MONITOR

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MARCSTA providers receive excellence awards

C hown here are Darren Ridley and Ray Hargreaves receiving the inaugural $oldsymbol{J}$ Catherine Stedman Awards for Excellence in Training presented at MARCSTA's Annual General Meeting on the 3rd December 2004.

In accepting the award Darren recalled his participation with Greg Harris, Bob Halse and Tom Bateman at Minesafe International in 1996 to promote the original MARCSTA concept of an industry specific generic safety induction.

Darren commented on the true passion of the late Catherine Stedman for achieving high standards and for the mentoring of Tom Bateman and his staff that led to his success as a training provider.

Darren has now made a career change and is working for the Master Builders Association.

MARCSTA wishes him every success.

Ray Hargreaves thanked all those who had helped him achieve the high reputation which warranted his award and spoke kindly of the direct and relentless approach of Catherine to quality.

Both Darren and Ray have maintained high standards throughout their training careers and we hope they continue to do so for a long time to come.

Revised AQTF standards

uring 2004 the Australian Quality Training Framework standards were reviewed as part of a commitment to continual improvement. The review focussed on fine-tuning and clarification of wording. The changes strengthen the AQTF by providing a clearer basis for consistent interpretation, greater protection of clients and the integrity of VET qualifications and improved responsiveness to industry needs. The changes to the standards were endorsed by the ANTA ministerial council in December 2004.

These revised standards will apply and be fully implemented from 1 July 2005.

MARCSTA is in the process of upgrading its documentation to meet these revised standards.

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Above: Darren Ridley



Above: Ray Hargreaves

MARCSTA is a not-for-profit Association. All proceeds are reinvested into the industry for future development of safety and training. The Monitor circulates widely throughout the mining industry and contractors to mining companies in Australia

Left: Outgoing Chairman, Terry Condipodero

Below: Incoming Chairman, Joe Maglizza is congratulated by the inaugural Chairman, Greg Harris



Extracts from chairman's AGM address

We constantly need to remind industry, government, our clients and the general public that MARCSTA is a non-profit organisation and that those who direct its activities commit a considerable amount of time and effort, not because they receive any

monetary benefit, but because they believe that the safety and health of industry employees is improved as a direct consequence of the training provided by MARCSTA.

General Safety Induction Training

In 2004 MARCSTA training has been delivered to more than 20,000 participants by providers now located throughout the state.

The benefits of this competency based training have arguably been to raise the baseline awareness of occupational safety and health in the mining industry to a level well above that of any other major industry sector.

Providers

The Assessment Panel chaired by Joe Maglizza and comprising senior industry training and OHS personnel has the unenviable task of ensuring that only those applicants who will add to this pool of quality trainers will be accredited. Statistically, less than half of the applicants gain accreditation. The dedication of members of the Accreditation Panel is much appreciated by the Management Committee.

Formal auditing of providers and their performance was introduced and the results affirm the insistence of MARCSTA that substantial safety training experience in industry be a pre-requisite for accreditation.

MARCSTA provided continuing professional development opportunities during the year and workshops directed by Leigh Farnell and Mark Rosekind have been very successful.

Programs

Our General Safety Induction which represents the benchmark for induction training is now supported by Conduct Local Risk Assessment. This risk awareness program has completed the pilot process and is expected to be utilised by industry in 2005.

The original Managing a Shiftwork Lifestyle program has been re-written and will be released under the title "Extended Working Hours and your Health and Safety" in early 2005.

Client Initiatives

The introduction during the year of an RPL process has enabled clients to have the benefits of a full range of options for achieving or renewing General Safety Induction certification.

Certification for those persons whose work experience meets specific requirements can be achieved through a one hour Fast Track written examination. This option effectively rebuts complaints that MARCSTA's renewal of certification requirements are time wasting and represent a "money making exercise"

Client records are now available to them on a 24 hour basis via the website with confirmation of their training history at the press of a "print" key. This is a unique and time saving service to clients.

Concluding Comments

Last year I pointed out that with the advent of the risk awareness program MARCSTA would be able to offer a three day comprehensive occupational safety and health program. Our objective is to see that all persons working in the industry are provided with the opportunity to receive this low cost quality training.

Special thanks are extended to Jim Torlach, Martin Knee and the staff of DoIR, and Russell Docking, for their guidance, assistance and support throughout the year.

Editorial

ow that the Southeast Asian tsunami itself is some months behind us, and the immediate response phase is well in train, it should remind us about its lessons for safety planning. On the 25th March 1998, a tsunami warning was issued for southern Australia based on a sub-Antarctic earthquake (it reached the Fremantle Water Police at 4pm WA time), and this led to better definition of responsibilities and



Geoff Tavlor

a plan by the authorities. There was another such warning for southern Australia on Christmas Eve 2004.

What characterised the Boxing Day tsunami in safety terms was the relatively large variation in time between the initiating incident and the loss of life, property and natural environment, ranging from a few minutes to seven or so hours. In that it was like the transfer of an epidemic illness between continents by a carrier. The second feature it highlighted was that incidents can occur at very inconvenient times. Although the biological clock can't be implicated in this incident, it often is the reason for the inconvenient time of occurrence, which can lead to a poor response. Another aspect was the importance of communication, and people's preparedness and ability to respond to that communication. For instance US authorities warned the Diego Garcia naval base which was about five tsunami hours from the earthquake. They had problems knowing who to contact in other countries. And within a country the difficulties of communication with manifold coastal settlements on the Indian Ocean rim are enormous. Even a bit of Mexico on the Pacific experienced a 2m tide surge from Aceh. Hard as it is to do so, that suggests factoring the unexpected into emergency plans both before the emergency and in the recovery phase. Then there is the issue of low frequency, high impact incidents and how many resources can be committed to them, so those of you who have done the MARCSTA or another risk assessment course might like to try running the tsunami through the decision making method you were taught. Note also that factors which mitigate the consequences of an incident may be taken into account. Diego Garcia suffered little because of the shape of the sea floor approaches. As always let us learn what we can from every incident, major or minor.



Chief Executive Officer Patrick Gilroy AM

> Chairperson Joe Maglizza **Readymix Holdings**

Vice Chairperson Ross Graham Komatsu

Committee of Management

Warren Claydon Allaine Coleman Terry Condipodero Peter Luobikis Arlene Roe

MARCSTA Monitor Editor Geoff Taylor

MARCSTA plans to run a seminar on recent research into common errors made in risk analysis later this year.

On another note, after a major inquiry which concluded late last year, the use of the safety case regime for mineral processing plants which could pose a major hazard was announced by the Minister for State Development. The regime is contained in the National Standard on Major Hazard Facilities. It is to be hoped that plants are required to be assessed at the design stage, and that in deciding which plants to include, the government errs on the side of caution.

UK drafts bill to introduce corporate manslaughter offence

The UK Government has published a draft Bill aimed at introducing a new offence of corporate manslaughter.

The draft Bill will create a new offence that targets very serious failings in the strategic management of a company's activities that have resulted in death.

The criminal liability of individual directors will not be affected by the proposals. Corporate manslaughter is an offence committed by organisations rather than individuals and will therefore carry a penalty of an unlimited fine rather than an custodial sentence.

The new offence would cover deaths at work and is linked to the standards required under existing health and safety legislation.

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Safety performance of the WA mineral industry 2003/04

The release by the Department of Industry and Resources of the publication "Safety Performance of the WA Mineral Industry 2003/04" once again provides a wealth of information for the safety practitioner to hone his or her professional skills.

Some observations:

- Fatal injury incidence continues to hover around the 0.1 to 0.2 level, the lowest incidence rate ever recorded by the industry (1 - 2 fatals per 10,000 employees). The graphical illustration by the Department on the wall chart accompanying the publication provides irrefutable evidence of the continuing reduction in incidence over the past decade.
- Serious injuries remain the achilles heel of the industry with no improvement evident in recent times. In fact, the serious injury frequency rate continues to *rise* in both the **metalliferous underground** and **coal surface** sectors while it remains **stable** in the **metalliferous surface** sector.

Other important statistics for 2003/04:

Positive indicators

• Lost time injury frequency rates improved in the gold and nickel areas by 14% and 19% respectively;

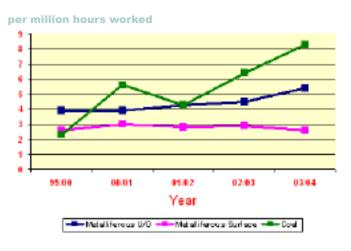
Negative indicators

- The overall industry lost time injury duration rate deteriorated by 10%;
- The lost time injury frequency rate in the iron ore sector deteriorated by 38%.
- Information in the publication and accompanying wall chart has been derived from the AXTAT computerised accident reporting system.
- The publication is available on the Department of Industry and Resources website at www.doir.wa.gov.au/safety-pubs.

Fatality Incidence Rate



Serious Injury Frequency Rate



The ageing factor

Although no information is available on the age of workers in the industry, the analysis of attendees at MARCSTA programs during 2004 does provide a basis for estimating serious injury incidence rates for age brackets, using AXTAT data.

Age Group	Incidence Rate (per 1000 workers)
Under 30	20
31-40	37
41-50	37
51-60	60

The figures suggest that research identifying the causative factors for this apparent age related increase is warranted.

Conferences and courses

MinSands Inform, Melbourne, 30-31 May 2005. Phone: 02 9080 4307, fax 02 9290 3844. email: registration@informa.com.au China Coal and Mining Expo, Beijing, 25-28 October 2005. Phone: 852 2881 5889, fax 852 2890 2657, web: www.together-expo.com.

MARCSTA's 2005 general safety induction program

2005 Training Manual

The General Safety Induction training program, which is reviewed annually, was released in April to providers in all parts of the state and in Tasmania.

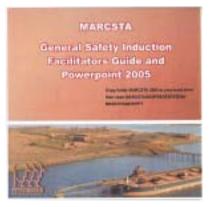
Input to the review is received from industry, DoIR, providers, a range of organisations providing services and support, and safety and health professionals. Suggestions from attendees at training programs are also taken into account.

The program includes relevant changes to legislation e.g. substantial increases in penalties for non-compliance, introduction of the right of appropriately trained

safety and health representatives to issue provisional improvement notes and reporting by employers of disabling injuries.

The supporting PowerPoint presentation has been modified to provide video imagery and stimulation for the program.

The delivery cost of the program remains the same and is at approximately half the cost of comparable alternatives.



Goldfields men's health and well being research project

Surveys have recently been distributed to 1500 randomly selected participants in the gold and nickel sectors following piloting of the survey content by Nicholas Keown, Research Officer for the project.

The survey is comprehensive and addresses a range of matters affecting the health status of men in the mining industry.

The outcomes of the research will be invaluable as there is little data currently available anywhere in the world that focuses on the relationship between work practices and the health and well being of male employees in the mining industry.

Soap and water still the best option for avoiding disease viruses

A University of North Carolina study comparing the effectiveness of hand hygiene products has shown that nothing works better in getting rid of disease-carrying viruses than simply washing one's hands with good old-fashioned soap and water.

Among the viruses that soapy hand washing flushes down the drain is the one that causes the common cold. Other removable viruses cause hepatitis, acute gasto enteritis and a host of other illnesses.

A separate key finding was that waterless hand wipes only removed about 50% of bacteria from volunteer subjects' hands.

MEMBER PROFILE GRD Minproc

GRD Minproc is a leading international engineering contracting company specialising in the design, engineering and construction of resource projects through its technical and development solutions, project delivery and asset management service offerings.

GRD Minproc undertakes projects from its head office in Perth, Western Australia and its regional offices in Johannesburg, South Africa; Santiago, Chile; and Lima, Peru.

Founded in the 1970s, the Australian public company grew rapidly on the strength of the high quality engineering services it provided to the Australian gold industry.

Over the past two decades the company has successfully completed more than 500 assignments, including 300 feasibility studies and 200 major design and construction projects in more than 33 countries across the globe.

Today, GRD Minproc is among the few engineering companies that services the entire resources product development cycle, from feasibility, through to project delivery and into ongoing maintenance and operational needs.

GRD Minproc is committed to improving the safety of its employees and other people affected by the activities of the company. Health, safety and the environment are integral to the GRD Minproc culture and are demonstrated through the progress made in these areas throughout the year.

Highlights for 2004 include:

- Receipt of the 2004 IFAP Safety Award through demonstration of a corporate safety management system
- Working towards achieving certification under AS/NZS 4801:2001 Occupational Health and Safety Management Systems. Once achieved, international recognition under OHSAS 18001:1999 Occupational Health and Safety Management systems will be sought.

In 2004, the company expanded the HSE programs to encompass the company's community relations program, ensuring local communities are actively engaged in issues that may affect them.

New publications...

DolR:

- Code for Mine Survey
- Safety Performance in the WA Mineral Industry, Accident and Injury Statistics 2003-04

Mines and Aggregates Safety and Health Association:

• Pocket Guide to the Five Point Safety System. Phone: (705) 474 7233 ext 279 or www.masha.on.ca WorkSafe:

• Bulletins (electronic only) on changes to the OSH legislation.

 OH&S Practitioner Learning Guides – BSBCMN421A Assist with compliance with OHS and other relevant laws, BSBOHS403A Identify hazards and assess OHS risks, BSBOHS404A Contribute to the implementation of strategies to control OHS risk

WestOne:

 Workbooks - BSBCMN421A Assist with compliance with OHS and other relevant laws, BSBOHS 403A Identify hazards and assess OHS risks, BSBOHS 404A Contribute to the implementation of strategies to control OHS risk

MARCSTA members

FULL MEMBERS

Ausdrill Ltd Australian Raise Drilling Barminco Mining Contractors BGC Contracting Brambles Ltd Charles Hull Contracting Cooks Construction Ltd Readymix Holdings Pty Ltd GRD Minproc Komatsu Pty Ltd Macmahon Pty Ltd Roche Mining Roche Mining (JR) Pty Ltd Skilled Group Ltd Thiess Pty Ltd Total Corrosion Control Westrac Equipment Pty Ltd

ASSOCIATE MEMBERS AVELING Mandurah Safety and Training Services

This list is current at the time of going to press. For further information contact the Secretariat (08) 9355 1400 $\,$

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provider profile Tracmin

Established in 1982, TRACMIN: *Training Action in Mining Industry* is a leading provider of MARCSTA safety training in Australia. It has professional drilling, mining and quarry assessors. Each of its trainers is a specialist with years of practical site work experience. TRACMIN'S trainers are supported by a friendly, enthusiastic and efficient administration team.

TRACMIN has an established reputation within the safety management consultancy and training industry for the provision of high-quality services that are delivered professionally. Integral to this success is the calibre of the trainers, who have had vast experience in the field, as well as in training.

TRACMIN values keeping in touch with the mining industry, and keeps abreast of the latest issues through regular site work in both training and implementation of safety systems and programs.

"We respond positively to client and participant evaluations," says Tom Bateman, TRACMIN's managing director and a MARCSTA provider with eight years experience. "We aim for the best quality training outcomes for participants and employers alike." TRACMIN has delivered on-line learning programs for supervisors and managers which correspond to the nationally recognised units S1 Risk Management, S2 Safety & Health Investigations, S3 Effective Workplace Communication.

TRACMIN was the first MARCSTA provider in Western Australia to provide full-colour multimedia presentations as part of the induction. With over 30, 000 participants over the past years, TRACMIN has extensive experience in safety training for the mining industry.



Above: Tom Bateman

Below: Joe Duyvestyn



Tom has more than 25 years experience in training and mining. As a geologist he has worked throughout Australia, while he has also worked in vocational education and training for over 20 years. Joe Duyvestyn has 10 years experience in workplace training programs, and four years in OSH. His background includes 15 years in the exploration drilling industry. Carl Berglin, based near Sydney, has worked as a metallurgist, process engineer, mine manager and trainer.

TRACMIN conducts the MARCSTA General Safety Induction five days a week from its training centre at 82 Beaufort Street opposite the WA Museum and only 200 metres from the Perth Central Rail/Bus Stations.

MARCSTA	REGISTERED	PROVIDERS
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Mark Adam Jayson Aveling Tony Aveling Graham Bailey Ron Baker Tom Bateman **Catherine Benato** Carl Berglin Danny Bognar **Clive Brindley** Dale Cocker (U) (S) Jim Dandie Geoff Day Peter Dowding Joe Duyvestyn Linda Elezovich

Helen Fleming (S)
Ashley Gilbert
Ross Graham
Ray Hargreaves
Ralph Keegan (S)
Guy Le Noir
Joe Maglizza
Malcolm McFarland
John Preston
Graeme Richards
Merryn Richards
Jason Roberts
Victor Roberts
Des Shaw
Brian Smith

Peter Stoneman Wayne Sullivan (S) Mitchell Talbot Marcus Taylor James Titmus Peter Tredgett Peter Tynan (U) Graham Wall Graham Williams Paul Willoughby Terry Young

The trainers listed above provide general inductions. U denotes underground trainer as well. S denotes shiftwork lifestyle trainer as well. This list is current at the time of going to

press See www.marcsta.com for location of trainers.

News and Views

Those of you looking for a "hook" for a safety activity keep in mind that April 28 is the **World Day for Safety and Health at Work.**

Samuel Alderson the inventor of **crash test dummies** died at 90 on February 11, according to the *International Herald Tribune*. The dummies, originally used by NASA for testing ejection seats and parachutes, were of little interest elsewhere until Ralph Nader's 1965 book Unsafe at Any Speed. The US National Traffic and Motor Vehicle Safety Act was passed a year later. Actors dressed as the dummies were used in a series of videos on management of OHS produced by Workcover NSW some years ago.

CIM Journal for January-February 2005 notes that Malcolm Scoble's earlier article on **women in mining** (see December Monitor) attracted a lot of attention inside and outside Canada. In the same journal Vanessa Anastasopoulos writes on **Mentorship** - Passing the Torch. Canada faces an aging and retiring mining workforce, and passing on skills is important. It cites 16 characteristics of good mentors.

In *Canadian Mining Journal* for October 2004, A. Dalgic and A. Karakus discuss a computerised study of natural ventilation characteristics in a chromium mine.

Australian Mining for February 2005 notes that the Queensland LTIFR has decreased by 61% since 1997-8 from 15.5 to 6.2 (mines 5.3, quarries 7.4 according to the Mining Journal Queensland for December 2004), and that across the country mine safety is at an all time high. But in Queensland the LTIFR is up in a year from 5.9 to 6.7 in surface and u/g coal, with severity going from 82 to 121 and duration from 13.9 to 18. This ends a downward trend for the first time since the Moura recommendations. It also describes how Pronal safety cushions can be used to **part pipes in boiler repair**, an easier and safer method. Also included are articles on **exports of Australian safety equipment**, on WA firm Neuromonics **tinnitus treatment**, and on better safety using **high density polymer rollers** on conveyors.

Mining Journal Queensland for December 2004 features the new **Petroleum and Gas (Production and Safety) Act 2004** after ten years consultation. This features a risk-based outcome-based philosophy. It includes coal seam gas production. There is also a useful article on **heatstress** by D. van Zanten, on **terrorism security** of ammonium nitrate, on noise including **shift length adjustment** by G. Irving, and on Xstrata Oaky Creek No 1 team's win in the **national mines rescue** underground competition.

Australia's Longwalls for September 2004 notes that Austdac's Austran system is designed for inspecting and recording the **maintenance of Austdac self-rescuers**. There is a transponder inside the self-rescuer and the records from the scanner can be downloaded. In the same issue is i.Power Solutions' Live Line Indicator which provides a visual display of the **status of each phase in a three phase AC load circuit.** It verifies (after isolation and before gaining access) that all phases have been removed.

South African Mining for April 2004 notes that the South African platinum industry has a adopted a **universal SHE induction program**, as a result of the Bushveld Safety Forum. Impala and Angloplats will use KBC as the trainer. In it also Neil Watts discusses individual responsibility for SHEQ, and there is an article on the Melco roller brake for conveyors.

Mining Engineering for November 2004 discusses **musculoskeletal disorders in mining**. The article by Steiner, James and Turin includes discussion of lighter welding hoods, and dragline workstation design.

Also in *CIM Journal* for January - February 2005 was this story on mentoring: A retired man was called back to his mine by a panicked successor. No one knew how to fix a broken machine. He came in, drew an X on the machine, and said "hit that with a hammer and press the button". The successor did this and the machine then worked perfectly. The invoice for \$1000 duly arrived and was queried. The second itemised invoice said "chalk mark -\$1, knowing where to put it - \$999".

MARCSTA Monitor

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