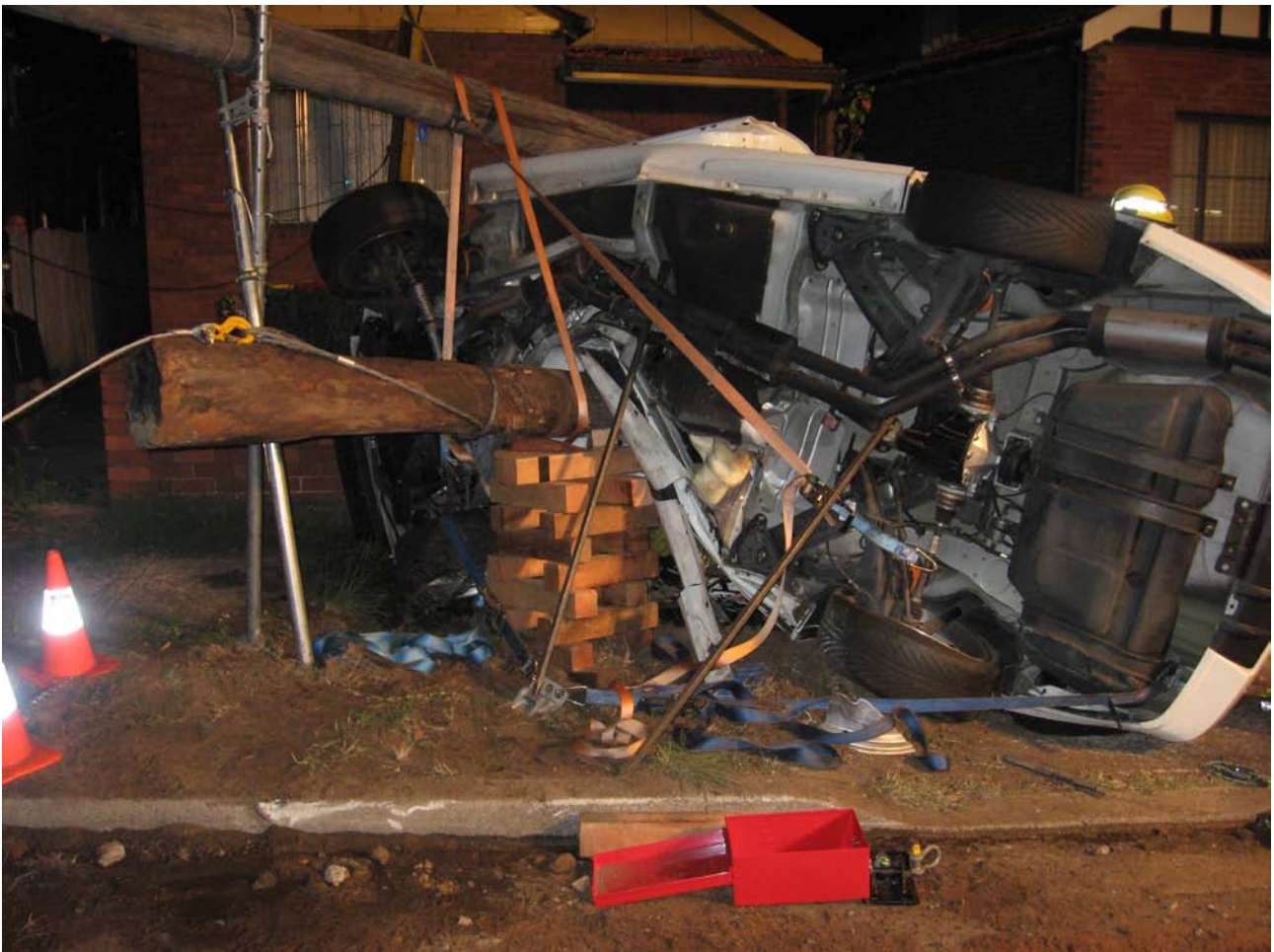
Case Study: ... MVA, Persons Trapped, Forest Road, Arncliffe, NSW

Station Officer Greg Purvis is a member of Fire & Rescue NSW and submitted this article following a recent incident. Greg is a former member of the NSW Fire Brigades Burwood team that participated in many Australasian and World Rescue Challenges. As you will read, the lessons learned came in handy in this complex operation.....

At 0028hrs, Pump 29 Arncliffe and Pump and Rescue 20 Hurstville "A" Platoon were called to a MVA Persons Trapped at Forest Road Arncliffe. On arrival, Arncliffe Station Officer Andy Jones discovered a SS Commodore on its side, having impacted a pole and snapped it in two. The pole had been torn from the ground, with the top section balanced precariously on the top of the vehicle, only held in place by live power lines. The bottom 4 metres of the pole were embedded in the driver's side door. The driver was still in the

vehicle. 29 Pumper's crew immediately set up fire protection and rendered a fuel spill safe.

20 Station Hurstville Pump and Rescue arrived shortly after. On arrival Hurstville Station Officer Greg Purvis liaised with SO Jones and commenced stabilisation of the scene. Whilst the power pole presented a major risk, none of the live wires were on the ground, and there was adequate clearance to commence rescue operations. The scene assessment also revealed that none of the airbags in the vehicle had operated, and as a result the battery was disconnected to deactivate the SRS system. Stabilisation was carried out by utilising the Holton Foot and blocks to stabilise the vehicle. Two Acro Props were lashed together to support the top power pole, which was then held in position utilising



Continued page 16

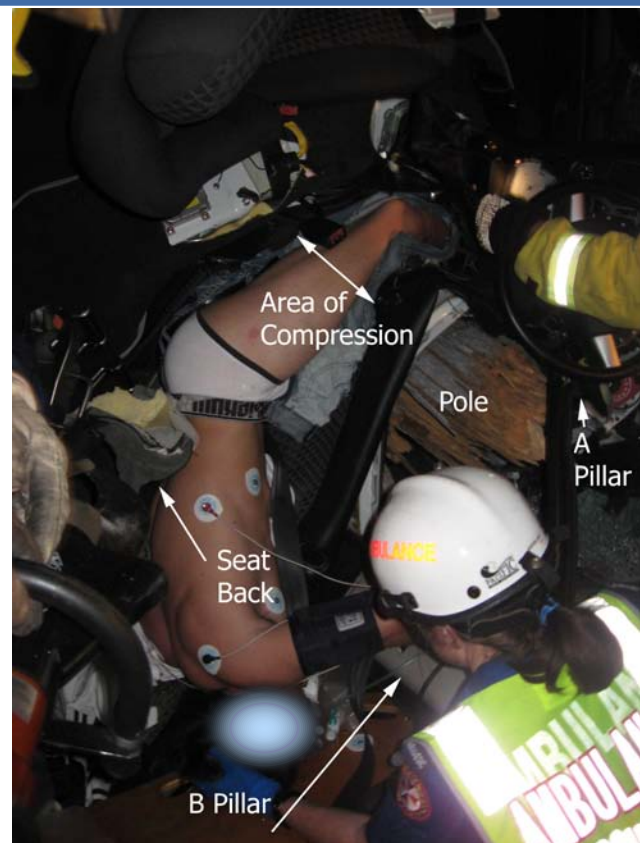
Case study: MVA Arncliffe ...

trucking straps from a second Holton Foot. 2 x 2 Pigsty cribbing was utilised to support the 4 metre length of pole which was embedded in the driver's door. This was also held in place with trucking straps.

Whilst Stabilisation was taking place, SO Purvis liaised with Intensive Care Paramedics from Rockdale Ambulance. Due to the severity of impact, the extent of entrapment could not be ascertained. The Paramedics reported that the driver was in a stable condition. They had also responded a medical team from Bankstown airport, consisting of a Doctor and Special Casualty Access Team (SCAT) Paramedic.

The extrication plan at this stage was to remove the roof of the vehicle to ascertain the nature of entrapment. Due to the proximity of a brick wall, the roof would have to be removed entirely. The patient's head and shoulders were in contact with the rear driver's side window, which would complicate the roof removal. A clear plastic sheet was placed over the patient and Paramedic whilst glass management was carried out. A wooden half spine board was then introduced via the rear window and placed to support the patient, with cribbing underneath to hold it in position. This would allow the removal of the roof, whilst still supporting the patient. The removal of the roof was to prove to be a straightforward operation.

Once the roof was removed, the full extent of the entrapment became clear. The power pole had impacted in the centre of the driver's door and penetrated over 1 metre into the side of the vehicle. The driver had taken the whole force at mid thigh level and was basically draped over the pole. There was a distance of approximately 10 cm between the interior of the door and the transmission tunnel. In this space were both the driver's thighs and the distorted driver's seat. The patient was suspended upside down by this compression, and everything below the knees was concealed behind the crushed dash. An extrication plan was decided on which included the dismantling of the seats, centre console and dash. Whilst work commenced



on dismantling the interior, a second team commenced set up of the emergency release option. This plan was to winch the power pole free of the vehicle utilising the Tirfor winch, and then ram the driver's door away from the patient. This was considered a higher risk option, due to the proximity of the pole to the patient, and the risk of destabilising the vehicle.

Whilst work commenced on the extrication, the Ambulance medical team arrived on scene. They reported that the patient was stable, amazingly with no significant injuries above the waist. This would allow a systematic extrication to take place. The medical team expected to have to deal with Crush Injury Syndrome as the extrication progressed. Throughout the extrication a high level of communication and cooperation took place between all services in attendance.

As extrication continued, the following activities were carried out:

The rear seat squab was removed.

Both front seatbacks were removed. This proved to be quiet time consuming on the

Continued page 17

Case study: MVA Arncliffe ...

driver's side as the patient was tightly wedged between the seat back and the power pole. The seat cushions were removed utilising trauma shears and the structural components were then carefully cut with the parrot beak shears. A further complication was the undeployed side air bags in the seat backs.

The centre console was removed using hand tools. The handbrake lever and gear stick were removed using shears.

The dash was disassembled using hand tools.

The steering wheel was removed utilising the Combi Tool, as it was found that the parrot beak shears would not cut the high tensile steel of the steering column. (Note: The drivers air bag restraint could no be fitted as the wheel had impacted the A pillar) As the dismantling of the dash progressed, the lower limbs were exposed. This revealed bi-lateral compound fractures, and a broken femur but no further entrapment. A KED was fitted to the patient in anticipation of supporting the patient during final removal.

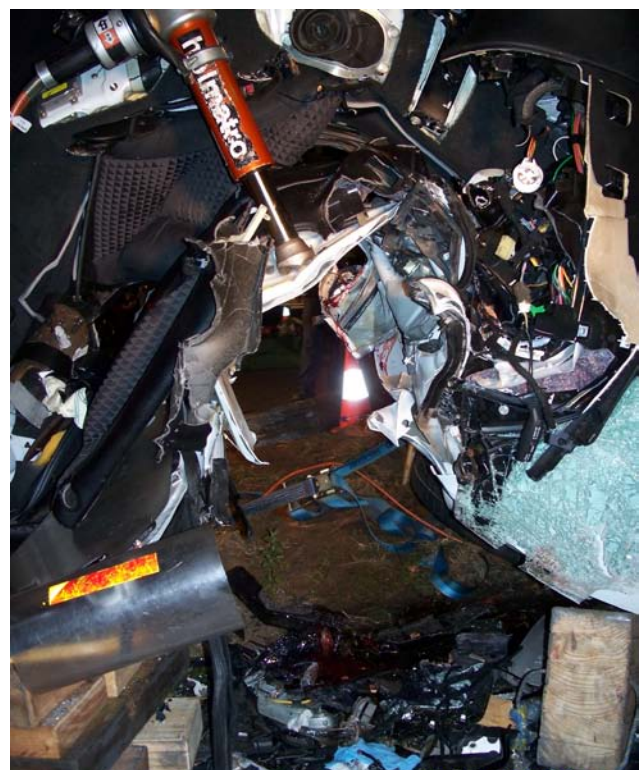
This dismantling process proved to be time consuming, due to the extent of damage, the confined work area, and the requirements of the medical team treating the patient.

Once it was clear that the entrapment was confined to the thigh area, a decision was made to remove the power pole. This proved to be a delicate operation due to the proximity of the patient to the pole. An Energy Australia Line crew on scene was consulted to ascertain the weight of the pole. The rule of thumb they use for power poles is that every one metre of length weighs approximately 100 kilograms. With this in mind, the cribbing was removed and a large group of Energy Australia and Fire Brigade personnel supported the pole as it was slowly winched away from the vehicle. Close communication was maintained with the medical team to ensure no impact on the patient. Once clear, stabilisation was rechecked to ensure there had been no movement.

An attempt was then made to push the door away from the patient utilising the 2005

Hydraulic power ram, between the driver's door and the passengers B Pillar. Due to the force of impact, this proved unsuccessful, and the ram was left in position. A decision was made to attempt to weaken the driver's door. The hinges on the driver's door were accessed from the bottom of the vehicle and severed. The outer skin of the door was removed and the side collision bar was severed. The Nader bolt was cut, along with other structural components. A spread at the bottom of the door provided access to the patient's feet, allowing the Doctor to examine them.

A second attempt with the in situ ram then proved successful in releasing the entrapment. A spine board was utilised to remove the patient from the vehicle and transferred to a stretcher. The patient was treated and packaged on scene then transferred to hospital.



Overall, whilst a protracted and technical rescue, the outcome was a success. The cooperation and communication between rescue and medical crew was excellent and achieved the best possible outcome for the patient.

Continued page 18

Case study: MVA Arncliffe ...



Lessons Learned:

SRS systems may not always function. It was surprising to discover that the side air bags had not operated in such a high impact collision.

The time spent in setting up your stabilisation correctly in the first instance is worth it. There was minimal adjustment of stabilisation required during the operation.

Take the time to introduce yourself to the medical team and consult at every step of the process. An excellent rapport was established early in this incident, which resulted in a smooth operation

Utilise down time whilst medical teams are working on the patient to set up alternative options and plan ahead.

Use on scene experts to find out information that will assist with your operations.

Utilise the Searchcam Recon to explore confined areas and ascertain entrapments. It is also useful for Paramedics when assessing patients. These cameras are located on Heavy Rescue appliances.

This was an equipment and manpower intensive operation. Call for addition resources early.

