<u>www.canadianranger.net</u> Winter 2006 – Safety Equipment Recommendations





There have circumstances in my forestry career where working in the bush suddenly presented me with a fairly significant safety concern. Unsafe conditions cannot always be foreseen so when they do occur it is important to remember the conditions of the situation. I thought I would share this experience with you; perhaps someone will benefit from this paper... Accidents can happen when you're at work, during field training exercises, deployments and regularly scheduled Ranger meetings (anywhere at anytime).

Below are a few occurrences that I have experienced personally (in my professional life) and integrated the lessons into my Ranger life. This paper deals with specific Safety Equipment and why Rangers may want to consider adopting it as kit.

December 2000 the Kalum Forest District Small Business Enterprise Program needed to do some timber recce in the Arbor lake Operating area. There was a dispersed patch of very nice high elevation amabalis-fir saw log grade timber that required ground confirmation. The project officer in charge of this particular timber sale asked me to come along with him and I accepted. A few days later we were lifting off from Elsworth Camp in a Bell 206 Jet Ranger to the vicinity of Arbor Lake. Arbor Lake is located within a snow belt. I was carrying my standard Forest Service Kit, although fairly heavy, working in isolated and remote locations necessitates special precautions.



I brought my full day kit, not much different from what I have built into my Ranger Day Pack. Kit primarily consists of Cruising Vest, Layered wool clothes and wool trousers, Helly Hansen® rain gear, large field lunch, 2 litres of water, snowshoes, gloves & spare waxed leather mitts (with wool liner), toque, red pen flares, personal first aid kit, razor sharp hatchet, VHF Radio, spare battery, Mini-MAGLITE® flashlight, Silva Ranger® compass, GPS, aerial photo, forest cover map, 12ga shotgun, 6 rolls of winter-weight flagging tape, permanent marker, Duksbak® binder, waterproof paper, pencils, survival kit and **Wide Brim Hardhat**.

We flew over the recce area several times and took a few notes on various observations. Early morning cloud cover was quite low which required us to fly just over the treetops. After some time we managed to find a landing location about 2.5 Km from the recce area. The landing location was on the edge of a small frozen swamp covered in a thick blanket of snow. Although I had exited helicopters on frozen swamps several times in the past it was never really an experience I enjoyed. But that is a discussion for another time....

Properly exited from the helicopter and gear removed from the Cargo area we both hunkered down and gave the pilot the visual "Thumbs Up". In short order the Bell 206 powered up and flew off. It is not until the audible 'thump thump' of the rotors disappears that to realize that you are in the middle of no-where in the dead of winter. All you hear is the sound of the wind and your own thoughts. After dusting off the powdered snow from the rotor wash we proceeded to don our field attire. The snow was deep and it was fresh. It had been snowing all night up at the top of the mountain.

Before venturing into the timber the skies had started to clear. Blue skies and sunlight brightened our day. The temperature was warming.

<u>www.canadianranger.net</u> Winter 2006 – Safety Equipment Recommendations

Navigating to the site was easy, although slow. One does need to calibrate their pacing while wearing snowshoes otherwise distance estimation can become overly complicated.

Once we arrived at the proposed block the temperature had risen but in the shade of the forest canopy it is difficult to be precise. The powder snow that we had grown accustomed to in the morning was becoming heavy and wet; This made for strenuous walking. Additionally it was starting to rain however we were under blue skies.

Yes you guessed correct! The snow in the forest canopy was melting rapidly.

Thus we come to the root of the story. Amabalis-fir (Abies amabalis) when mature generally have rounded tops. A significant plateau of snow and ice can build on and in the crown of these trees.





The average height of these trees is 40 metres. A fragment of broken ice dropping this distance can do significant damage to a human being upon impact. To add to this the chunk of ice is also bringing down with it all of the fragments it hits on the branches below it as it travels through the crown. Therefore each hit is represented by a shower of ice, snow and water.

It is not until you are in a situation like this that you really get to appreciate your hard hat. Throughout the day I was continually struck by small chunks of snow and ice across the shoulders, back and head.

On one occasion I received a direct impact to the head by a shard of ice and snow. The force of the impact removed the hard hat from my head and buried it in snow a few metres down-slope from me.

While I was temporarily fazed by the impact I wasn't injured. I noticed some mild discomfort in my right shoulder (which received some of the impact) but otherwise I was unharmed. I was probably quite lucky to have been able to walk away from that blow. I am more concerned now thinking about "What could have been" if it wasn't for that hard hat.

Part 8 Personal Protective Clothing and Equipment - OHS Regulation & Related Materials Worker's Compensation Board (WORK SAFE BC)

Section 8.11 Safety Headgear

(1) Safety headgear must be worn by a worker in any work area where there is a danger of head injury from falling, flying or thrown objects, or other harmful contacts.

This simple rule just makes good sense!

www.canadianranger.net Winter 2006 – Safety Equipment Recommendations

The WCB identifies that working in forests constitutes an overhead hazard. Try going for a hike in the Forest on a really windy day and you will see what an over-head hazard looks like... (NOT ACTUALLY RECOMMENDED)

The Worker's Compensation Board does not insure rangers because we are hired by a Federal Government Agency (DND), which has, it's own policy. Either way it makes good practical safe sense to wear some protective equipment as it applies to the task(s) at hard. Additionally hardhats have a multitude of field expedient uses:

- 1. Protects your cranium from over-head hazards;
- Keeps your head dry It is 100% waterproof ⁽²⁾

- Water Container (dew collector);
 Hi-vis for Domestic Operations;
 Attach face screen & ear muffs;
 All hardhats are designed to attach winter liners;
 Great for pushing through thick underbrush;
- 8. Rugged and Reliable & Lightweight



There are a multitude of hard hat designs available to purchase. Generally they are, on average, not expensive unless you're looking for hardhats with specialized attachments or harnesses. Additionally because hardhats are safety items you do not pay tax on them.

The hardhat I purchased and continue to use in Ranger exercises and operations was made in Canada by a company called NORTH (model: Everest Wide Brim). It only cost \$30.00 plus an additional \$5.00 for reflective adhesive tape which I attached later. Great for night time exercises when you 'Want to be seen'.



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Next time you receive your Ranger pay consider putting some of it aside for personal safety equipment. Many of us reside in towns where the forest industry plays an important role in the local economy. You should be able to find a retailer that carries safety equipment.



Taken from 4 CRPG web site - http://www.army.gc.ca/4CRPG/bc/slides terrace kitimat.htm

In Conclusion:

When out of Garrison Uniform Rangers will wear field expedient kit. Quite often they wear military surplus clothing because:

- 1. It is suitable for the field
- 2. It is durable;
- 3. It is inexpensive

Safety equipment and clothing generally follows similar criteria. Safety Equipment and Clothing is designed to be affordable so that workers have an opportunity to meet the safety standard of the day without going broke. In the end we all want to go home uninjured having accomplished something important. Not everything the Canadian Ranger does requires a high level of camouflage & concealment. Often wearing hi-vis equipment is integral to the task at hand – especially for local assistance to domestic operations.

If you are concerned about jokes and peer pressure regarding the application of hard hats think again. Safety is no laughing matter when someone is injured – or worse.

Vigilans

Richard Kean Canadian Ranger

