Issue #10 December 2009

Training over hill and dale

Former senior MRO McPhail recalls career

More than 30 years after he retired, former senior mine rescue officer George McPhail is unequivocal, "I loved the job."

Now 98, he readily recalls volunteers wearing the McCaa breathing apparatus slogging up and down the hills and along the roads behind the Frood mine rescue station as part of their training regime.

"The men were glad to do that," said McPhail, who joined mine rescue in 1947 and retired as senior mine rescue officer 30 years later in 1977.

McPhail succeeded Tom Fee, one of the original three mine rescue officers, at the Frood station when Fee retired. Eight years later, in 1955, McPhail succeeded Percy Smith, another of the original three, as senior MRO. The first senior MRO and last of the original three, Austin Neame had retired in 1947.

"None, I started right away," said McPhail, when asked of training he received to become an MRO.



Former senior mine rescue officer George McPhail poses at the unveiling of the historical plaque commemorating the founding of Ontario Mine Rescue.

But McPhail was no novice. He had started underground as a labourer at Frood and built a reputation as a distinguished first aider, having coached

three Frood Mine first aid championship teams in Inco's annual company-wide competition for the R.D. Parker Shield.

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Volunteers 'used a lot more muscles'

ine rescue training isn't what it used to be, say a pair of long-time volunteers, and that's good because mine rescue isn't what it used to be.

"It was pretty intense. You used a lot more muscles," said Gilbert Wahl, a

36-year volunteer still training as a rescuer with Wesdome's River Gold, recalling his early days in mine rescue.

"We use to spend an hour digging in a muck pile wearing an apparatus," said Wahl, who was trained by Ron Eveson in 1973. "It was a little more labour intensive back then."

Ernie Sapinski, a 32-year volunteer, was first trained as a student at the Haileybury School of Mines in 1977 and now trains with Xstrata Copper Kidd Mine. He has similar recollections.

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We need you!

If you have comments about the newsletter, or suggestions for future articles, please contact Susan Haldane at MASHA, (705) 474-7233 ext. 261, or susanhaldane@masha.on.ca



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McPhail developed training techniques

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Without training resources other than the Ontario Mine Rescue Handbook and the McCaa breathing apparatus, McPhail said he relied on his own ingenuity, as well as the hills behind the station, for training. He figured out a way to train volunteers in smoke.

"We went to the mine and we took our men in smoke. We used a lot of smoke," he said, but no smoke bombs or generators. "We used kerosene to start a fire," burning tarpaper and rubber in deadend stopes to fill the area with black smoke.

Teams were trained how to extinguish fires and build air-tight barricades in near-zero visibility.

When McPhail became senior MRO he visited mine rescue operations across Western Canada and the United States to exchange ideas and information on training techniques and practices.

"We went to Manitoba and Saskatchewan, Alberta and B.C. I went to every province," he said.

"I tried to show them what we were doing and we got some answers (to issues we had)," McPhail said. "We were so good we had many people from England, from Ireland and Germany" visit, as Ontario Mine Rescue began to develop as a national and international role model.

He also regularly travelled to U.S. competitions as an observer.

"I went down by myself and I



Former senior mine rescue officers George McPhail, left and his successor Ron Eveson share a laugh during a mine rescue competition in the Northwest Territories in 1977.

watched them carefully," said McPhail, noting that the Americans were procedure-focused. "I didn't try (to teach them). They were good. They did everything by the book."

During his time as senior MRO McPhail introduced certificates to acknowledge the training accomplishments of volunteers, developed the advanced training program to further challenge and train volunteers, and played a significant role in the introduction and growth of mine rescue competitions.

Visiting U.S. competitions and studying incidents in other jurisdictions, gave him a steady source of training and competition scenarios to adapt to Ontario mines.

Mine rescue equipment also evolved during McPhail's time with mine rescue. Though he didn't see the more recent switch to the hand-held iTX Multi-gas Monitor, McPhail does recall caged canaries to test oxygen levels being used at the start of his career.

McPhail played a key role in the acquisition of the BG174 in 1966, having travelled to Germany with former MRO Harry Moorehouse for a first-hand examination and demonstration of the breathing apparatus. He arranged an evaluation process with Inco mine rescue teams working in smoke. Half wore the old McCaa apparatus, half the new BG174 and halfway through the men changed apparatus.

The BG174, the forerunner of the BG4, was "well-received by the men", he said. They found it safer because "they could see how much oxygen was used in the unit."

McPhail was succeeded as senior MRO by his colleague Ron Eveson, whose very competitive attitude to competitions led to occasional differences "but we were good friends".

Thirty-two years later, McPhail still takes strong interest in mine rescue news, and proudly tells visitors, "I loved the job."

Thank You for 20 Years of Service

Xstrata Copper - Kidd Mine

Ken Beamish Nelson Girard Ron Seguin Rick Byrnes Goldcorp Hoyle Pond

Armand Massicote Mike Simumovic Ken Cook Canadian Gypsum

Tim May

Vale Inco Ltd.

Wayne Beckerleg
Dan Gagnon

Finding Answers in Questions

Training, preparation focus of MRO's work

John Hagan has a stock response to any mine rescue volunteer's question, he asks them the same question.

"I'm testing the group from the time I walk in the door to the time I leave," said the mine rescue officer/consultant for Onaping, and that includes encouraging volunteers to use the resources available to answer their own questions.

Grant Saunders didn't have much of an adjustment issue when he made the switch from mine rescue volunteer to mine rescue officer/consultant about six years ago.

"The biggest adjustment was that one day I was asking the questions, and the next day I needed to answer all of the questions," said the MRO for Red Lake who has no concerns about being stumped.

Saunders' preparation for the position included 10 years as a volunteer, a training period in Sudbury with senior MROs, a Train the Trainer course and having the former Red Lake MRO Markus Uchtenhagen available for six months.

If there is a question the collective knowledge of Red Lake mine rescue volunteers and he can't answer, said Saunders, the answer would only be a phone call away to mine rescue program supervisor Charlie Burton and his more extensive resources.

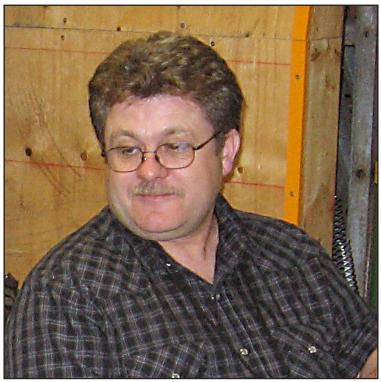
But that hasn't happened yet, he said.

While the two have slightly different approaches to questions, both Saunders and Hagan spend the greatest proportion of their work time, more than 40 per cent, just training mine rescue volunteers.

"Refresher training is the majority of it," said Hagan, and that occurs mainly from September through to April. But he also handles at least one introductory course a year, technician training and technician refresher training, and training for competitions.



John Hagan



Grant Saunders

But actual training time is only a fraction of their work time. Lessons and exercise time require preparation. In fact, occasionally preparation can take longer than actual training time.

Hagan said preparing for a one-day refresher training usually takes two days of work that includes developing and writing the scenario, visiting the mine to scout out the exercise area and conferring with mine management, followed by another visit to ensure everything is set up properly and researching material for the afternoon session.

In April and May, the focus for Hagan and Saunders shifts to training for the district and provincial competitions.

"Preparation for competition is pretty much the same as for regular training," said Saunders, though the problems "are a little more detailed."

Hagan agreed, "For competition, it's basically writing problems."

Both dedicate three additional training days to each team in the district competition and five days to their district's representative in the provincial competition.

Hagan, who has been training for 13 years after serving 10 years as the provincial technician, said that among the training changes he's noted is in the amount of time devoted to equipment, but the biggest change might be in himself.

"My approach to training has changed," he said, since earning a certificate in adult education through Cambrian College in November 2007. "I recognize people with learning disabilities now and adjust for them."

And the program has helped Hagan shift the learning process from trainer-directed to learner-directed by asking questions, rather than providing information. Volunteers become more active in the learning process, clarifying their knowledge and thoughts, while Hagan can more effectively evaluate their understanding and performance, and make adjustments to his training.

"In the past (for refresher training) I would run the scenario in the morning and then review it for 15 to 20 minutes. Not anymore," Hagan said.

"Instead of lecturing I'm trying to pull the answers out of them."

Training less physical, but still tough

Changed to meet evolving needs of mine rescue

Continued from page 1

"You put a guy on a stretcher and you carried him around a lot," Sapinski said. "You had to be tough." But the veteran doesn't think today's volunteers are any less tough.

"Now they overload these stretchers with gear," he said, noting the breathing apparatus, first aid kit, and numerous other pieces of equipment now conveniently carried in a stretcher both with and without a casualty.

There wasn't much equipment to learn when he started, mainly breathing apparatus like the BG174, the Oxy 45 and the Scott Air Pack.

"You'd just tear down the BG174 and reassemble it," Sapinski said. "Now there's all kinds of new equipment and there was only one book (the Ontario Mine Rescue Handbook), not three or four and we had to learn it inside and out."

For years after he started, Sapinski helped fellow mine rescuers who could not read.

"I used to read that book and quiz them," he said. That would be difficult now because there is more training material.

Simpler Material

"The material was simpler. Everything was in PSI instead of bars," Sapinski said.

"There's so much more to learn now," he said. "Now you have checklists. In those days you had a checklist, only it was in your head and if you forgot something you got whacked."

But 30 years ago "we did not have the need for that," Wahl said.

"It's a better program now," Sapinski said. "Before we just responded to mine fires, now we respond to every type of emergency. And we're trained to respond to every type of emergency."

"You could see it starting to change in the late 1970s," said Wahl, as greater emphasis was placed on first aid training, followed by training in the first pieces of specialized equipment, like the rock splitter.



Veteran mine rescue volunteer Ernie Sapinksi, second from right, field tests a Scott Air Pack during a competition. Sapinski has competed in 15 district and six provincial competitions.



Mine rescue volunteer Gilbert Wahl, front row right, poses with his team following a competition. Wahl, still active as a mine rescuer, also serves as a member on the Mine Rescue Technical Advisory Committee.

The Falconbridge Mine Rockburst in 1984 which claimed the lives of four miners accelerated the changes. There was more training on equipment, more in-depth knowledge, and less mucking in an apparatus.

The introduction of new, specialized equipment coincided with the arrival of a new generation of mine rescue officers, like now mine rescue program supervisor

Charlie Burton, which seemed to ease the adjustment for volunteers, Wahl said. People were open to change.

Though the training and personnel has changed, said Wahl, one constant has been the dedication of the MROs and the leadership they have provided.

"They're all great they all know their stuff," Sapinski said. "And it all starts with them."

Author! Author! Not!

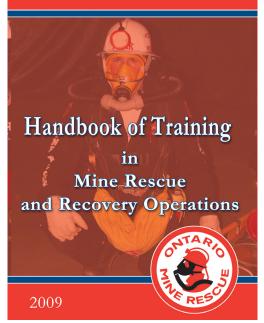
Who writes all that material?

The new Ontario Mine Rescue Handbook, released this autumn, doesn't list an author.

Nor do any other training materials, such as courses, training modules or participant manuals, produced by Ontario Mine Rescue.

The original handbook, the principle training resource for most of Ontario Mine Rescue's history, was cobbled together from an assortment of manuals and brochures provided by the United States Bureau of Mines, a generous contribution once acknowledged in the front of the handbook.

That acknowledgement has been moved into Chapter 1 in the most recent handbook, and replaced in the front by a new acknowledgement that the book, like the other training



materials produced by Ontario Mine Rescue, is a cooperative effort by mine rescue and MASHA staff, and outside expertise which may include equipment manufacturers, Ministry of Labour personnel, and the mine rescue technical advisory committee.

New and revised training materials, like the handbook, may pass through

many hands before ending up in the hands of volunteers, though the process is usually unique for each project.

Mine rescue officers/consultants, management and the technical advisory committee identify training needs and consult on how to best meet those needs – course, training module, manual, etc.

A subject matter expert – usually an MRO, and a writer are assigned to prepare the material. Research is conducted. References are checked or updated. Outside experts may be consulted, and necessary information obtained from manufacturers. The text is written, rewritten and revised throughout the process.

Appropriate photographs, illustrations, charts and graphs are collected, and assembled with the text by a graphic artist, into a near final product which is reviewed, edited and revised into the final training product.

Final at least, until it's time to revise and update likely within two to three years.

International rescue body tips hardhat to Gryska

he International Mines
Rescue Body (IMRB)
placed another hardhat
on Ontario Mine Rescue manager
Alex Gryska's head during the fourth
International Mine Rescue Conference
this autumn in the Czech Republic –
IMRB secretary.

"We've been there right from the outset and people have been using me as a resource to connect to others," said Gryska, explaining that the main function of the new job is to provide continuity and internal communications for the organization.

The IMRB was created in 2001 to promote mine rescue at an international level and to improve mine rescue



Delegates to the fourth International Mines Rescue Body in the Czech Republic this fall discussed ways to improve mine rescue knowledge and development.

knowledge and practices by supporting innovation and global cooperation. The organization meets every two years, but does not have staff to maintain records or provide continuity.

MASHA took on the responsibility of creating, maintaining and being the contact for the IMRB's website, www. minerescue.org, at the organization's last meeting in Nashville, in 2007, and assuming the role of secretary was not a big jump in responsibility, Gryska said.

Tasks include maintaining contacts, and ensuring IMRB information is distributed on a timely basis to all members, he said.

Continued on page 6 - NATIONS

New health and safety association to serve Ontario's north

Ontario Mine Rescue will stand under a new umbrella come January 1. The former Mines and Aggregates Safety and Health Association (MASHA) will be part of a merged organization serving all sectors in northern Ontario, as well as traditional clients in the south.

The creation of Workplace Safety North was announced in 2008, and the new association will officially start business January 1, 2010. The association joins together MASHA, the Ontario Forestry Safe Workplace Association and the Pulp and Paper Health and Safety Association. As well as serving all companies in these three sectors, it will work with sister organizations to serve firms in all industries in northern Ontario.

Some details of the new organization are still to be confirmed. It is led by Candys Ballanger-Michaud, formerly Director-Northern Region with the operations division of the Ministry of Labour. Stay tuned for more information in 2010.

Nations focus on improving mine rescue

Continued from page 5

More than 25 nations attended the September week-long conference in at Hradec nad Moravici, approximately 30 km west of Ostrava, to hear papers on topics such as using computer software as a guidance system for emergencies, a long-term breathing unit designed for use in vehicles, new escape and rescue chamber designs, and the potential of small jet inert-gas generators in firefighting.

Past conferences featured presentations and discussions on new devices and systems for fire and explosion protection, long-term breathing protection, ropesupported rescue, self-rescue and emergency respiration.

In addition to longtime members, such as the United States, Australia, South Africa and Poland, first-time non-



Ontario Mine Rescue manager Alex Gryska addesses the fourth IMRB conference.

members attending included Switzerland, the Netherlands, Austria and Vietnam.

The international organization also revised its membership rules, allowing different mine rescue organizations from the same country to join but restricting voting to a one-country one-vote basis.

Canada was also represented by mine rescue organizations from Manitoba and Saskatchewan, the latter by former Ontario Senior MRO Malcolm Smith.

The next IMRB conference will be held in Beijing, China in 2011.

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