

# Future Hockey Star





# Applying Virtual Reality to Ontario Mine Rescue Operations

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# 2005 Provincial Mine Rescue Competition Champions



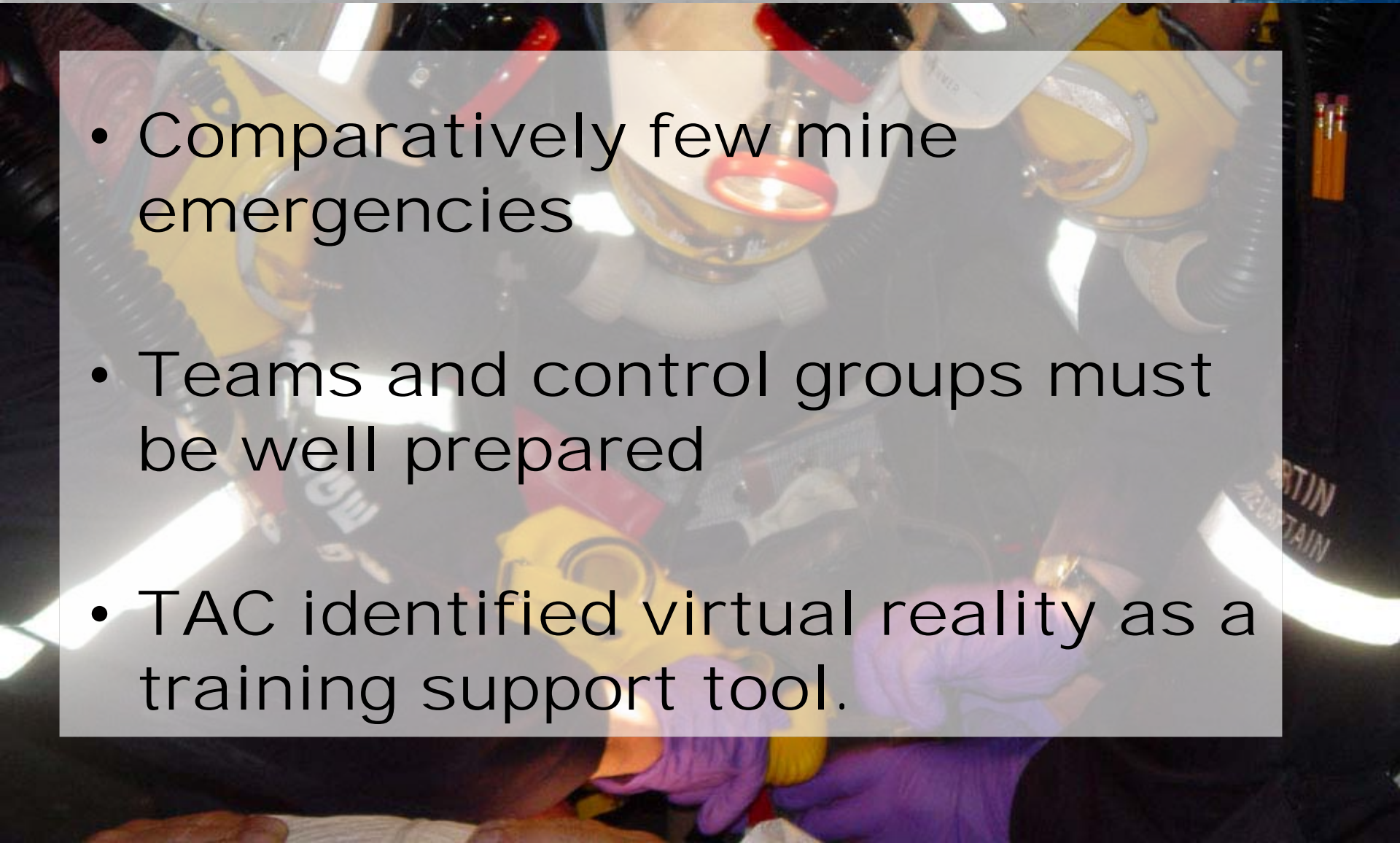
## INCO - West Mines



# Project Origin



- Comparatively few mine emergencies
- Teams and control groups must be well prepared
- TAC identified virtual reality as a training support tool.



Virtual Reality project is a collaboration of



Industry Academia MASHA



# What is Virtual Reality



Virtual reality is a highly interactive, computer-based, multimedia environment in which the user becomes a participant with the computer in a 'virtually real' world.

# Purpose of Project



To explore the use of virtual reality as a decision making tool to assist control groups during an emergency.

# Traditional Control Group Training Methods



- Classroom environment
- Lecturing
- 2 dimensional plans and sections



# Demonstration Project

- Uses 3 dimensional computer images
- Real time
- Randomly-generated fire and non-fire scenarios
- Built in knowledge testing

# Demonstration Project



- Content based on existing control group training
- Integrates existing Ontario MR procedures
- Communication between team and control group is critical

Documentation

Options

## WINZE HOISTMAN'S DUTIES

On being requested to introduce the STENCH GAS, the hoistman on duty will do the following:

A) Obtain and record the name, number and location of the caller, location and type of fire.

B) Place request for assistance (if necessary) and inform them that there is a fire underground and request STENCH GAS be injected in the main fresh air fan and compressor.

C) When advised of the introduction of STENCH GAS, the winze hoist must be manned.

# Regional Mine Demonstration



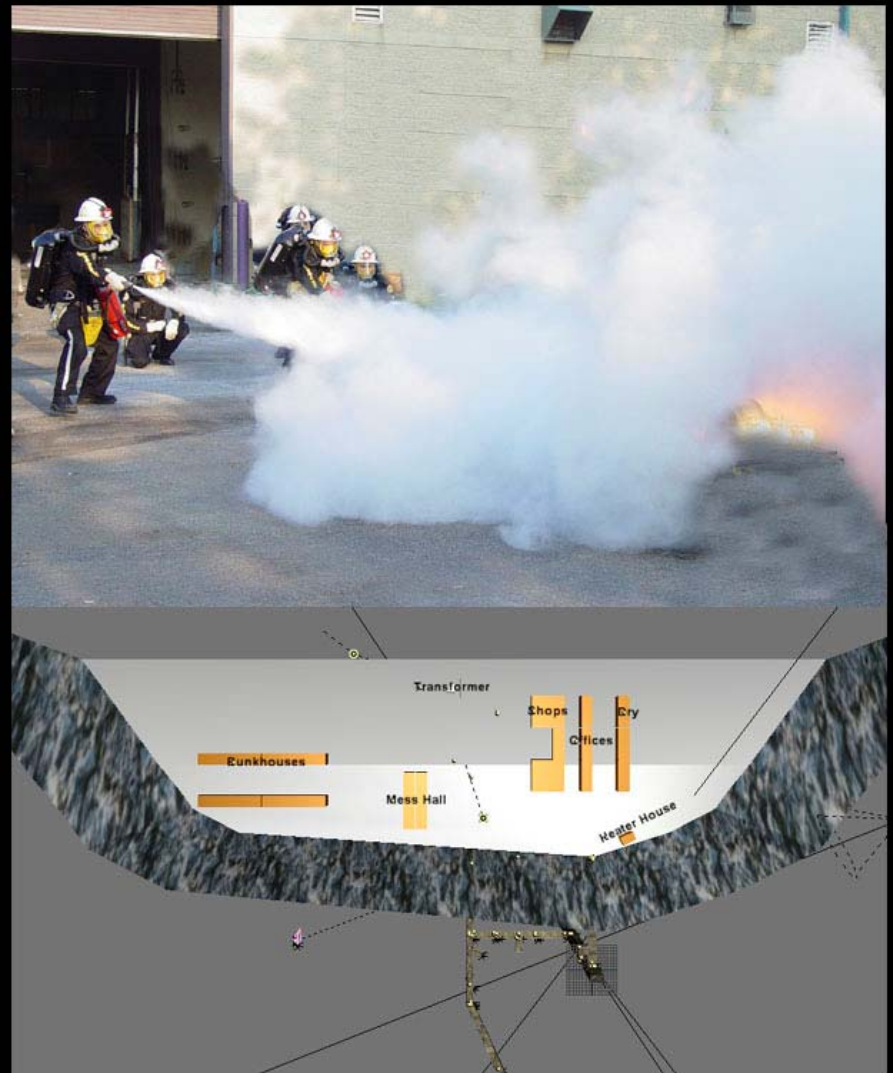
Click [here](#)  
to view  
DEMO



# Conclusions



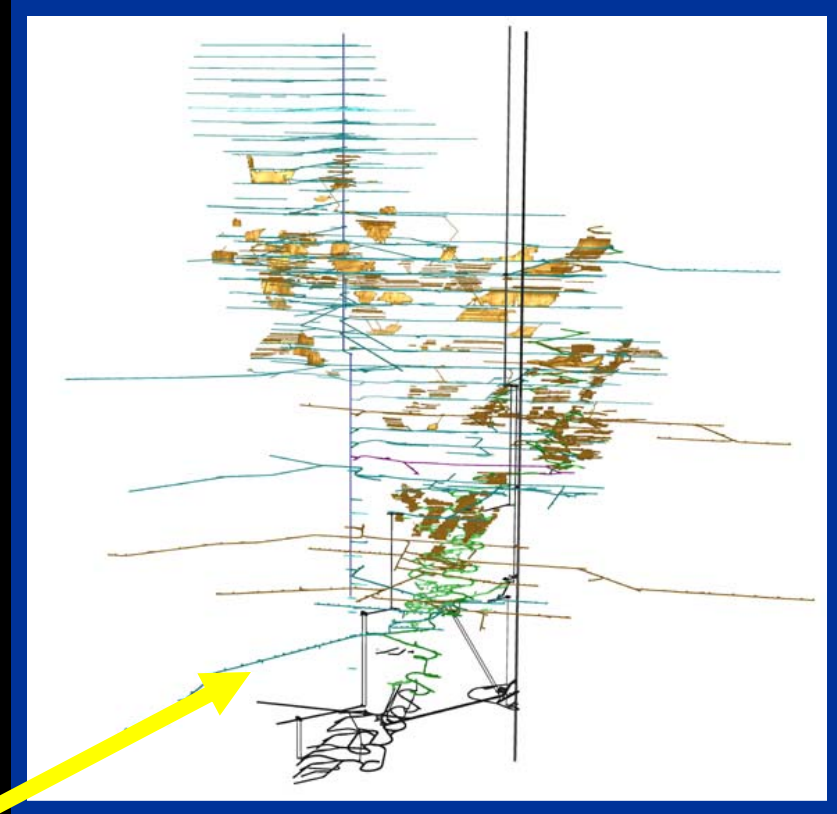
- Simulation demonstrated to numerous groups (TAC, Labour)
- Feedback very favourable
- VR seen as a powerful decision making tool



# Next Steps



- Integrate more complex fire and non-fire scenarios
- Variable ventilation network
- Incorporate geomechanics component into future development.



Isometric

Red Lake Mine 2