

TECHNICAL RESCUE

NEWSLETTER

53

We continue to have problems with our AOL server so have switched a lot of our output to our BT Internet account. Can you therefore cc: rescuemagazine@btinternet.com when sending any mail to our AOL account - thanks.

We mostly work remote from the office phone so don't expect an answer. However, we will ring you back if your message hasn't been accidentally deleted. Better still email us because we monitor these continuously regardless of where we are:

info@t-rescue.com
rescuemagazine@aol.com
rescuemagazine@btinternet.com

Contents

- 2: Issue 53 Sampler
- 3: Issue 54 Sampler
- 4: Reviews in the Pipeline
- 4: subscriptions Offers
- 5: Who's Who-at TRm- Richard Hackwell
- 6: SAFETY REPORT BMC & Helmets
- 7: TRm WEBSITE -What's New?
- 8: ARTICLE -Lifeguards at the Olympics?
- 11: GALLERY - GHOST Robots +TEAM BADGES
- 13: Gallery & A Water Incident
- 14: TRm Back Issues
- 15: Back Issues - FOCUS on issue 45
- 16: Emergency Services Show 2008 (Coventry UK)
- 17: PRODUCT S- Petzl and Singing Rock Arb Harnesses, MFC Motorised Flood Raft, Prolite SCBA SPine Board



Which Cover? Sword or Bison? Go to the Home Page of our website to vote: www.trescue.com



ISSUE 53 **Sampler**



OUT NOW

Subscribe via the website:

www.t-rescue.com..... shopping.t-rescue.com.....subscription

Left: COVER 53: Having reviewed the new PWC course from K38 in the UK in the last issue this is the model favoured by K38 founder Shawn Alladio in California and here, after some hurried running repairs is used on a fundraiser for the Higgins & Langley Trust the swiftwater rescue awards program initiated by Nancy Rigg. The result of this years awards are in issue 53

Below Left: Larry Collins of LA County Fire Dept picks up the reigns on mud and debris flow a subject that was very high on Jim Segerstrom's list of priorities just before his untimely death. Larry gets plenty of chances to put theory into action in one of the world's key hotspots for fire & flash flood induced mud slides.

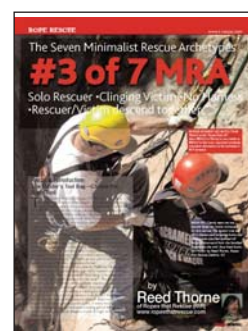
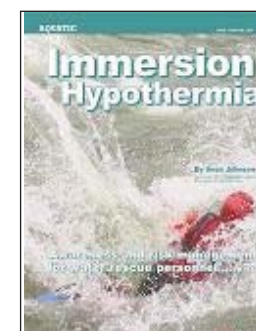
Below Middle : Lee Lang investigates an In-Field Tool to compensate for shadow effect

Below Right: Jez Hunter asks whether wire rope winches really are the tool of choice for confined space rescue.



Left: Ivan Hansen Ivan Hansen examines the aftermath of incident response calls that resulted in a crashed emergency services vehicle

Right: Greg Churchman looks at the Raven TARP EX Rescue Pack.



Far Left: Sean Johnson covers the basics in a two-parter on immersion hypothermia

Left: Reed Thorne looks at pick-off rescues that require a rescuer to be lowered from the top.

Right: Mini Pneumatic Airbags is the subject of this issue's Market Guide and the first of 3



ISSUE 54 **Sampler**



Going to print in late October, get your order in NOW:

Subscribe via the website:

www.t-rescue.com..... shopping.t-rescue.com.....subscription

Left: COVER 54: One of 2 covers under consideration (go to www.t-rescue.com to vote) The Sword weapons carrier is an overtly militaristic robot but one of a family from Foster Miller in the US dealing with bomb disposal, HAZMAT and SAR. Robotics Support is the subject of this issue's Team

Below Left: And that team isGHOST a UK-based highly specialist team that supports local authorities and emergency services with incidents that would be hazardous for firefighters or work personnel to enter.

Below Centre : Ivan Hansen looks at the 2008 SAR Canada event bringing together National Parks Teams, Police and Coastguard to compete and compare notes in Victoria, British Columbia.

Below Right: One of 3 or 4 reviews in issue 54 is the 66 North Thorsmork Parka, a serious outdoor garment well suited to Antarctic winters but in our case gets a working out in Norway and a chance encounter with a blizzard in the UK!



ALSO IN ISSUE 54: • Reed Thorne & Len Batley look at AZTEK mini pulley systems • Rich Hackwell describes a radical shakeup in the way the UK Coastguard carry out rope rescue • Review of Actsafe Harness • Review of Future-Safety Helmet • Sean Johnson continues Immersion Hypothermia • Top Twenty Rescue Books continues • Market Guide to Standard-sized Pneumatic Airbags and Flood Rescue Boats • Reed and his 7MRA

Winter 2009 **ISSUE 55** Winter 2009

MARKET GUIDE: Low Pressure Airbags
 MEDICAL: Physiology of Rescue - Dr Mike Tipton
 and his team look at what energy we actually exert
 during various phases of rescue
 TEAM: Canadian Coastguard
 REVIEWS: SatMap GPS, Wilderness Medicine,
 Informed Fire&Rescue and ACLS Field Guides

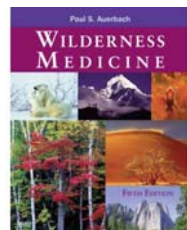
REVIEWS IN THE PIPELINE



Informed Guides are a series of comprehensive Field Guides covering everything from Homeland Security and Emergencies in the Home to NIMS and Law Enforcement. Our interest is in the Fire & Rescue Guide and the two Medical guides - EMS and Critical Care. There are many excellent FOGs out there and these offerings from Informed are up there with the best, well made and easy to use in full colour with tabbed sections for a quick GO-TO. Also on the subject of books and fantastic ones at that we're taking a long overdue look at the latest edition of Paul Auerbach's Wilderness Medicine (6th not 5th as shown here), probably the most comprehensive, multi-role rescue book on the market. From Peli we're using the RALS portable LED area lighting system with two output options.



SatMap is a relatively new system introduced into the UK using Ordnance Survey maps instead of graphics to show exactly where you are. Packed full of the usual GPS features SATMap promises to be a revelation in Search operations. Not yet fully 'ruggedised' for marine and helicopter use it is nevertheless waterproof and shock proof to an acceptable degree.



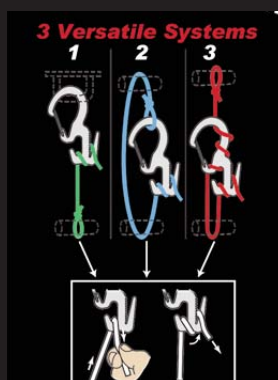
The Actsafe Quick Harness from Sweden is notable for introducing a vertically aligned rigging plate as it's MHP or main hard point for connection of descender/ascender/fall arrest etc. SO far we have been very impressed with the functionality and comfort of this two-piece ensemble and hope to get the review into issue 54 - just got a bit more 'outer-envelope' testing to undertake and we'll be able to report.



SUBSCRIBE for 2 years to TECHNICAL RESCUE magazine



& receive this handy tool from Niteize Figure9 Carabiner



The highest quality Rescue magazine in the world: TECHNICAL RESCUE magazine quarterly

2 YEARS/8 Issues: US\$75. USA & Canada £45. UK, Eire, Europe £45. Australia & Rest of World

(1YEAR /4 Issues:) US\$45. USA & Canada £28. UK, Eire, Europe £28. Australia & Rest of World

Simply send a cheque payable to 'TECHNICAL RESCUE'

or for credit card payment go to the website: www.t-rescue.com..... shopping..... subscriptions..... 2 year.....

The Figure9 is an alloy carabiner with integral rope friction hook and cleat that allows you to tension or lengthen rope from 3mm to 9mm in diameter. It provides rapid, adjustable tie-down to secure loads/luggage, clip gear, save your tent, leave your dog, horse or boat outside the bar or to hang your gear at an adjustable height.

Just don't use it for climbing as it's only rated to 150lbs/68kg!

This Offer applies to NEW subscribers and renewals from issue 52 & 53 onwards. Recent subscribers can pay the difference on the new discounted 2-year rate to qualify - email: info@t-rescue.com for details

See Niteize, Leatherman, Fox, Princeton Tech, Kershaw and other knives & multitools at www.whitbyandco.co.uk



GROUP SUBSCRIPTIONS

Technical Rescue magazine is pleased to support teams and agencies with discount group subscriptions (mailed to one address):

5 copies £100 / \$180 per year/4-issues

10 copies £175 / \$320 per year/4-issues

go to: www.t-rescue.com

click on: shopping select: Group Subscriptions from the drop down menu

or email: groupsubs@t-rescue.com for cheque or BACS payment

Who's Who at TRm?



REED THORNE
US Contributing Editor - Rope - USA
Rope Guru, Sedona SAR, ex-Firefighter, Stonemason and regular NASAR presenter,



IVAN HANSEN
Contributing Editor - Canada
Acting Fire Captain, Advanced Emergency Medical Care Assistant, ex-Coastguard Aux.

Richard Hackwell
TRm Research Editor



Rich is the current head of Technical Rescue for HM Coastguard (MCA) in the UK having previously been a serving Coastguard in the Portsmouth (mud rescue) team for 7 years.

He is also a senior member of lifeboat equipped Portsmouth Lifeguards responsible for the seafront on Portsea. Rich's background was as a qualified arboriculturalist carrying out tree surgery for 10 years before becoming the Arb Officer for a local Authority. The Technical Rescue Unit in Hampshire were diversifying their primarily firefighter based crews with active rescuers from other agencies who had strong rope and rigging skills. A Tree surgery background had always been favoured because of it's inherent requirement for handling high and frequently precarious loads and Rich therefore became one of TRU's key personnel. Rich was one of the first in the UK to qualify as a Flood & Swiftwater Rescue Instructor under Jim Segerestrom and IRIA's rigorous new program. Following this he worked with RIG systems to deliver London Fire Brigade's water rescue training package before joining the Coastguard full time where he has been responsible for a complete overhaul of the Coastguard's Rope

Rescue system (as highlighted in issue 54 of the magazine) and is currently reviewing ALL water & mud rescue procedures. Rich continues to be an important and enthusiastic member of the Technical Rescue mag team because it enables him to keep on top of new developments and to research new equipment.



Rich in his Technical Rescue Unit days (blue vest-left) liaises with the hydraulic platform operator to position it for a casualty evacuation from a ship in dry Dock. Incidents in the Royal Navy Dockyard were dealt with by TRU and their sister team (with commonality of personnel) Fleet Support Rescue Team.



ADE SCOTT
Editor - UK
15yrs Head of Technical Rescue Unit (TRU) (ret) Rescue/Defence consultant and guinea pig



JIM SEGERSTROM
US Editor - USA (died Feb 2007)
Water Guru, Founder Rescue3 International, Flight paramedic, Tuolumne County SAR,



KELLY MATTHEWS
Sales & Admin Director- UK
Law Costs Draughtsman, The real Boss of TRm



GARY CROSS
Senior Chimp - UK
Firefighter, ex-TRU, HMCoastguard, Extrication Team Medic, Marine Incident Response Group



RICH HACKWELL
Research Editor - UK
HM Coastguard-Technical Rescue Consultant, Lifeguard, ex-Technical Rescue Unit,



BRIAN ROBINSON
contributing Editor - Con-Space - UK
National Confined Space Rescue Instructor ex-Mines Rescue, ex-TRU



JEZ HUNTER
Contributing Editor - UK
ex-Royal Marines, Water Rescue Team, USAR, Rope & Water Rescue instructor



DR STEWART BOYD
Contributing Editor - Medical -RSA
Top Medical Dog - KZN, Trauma Doc, Flight Medic, War-zone junkie



LEE LANG
Contributing Editor - SAR - USA
Ex-firefighter & EMT, current SAR team member and 2008 NASAR presenter



JIM HUTCHEN
Researcher - UK
Firefighter, ex-Technical Rescue Unit, Extrication Team Snr Medic, USAR Team



SEAN JOHNSON
Contributor -Dive Rescue -USA
Fresno Fire Dept Firefighter, USAR & Dive Team



GREG CHURCHMAN
Contributor -USAR/ Rope - Canada
ex-Regina Fire Dept Firefighter, Pilot, Rope Rescue Instructor



RICH BELL
Contributor - UK
Dir Extreme Medics , ex-Police, Paramedic, Tactical medic, ex-TRU



CHRIS WALKER
Researcher - UK
Ex-Technical Rescue Unit, National RNLI Instructor (HQ),RNLI Lifeboat crew.

SAFETY REPORT

from falling objects. As a result, the major pre-requisite of the standard was that helmets for climbing and mountaineering should provide adequate protection against impacts on the crown of the head. Unfortunately, this means that requirements in both these standards for minimising the effects of impacts elsewhere, or for preventing major injury if the climber hit the ground headfirst are minimal. After several conversations with climbers about the effects of hitting the deck or swinging headfirst into a route Mark decided to look further into this crucial area. A new comparison test was devised whereby the front of a helmet (inclined at 45° from the vertical – see figure 1) would be subject to an impact equal in energy to the crown impact test stipulated in the EN standard - 98 Joules (or a 5kg weight dropped from 2m in real language!), using a flat striker. Three common types of helmet were to be compared:

1. A traditional hard-shelled helmet (e.g. HB Joe Brown, Edelrid Ultralight).
2. A modern thick foam/soft shelled helmet (e.g. Cassin Mercury, Camp Starlight, Petzl Mercury, Grivel El Cap).
3. A modern thick foam/hard shelled helmet



usual it all comes down to choice, preference and the type of climbing you will be doing, but the above results provide a couple of clear pointers to bear in mind when buying a new helmet:

For general rock climbing, at the typical British crag you should be looking for a lightweight helmet that offers good all round protection (ie. from impacts from all sides) with good ventilation to help keep the old noggin cool. Modern foam/shell combinations are a good choice.

For alpine and ice climbing, good top impact performance is more important along with good resistance to penetration from sharp falling objects. Traditional shell/cradle models are more appropriate for this use.

It is worth stressing (once again!) that the most important criteria when choosing a helmet is that you actually like it and feel comfortable wearing it, otherwise the odds are it will stay in your attic and not be protecting you at the crucial moment. As the old saying goes "any helmet is better than no helmet" – a lot of us would do well to remember this in these fashion conscious days.

This report originally appeared in Summit 26. Opinions expressed are of the author - not necessarily the BMC, and should be taken in the context of time.

Thick foam/soft shell - The thickness of foam is constant throughout the whole shell, and as this is the main energy-absorbing layer, it is clear that the helmet will be effective wherever

[illegible]

VOTE NOW

In mid-October we will also begin a weekly straw poll gathering your votes on issues such as equipment type preference, techniques used, guidelines and rescue politics - come back regularly and let us know what you think - voting is anonymous but the current polling system allows for you to post comments if you wish.

NEW SUPPLIERS GUIDE

NEWSLETTER ARCHIVES

We will continue to post past Newsletters on the website for free download but to receive the latest quarterly Newsletter free of charge sign up on the right hand side of the home page. Our Newsletters contain a lot of graphics and detail forthcoming articles, pictures we couldn't fit in, an extra article or two, team badges, background to all the TRm staff and contributors, Product news, events pending and reports on events past. We also have a regular statistics page (though we ran out of space this time!)

Lifeguards at the Olympic Games?

By Stathis Avramidis

Stathis Avramidis PhD student, MSc, DipRLSS, BEd is a part-time Lecturer in Leeds Metropolitan University (UK) and Vice President of European Lifeguard Academy (GR).
web: <http://stathisavramidis.blogspot.com>, email: elagreece@gmail.com

Unusual Lifeguard Intervention during the Athens 2004 Olympic Games

Do we need lifeguards during the Olympic Games and other similar major sporting aquatic events? Most people would say 'no' as they seem controlled and safe activities. This case report describes an unusual aquatic 'emergency' that would be interesting for aquatic professionals, and possibly should need to be taken into account when establishing the Emergency Action Plans of an aquatic facility for sporting events that attract media attention.

On August 17th 2004, an unexpected, and possibly the strangest incident of the Olympic Games from a lifeguard perspective, took place in the diving event during the Men's Synchronized 3M Springboard Finals. During the game, a spectator starts talking with the security guard that was in restricted area near the fence. A friend of his, a stalker dressed in a tutu, clown shoes and with a tattoo of an internet casino, jumped inside the restricted area from behind the guard and climbed the diving platform. The man had appeared at the world figure skating championships in Germany the previous March (Golden Palace, 2004). He started posing and dancing for a short time and then jumped into the water (photo 1). He carried on waving to the spectators. The direc-

tor of diving, ordered the lifeguard on duty to jump into the water to take him out. The lifeguard thought for some seconds whether it is more appropriate to jump or not. Finally leaving his rescue tube he dove in and approached the man (photo 2) (Lester, 2004). In an effort to make the man leave the pool the announcer said to the spectators: 'Let's clap to congratulate him for his entertaining show'. Every body started clapping. While the lifeguard was approaching the person he started moving towards the edge of the pool. A police man shouted to the lifeguard: 'It is OK; don't touch him!' The person left the water and later on was dragged away by safety officers at the back of the field of play (photo 3).

Conclusion

The following are some conclusions for this unexpected event that is possibly the first case reported in the lifeguard literature: A lifeguard should always wear a rescue tube, not just have it near the chair or hold it. Trying to find the strap when it was needed to dive in wasted valuable time when the Olympic Games were live on the TV. The same should happen in every lifeguard duty. In a drown-ing incident that is in progress, it is not best practice to try to find the strap at the last moment. Lifeguards should always have a rescue tube with them, for their safety and for the casualty's safety. If this man was violent, the lifeguard would need to deal with this without the benefit of protection afforded by the the rescue tube.



Photos 1-3.
A streaker enters into the water and a lifeguard dives in the pool to pull him out in Men's Synchronized 3M Springboard Finals of the Olympics 2004 (Seghers, 2004).



Even in controlled and high level aquatic activities where one considers the participants to be amongst the strongest swimmers in the world lifeguard cover is essential. Some events with quite aggressive in-water contact such as water polo could easily result in a casualty 'lost' in the melee as players and spectators concentrate on the activity around the ball. Sport event organizers should perhaps employ Casino-style character - recognition-software to ensure that there are no known 'streakers' and 'activists' amongst the spectators. Development of written operating procedures- there will be emergency action plans and daily operating procedures but these tend to focus on mass-casualty or recognised risks - lifeguards should be aware of the potential for 'intrusive' incidents and in-water injuries 'off-the-ball' which can be difficult to spot when there are many participants i the water creating disturbance at the surface.

References

Golden Palace (2004). *Surprise Streak, Surprise Gold for the Greeks!* Retrieved 3 November 2004, from <http://www.goldenpalace.com/welcome.php>
Lester, J. (2004). Pool Hero STATH. *Leeds Student*, 35(3), 23-24.
Seghers, G. (2004, October). STA at the Athens 2004 Olympics. *Swim and Save*, 16-17.

PSDiver Monthly
www.psdivermonthly.com
FREE INTERNET MAGAZINE
PUBLIC SAFETY DIVE TEAMS
WATER RESCUE TEAMS

Oceanid
WATER RESCUE CRAFT
208.322.3600 | OCEANID.COM

MADE TO MEASURE PROFESSIONAL DRYSUITS
email: sales@polarbears.co.uk
website: www.polarbears.co.uk
Units B1 & B2,
Pennygillam Industrial Estate,
Launceston,
Cornwall, ,
PL15 7ED.
ENGLAND
Tel: (+44) 01566 773 654
Fax: (+44) 01566 776 065

MICRO CASES from **PELI-PRODUCTS**

Air-tight Watertight safety for your valuables and electronics
6 sizes, 4 colours or clear with coloured liners
See www.peliproducts.co.uk for full details



Main pic & Below courtesy of HERS



Issue 54 of Technical Rescue features the GHOST project. This is a robotics rescue/hazmat support team sponsored by Qinetiq and funded by various government agencies primarily aimed at fires and vehicle accidents involving gas cylinders. In these instances Robots like the Bison (top & bottom right) have on-board cameras and cutting/spreading/disc cutter equipment to cut into vehicles while thermal imaging camera equipped hose carrier (above) can spray the cylinder to cool it. Right: Genius at work - He'll hate us for saying but Ken Pink is one of the real 'Q's of James Bond fame. See issue 54 for a full report on GHOSTS numerous robots.





A WATER INCIDENT

JEZ Hunter gives a perspective on an incident reported recently on the H2O Forum for Water Rescue:

The victim was pinned by his ankle on a cluster of barely submerged rocks midstream river right about a hundred yards below the main rapid. I had just come through trouble-maker in my kayak when I saw a young boy on some rocks midstream and as I paddle over to tell find out what was going on I saw a man on the rocks river right pointing at the water and then I saw the victim. His legs were upstream of his body and he kept trying to sit up but the current kept pushing him back down underwater. The eddy just below him was pretty turbulent and just upstream of another rock cluster and I would have had to paddle just to hold position so I eddied out river right, and climbed back upstream to some rocks about 15 feet from the victim. I waved until the commercial photographer upstream noticed and signaled him to call 911. Fortunately the victim was still conscious and I threw him my rope and then was able to pull his head and chest up out of the water. Two other guys now joined me from river right and helped with the rope. I knew it was just a matter of

time until the victim tired and dropped the rope so I opted to swim. I washed down to him but had a hard time holding onto the rocks while trying to pull him free at the same time. I could feel his ankle pinned down underwater and his foot was somewhat inverted. While I was trying to pull him free the current washed me off downstream. I swam in, climbed back up and swam out to him again. This time I reached down underwater with both hands and tried to use the force of the current pushing down on us to pry his foot loose but that didn't work either and I was washed downstream again. By the time i got back for swim number three, one of the guys holding the rope had jumped in. He wisely got into the slacker water behind the victim and was able to pull himself up behind and help keep the victims head and chest clear of the water. This was clearly the right move and this guy deserves a lot of credit. This had bought us some time so I jumped back into my kayak and went down and ferried the young boy stuck on the nearby rocks over to the right bank. When I got back, a firefighter had arrived on river right about a hundred feet upstream of the victim. I asked him for a rope but he said he thought his rope was too short so I ferried over to river left and borrowed a rope from two raft guides who had now stopped on that side. The firefighter wanted me to run the rope from river left back over to him and then

down to the victim. I had a suspicion that it might not work but like an idiot I ignored my better judgement and just went for it. Sure enough, just as I got back right the rope came up short, dipped down into the current and pulled me downstream backward. I dodged left to avoid the rocks and victim and pulled the quick release tab on my PFD. I had attached the rope to the quick release strap and fully expected it to pull free as designed. Unfortunately when the rope came tight, it failed to release and I was quickly rolled. I popped my skirt and grabbed for my knife to cut myself free but fortunately the raft guide holding the other end of the rope recognized what was happening and let his end go. I swam in my gear, dumped out my boat and worked back up to the victim. The raft guides on river left had now joined two ropes and got a line across to the victim. Another raft guide (Jeff) had swum down to the victim and was trying to pull his foot free. Quite a crowd had now gathered on both sides including fire and law enforcement. We were soon joined by a guy in a wetsuit, followed shortly by a guy in full dive gear. Some scissors were produced, passed over to the rescuers and after some effort the victim's shoe was cut off and he was pulled free. We swam him over to river right, and off he went to the hospital, hypothermic and with a bent flipper but still alive.



SHROPSHIRE FIRE & RESCUE SERVICE WATER RESCUE TRAINING

Above: Shrewsbury firefighter Richard Brazier is saved by colleague John Bee in a "live bait" rescue as part of a Swiftwater Rescue Technicians Course at Lake Bala, North Wales
LEFT: A throwline rescue during a one day water safety course on the River Severn at Ironbridge

FAR RIGHT: Shadley Abrahams of Cape Town Metro Medical Rescue Service shows how it was done in 2000 off of Table Mountain in RSA

COMMENT

- Timing – get the water crews mobilised early. Without an immediate rope support the subject probably would have drowned.
- Providing the subject with physical support was the key to stabilising the incident and buying time.
- Stabilisation should be the immediate response post safety protocols. What would have happened without an in- water intervention capability?
- Having swum the American River it is very warm compared with the UK. The water would have reduced the subjects chances of survival significantly.
- The foot was extricated by removing the subject's footwear. Drysuit integral booties do not allow this.
- Ropes are always too short, if you are unsure you are probably right; join ropes early and avoid the embarrassment of falling short.
- Swimming!! For those who are sceptical about technician swim standards, how many times did the rescuer swim from bank to victim!!
- Divers and swiftwater. Unless they are HIGHLY and SPECIFICALLY trained you are likely to have more than just the subject perishing.
- For those that operate around white water rivers, raft guides and kayakers are immensely useful for remote access but accommodate them very carefully in your DRA.

Hope this is useful Jez.



EXPERIMENTATION

Having mentioned in the Whos Who section that the Technical Rescue Unit (upon who's work this magazine was founded) felt strongly that tree surgery skills were a useful all-round asset this incident used those skill more directly. This wind-blown tree had fallen onto the rear windows of an retirement block with the rootball disengaging completely so that it could not return to the upright position (ie there was no rear counterweight trying to right the tree) so we took the unusual step of securing it by suspending it from the Immensely strong Alshore tripod rather than shoring it. This made it much easier and safer for us to dismantle the tree and lift it away from the windows. Had there been any danger of spring back this method would be no use at all! In the event it worked like a charm.

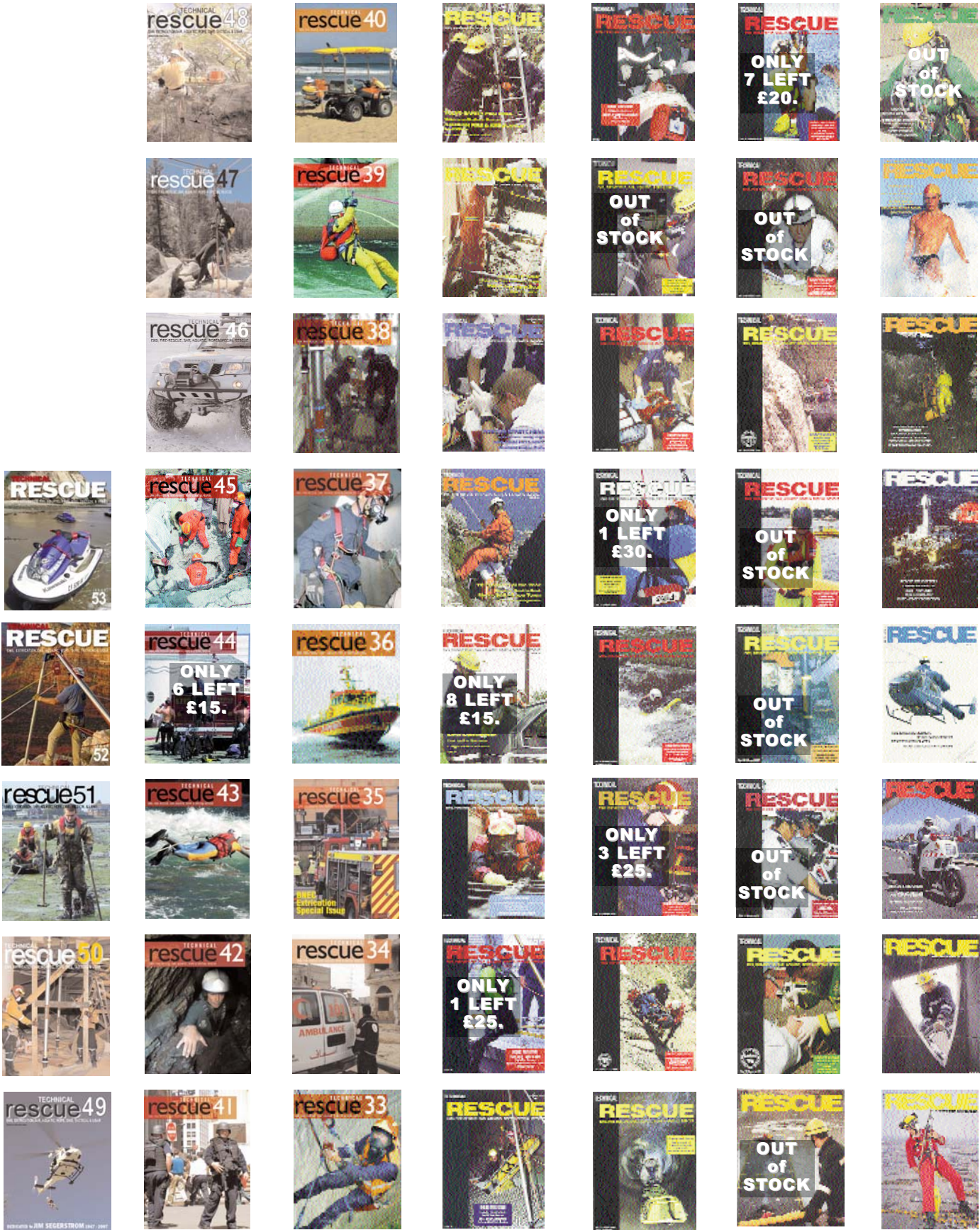


SIGN of the TIMES?

Crew Commander at an extrication competition making use of the new Panasonic Toughbook for data delivery on car specifications as well as real time upload/download of sitreps.



SUBSCRIBE go to: www.t-rescue.com £8./\$15 ea inc postage
shopping cart.....subscriptions



FOCUS ON ISSUE 45



Issue 45

came out in early 2006 and was a Pakistan Earthquake Special. The front cover and 5 page article inside showed members of the USAR-NL working on a collapse following the Pakistan Earthquake of October 2005. The Dutch team is comprised of 120 fire-fighters, police and ambulance personnel and works under the United Nations INSAREG umbrella. Our main article was from the UK's RAPID

organisation and their quite extensive involvement in operations in and around Islamabad. They were successful in rescuing 7 victims and were impressed with the level of co-operation and assistance from the Pakistan authorities. We had several Gear Reviews in this one - the Leatherman Core multitool a fully spec'd up asset for all rescuers (and tradesmen!) and the Spyderco Assist II FRN a simple but robust 2/3 serrated blade knife with 1/3 (at the front) a straight blade. This knife had a whistle built into the nylon handle - never used once in anger other than for the review but the blade itself has always been brilliant! The third Gear Review in issue 45 was the Petzl Navaho Complet Fast, a rather convoluted title for a new version with quick release buckles. The Navaho family have always been our favoured design but these days, Petzl's position of dominance is much harder to maintain because so many other harnesses are now made to the same high standards. Nevertheless, Petzl are still the one to beat.

Our Main Market Guide was Hydraulic Spreaders with a title photo that was never explained in the article - it was in fact a double fatal (strategically obscured by the text) involving a cab-forward van which hit the back of a massive articulated lorry with such force that we later found out the driver's aorta had transected and he had died more or less instantly. This was in South Africa on one of TRU's quarterly 'tours' to familiarise our personnel with major and violent trauma. I remember wondering at the time why this incident involved such a small amount of blood when we had been used to arriving at such incidents and having to virtually bale the front footwell. If the heart stops instantly there's nothing to pump blood out so such scenes are often uncannily clean. This crew was from Ambulance Rescue who, at that time responded in pairs (in fact the only pair for an area the size of New

Hampshire. Our Back to Back tests this issue involved 4 roll-along 'hand-luggage' cases. That means cases that would (at that time) could be carried onto an aircraft as hand luggage. Of course the stumbling block here was that they all weighed a ton(5kg) relative to a canvas bag so you would either have to fill them with socks and pants or something equally light or pretend that your arm wasn't falling off whenever you had to lift rather than wheel. We subjected our 4 cases to a battery of abuse including use of a marina lock to hit the anchored cases with some serious forces of water. Results overall were surprisingly close with a little known Italian model just squeezing ahead. Reed Thorne waded in with a huge article on pulley systems so if you don't get it after this lot - you never will! Meanwhile, back in the water Jim Segerstrom was producing his own excellent diagrams for rope control systems in flood and swift-water rescue.



CONTENTS

PRODUCT NEWS:

SARTEK LED torches, Princeton Tec Headtorches Eos & Apex, Draeger Airline, OguraElectric Hydraulic cutters and spreaders, Reach Rope Retriever, Ruffwear Dog Float-Coats, SMC Pulleys, Laerdal Speedblocks, 3M reflective tape, Nite-Ize Safety Markers, Yamaha JetDrive, Cromwell Dual Helmet System, BW GasAlertClip, Milwaukee V28, Spencer Basket Stretchers (loads of 'em!).

AQUATIC:

Boat&Rope Systems by Jim Segerstrom

BACK to BACK

Protective Cases

MEDICAL:

Changes in CPR Guidelines by Heart&Stroke Foundation Canada

ROPE RESCUE:

A Young Persons Guide to Pulley Systems by Reed Thorne

INCIDENT REPORT

RAPID at Margala Towers, Islamabad

USAR

Pakistan Earthquake USAR-NL

GEAR REVIEWS:

Leatherman Core

Spyderco Assist

Petzl Navaho Complet Fast

EVENTS

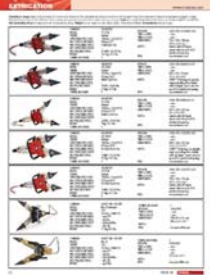
Police Symposium UK 2006

COMPANY SPOTLIGHT

Whitby & Co (knives and lighting)

MARKET GUIDE

Hydraulic Spreaders





TECHNICAL RESCUE magazine AT THE EMERGENCY SERVICES SHOW 2008

**The Emergency Services Show 2008,
Stoneleigh Park in Warwickshire
19th & 20th November.**

Now in its third year, The Emergency Services Show has established itself as the definitive multi agency event to facilitate this crucial sharing of information. A letter of support received from HRH Prince of Wales has highlighted its significance.

THE EXHIBITION

This doubled in size last year and looks set to do the same for 2008. For the exhibitor it provides the perfect showcase to reach all target customers under one roof. For the visitor it is a time effective way of sourcing all the latest equipment, from communications to PPE.

An extensive Outside Exhibition provides a platform for vehicles and vehicle equipment including decontamination response units, boats and air shelters. Large scale demonstrations are also achievable due to the space available. The Emergency Response Zone is a unique area within the Exhibition, exclusively for organisations that offer specialist services to highlight their role in responding to an emergency.

* New For 2008- the Blue Light Zone *

In the previous two years police, fire and ambulance services have taken stands within the Exhibition, both to capitalise on the multi agency networking opportunities provided by the event, as well as to communicate key initiatives.

The success of this has led to this year's Blue Light Zone, an extension of the Emergency Response Zone. This brings together all the police forces, fire and ambulance services into a dedicated area, promoting inter agency cooperation.

THE CONFERENCE

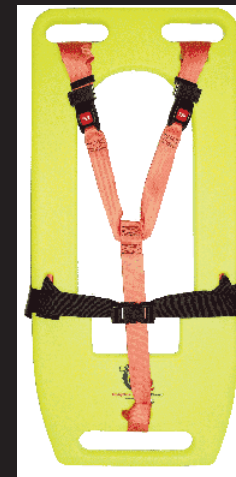
Integral to The Emergency Services Show, the Conference runs over the two days and aims to broaden knowledge of all aspects of emergency response capabilities. This is through a mix of interactive discussions and factual briefings, led by prominent speakers.

The Exhibition is FREE to attend, including the Emergency Response Zone, the Blue Light Zone and the Outside Exhibition.

Visit www.theemergencyservicesshow2008.com to register and to keep updated with the Conference programme as it is confirmed

We look forward to seeing you on 19th & 20th November.
Make sure you come and see us on **Stand Number 65**

PROLITE DRAGONE BOARD



The Dragone Rescue Board is changing the way rescues are done for those safety personnel wearing SCBA units.

The Dragone Rescue Board was developed using a new state of the art process called Roto Molding.

- Weighs less than 10lbs and can support up to 500lbs
- Has fins on the bottom reducing friction when dragging victims
- Has handles on both ends to accommodate a two man carry
- Can withstand temperatures up to 1300 degrees to conduct a rescue
- Will get your victim out of a building in a fraction of the time
- Is resistant to gasoline, diesel, kerosene

and bio- hazards

Standard Colors:

Yellow (ex: Fire Department), Blue (ex: Dive Rescue), and Red (training only).

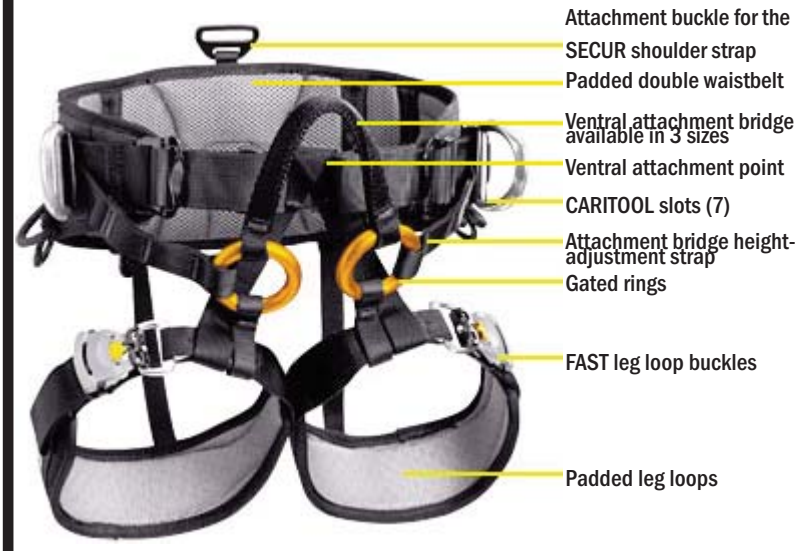
Contact Rapid Deployment Products:

www.prolitespineboards.com



NEW PETZL SEQUOIA SRT ARB HARNESS

Petzl have introduced a new arborists harness which many in rescue will find equally useful. The Sequoiq is available in two versions - one catering for SRT and one catering for doubled rope prusiking. See www.petzl.com



MFC Motorise their Rescue Sled



MFC Survival's RS15T Motorised Rescue sled is ideally suited for use on inland waterways and as a means of transportation for people and equipment in flooded urban areas. Following the success of the range of MFC Rescue Sleds, MFC Survival has added a new product to compliment the MFC Survival water rescue solution which includes walkways, API stretchers, hose inflation kits, drysuits, level 1 water rescue kits, lifejackets and sleds. After much discussion with many of our customers MFC Survival decided to redesign and power their best selling water rescue sled. This resulted in the RS15T. It is fitted with an integral transom with a non return drain port and towing 'u' bolts. Fully inflatable within minutes, the RS15T provides a completely stable and manoeuvrable safe working platform. Easily stowed, the 5m x 2.14m sled packs into a valise which measures just 1.65m x 0.55m x 0.35m.

Lightweight, the RS15T weighs just 56kg making it easily transportable. The sled is ideally suited for use on inland waterways and as a means of transportation for up to 15 people in flooded urban areas, especially where mass evacuation is needed. It can also be used to tow. The shallow draught enables use in shallow waters of approximately 40cm depth and the large bearing surface makes the sled ideal for ice and mud rescues. With integral stern boarding steps the sled is easily boarded. Fully laden and to full capacity (15 people or 1200kg) in trials the sled still powers along at 11 knots with a 15HP, 2 stroke engine and at 23 knots with 2 people.

The RS15T has many features such as stowage pockets, control line patches, internal and external lifelines fitted as standard and many more can be fitted to suit customer requirements. Contact MFC: www.mfc-survival.com

NEW SINGING ROCK TIMBER HARNESS

Almost as if it's tree harness season, Singing Rock have also introduced a new Arb harness - The Timber. This is much more arborist orientated in that the sliding front MHP suits the doubled rope prussik method far more than it does standard SRT rescue techniques.

Timber / W0017

- adjustable sliding D-ring enables you to take safe, comfortable and effective work position
- easily replaceable sliding sling available as a spare part
- wide and stiff padding offers great comfort when hanging in the harness
- side D-rings for work positioning EN 358 or gear attachment
- 4 gear loops
- waist belt construction allows to attach special power saw connector
- rock&lock buckle [contact www.singingrock.com](http://www.singingrock.com)

