<slide – Em Comms>

Hello Everyone.

This is the first in a series of presentations about helping you prepare for what lies ahead.

Today's topic is an overview of Emergency Communications – or EmComms.

I think it is fair to say that if you are here it is because you believe there is a real possibility of SHTF or as some people like to call it, the zombie apocalypse.

<slide – SHTF>

There are any number of scenarios for SHTF, both natural and man-made, and you are welcome to speculate on which one is most likely.

But whatever the scenario, it will have its challenges. What we are looking to address is one of the most fundamental challenges – the power is out, the internet is down and the phones are dead.

In those scenarios the need for communication becomes heightened – to ask for help, to provide help or to simply know what is going on.

An alternative communication capability must be established before SHTF happens, something that will survive an emergency and ensure people can still connect no matter what.

In other words – an emergency communications network.

<slide – radio>

Radio fits the bill perfectly.

The technology is readily available, easy-to-learn and affordable.
and there is no infrastructure - nothing to break or turn off.

Radio provides a communications capability that is totally independent and self-contained.

It is the ideal metaphor for like-minded people like us. Independent and self contained individuals who chose to connect with other like-minded people.

That's a network. Now just add some radios and you have an emcomm network.

<slide – range / two-tier>

One of the realities of radio is range – how far you can get your message to go.

As it turns out, there are basically two kinds of radio – long range and shorter range.

<slide – short range>

At the shorter or local range – like your town or city - you have

- walkie-talkies
- CB radios
- LoRa/Meshtastik devices
- VHF/UHF Amateur radios

Each of these are well suited for local networks, each with their own pros and cons.

<slide – long range>

Fo long range we have HF or high frequency amateur radios – the message can be bounced off the ionsphere and make it around the world. The equipment is more costly and complicated and you need to be more expert to operate them – as well as be licensed.

<slide - network
As we are looking to create a broad area network the idea is to create a two-tiered relay set-up – local short-range networks connected together with a single long-range network.

<slide – Baofeng>

At the local level we have been encouraging groups to adopt VHF/UHF amateur radios because it has been proven to be effective in local networks around the province and the country – from Norfolk, Sault Ste Marie and Leamington to Victoria BC and beyond. Based on the ubiquitous Baofeng UV-5R it is relatively easy to get up and running with a powerful, expandable device that is both affordable and easy to use.

While normally you would require a license to operate an amateur radio like the Baofeng, we have a work-around that gives you the simplicity of a walkie-talkie with the range of an amateur radio. More about that in a future presentation.

<slide – LoRa>

We also encourage groups to experiment with LoRa/Meshtastik devices. It is a relatively new text-only technology that has a number of advantages, like the ease of infilling a network as well as message encryption. It will likely become the mainstay of local networks in the future.

<slide – CB>

CB radios are also an option. If your group already has CB radios it makes sense to use them to build out your local network. I understand there are a number of these in place.

<slide – HF digital - interlocal>

At the long range or interlocal level are the licensed hams with their HF rigs. In addition to voice, we are working on making the interlocal network digital, which has a number of advantages – such as reliability of connections.

<slide – bridging the tiers>

The bridge between the local and interlocal tiers is less than seamless at this point. Hams relay the messages they receive to their local network.

So that’s what we are building – an emergency comms network that connects all like-minded people – across the city, the province, the country and around the world

<slide – how can you help>

So how can you help this come about? There are a number of things you can do:

- you can Help to build local networks –
- by helping to get devices into people's hands and
- then helping them to learn to use them effectively

You Can also Help to build the interlocal network,

- by recruiting like-minded Hams (the more the merrier)
- and by helping like-minded people get their license and then set-up an HF rig

Other ways to help include

- helping with our information efforts like emails, website and Telegram
- sharing your expertise
- conducting research
- organizing emergency drills

And just by getting a radio and learning how to use it you are helping to build the network.

And bear this in mind ... If nothing bad happens – and lets pray thats the case – then we will still have connected groups and individuals into one network – and that cannot be a bad thing – in fact it bodes well for our future.

<slide – Questions >

Pop Quiz. A couple of quick questions to test your knowledge.

What do we mean by the term EmComms?

What are the two tiers of the Network?

What are the primary devices that can be used to build a local network?

What is the preferred device at this time?

What are some of the things you can do to help?

<End Screen>

Thank you for your time.

73