HAM Radio Familiarization Workshop

By Thomas thomascissp@gmail.com 801.810.9889

Use this doc as a landing page for Radio resources.

REMINDER MESSAGE:

Brothers/Sisters, the 3rd Sunday of each month we test/validate our radio communications at 7:30pm on 154.570 (channel 19). This channel is for those that do not have a license. This frequency is authorized by the FCC to be used by non-licensed persons.

At 7:30 the "net control" will call each ward to check in. We will provide a 1-2 minute training on the radio use.

If you would like to LISTEN ONLY to the City's ERC net, that is on ch 8) and its each week Sunday at 8pm.

Once you have your license we would love to have you checkin on the City's ERC net.

If you would like to get your radio license, please see:

https://hamstudy.org/tech2018

We recommend upgrading your antenna. You can use your own personal funds or the wards budget upon approval from your bishop.

https://signalstuff.com/product/super-elastic-signal-stick-sma-female/

Other Radio Communication references can be found on Thomas' blog:

http://libertyfoxdefense.com/neighborhood-radio-communications/

There is a color diagram of the controls of the radio most people will find helpful.

TRAINING STAKE PRESIDENCY

Examples of Radios enhancing relief efforts. fire/floods/community building.

- Impressions to prepare a few simple things that will have a big impact when we have an emergency event.
- Historically, each ward has had multiple HAM operators to shadow leadership. However, given virus impacts, we have the need to "enable" leadership, so the plan is that church leaders will use a non-ham freq to communicate/direct relief efforts and that licensed operators will use the SS city HAM ERC frequencies to coordinate between the non-licensed freq and licensed freq.
- Having all bishops/eqp/rsp and all stake leaders on 157.570 will help simplify coordination, but might result in heavy traffic so we would need to manage the net.
- WHY radio?
 - Communication network that can not be taken down.
 - o Talk to entire team at once, so long as they are within range of the radio.
- Take charge during an emergency reduces: confusion and wasted resources.
- HOW to use the radio.
 - Handout
 - Letter to bishops
 - o Demo
 - Practice

Please each sunday at 7:30pm on 154.570 (MURs2 ch19) which non-hams can use & simplex).. Set a phone reminder!

RADIO RULES

- 1. Don't interfere with FM radio stations nor repeaters
- 2. Only relay facts that you know are true. Misinformation can travel quickly!
- 3. 70cm/440 cuts through obstacles better than 2 meter (144)
- 4. Do NOT transmit on HAM frequencies w/o a license unless lives are at risk!

Recommended Radio:

Uv5r https://amzn.to/39weD63

Stake leadership bishops, eqp/rsp training:

https://www.youtube.com/watch?v=c4ayb441QRs&feature=youtu.be

2016 general radio familiarization training:

https://www.youtube.com/watch?v=dXj3k6AvRjo&feature=youtu.be

Neighborhood online Training Recorded (basic radio navigation and usage):

https://bluejeans.com/playback/s/c4yjlziGJOLo2jr5hStt1FXsxll75eshX6mV1m4Klvc5ClQsSxl5S TPacUU7a6Op To program your radio, Download chirp -- (you must have a kenwood to usb cable too): https://trac.chirp.danplanet.com/chirp_daily/LATEST/

Thomas' chirp file (advanced freq for most of Utah, less non-ham freq and more ham-freq): https://drive.google.com/file/d/1OLrUPx1UVrBTIVyMkWQKmBDsm534421r/view?usp=sharing

Google sheet of Thomas' freq:

https://docs.google.com/spreadsheets/d/1XjUmMff2FrpFE7H2j8v-DjOgod9JBjHBFol4huWLusw/edit?usp=sharing

Stake chirp file (lots of non-ham freq and the same memory channels we did for radios purchased in a group buy in 2016 for our stake):

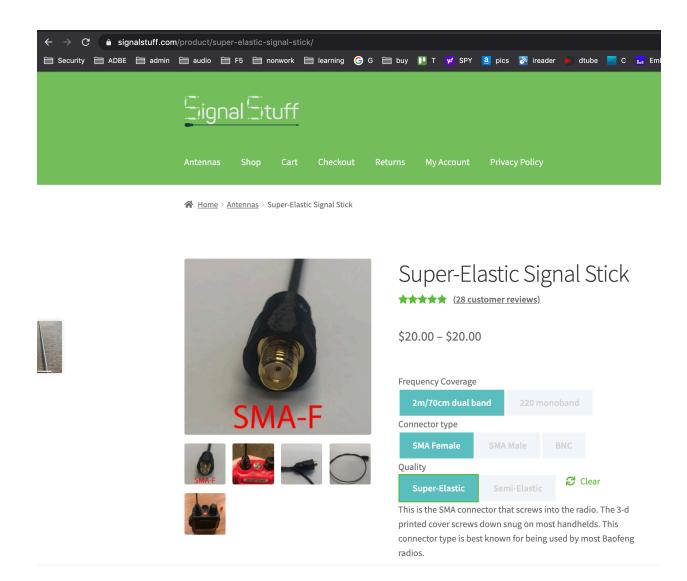
https://drive.google.com/file/d/1WsNn_VP6cpCNi1uzRUpoTBle8dOzGqqX/view?usp=sharing

Stake frequencies in google spreadsheet:

https://docs.google.com/spreadsheets/d/1DCR-4jVMR-j0Ja6qCWVle2zTzC4jiWhliwutLfEFWUs/edit?usp=sharing

How to program ham radio with chirp (or watch bluejeans near the end): https://docs.google.com/document/d/1ak19Djp6bFSdQcCvKUeoHrtRovhcOtN0HVvaLjD5uj8/edit2usp=sharing

Thomas recommended antenna: **uv5r** needs the sma female and super-elastic



OUTLINE:

Peptalk: what you do matters! Focus on circle of influence. Do NOT feed the fear/doubt/hate wolf. Feed the love & kindness wolf!

NOTES:

ONE: Refresher on using your radio.

Thomas will demo how to get on the right frequency (turn on the radio, navigate the memory channels, toggle between alphanumeric vs numeric only).

FAQ:

What freq can you legally transmit on w/o a license? FRS/MURS

What Freq can you NOT transmit on w/o a license?

REPEATERS! Do NOT get on a repeater w/o a license!

#1 fail is to mess with a radio station. Most ham radios have filters so you can't transmit on prohibited freq. This includes LE, Military, airline freq etc.

#2 fail is messing with a repeater!

Repeater example: freq 400 and then retransmits it at 405 (top of mtn and the 100' antenna and 100 watt).

DEMO, then follow along. demo then practice.

- How to turn on the radio;)
- How to unlock/lock demo then practice.
- How to toggle A/B (alpha vs numeric)
- How to arrow up to the freq you want
- How to manually enter a simplex

call/orange is mon or FM radio toggle.

PTT (push to talk) push to transmit





vfo/mr toggle between memory channels and manual enter mode.



A/B toggle between upper A and lower B

TWO: test

Once we help you get on the correct frequency, we will do a <u>local radio test</u> (if you are within 15 ish miles). So you can test your transmit and receive on a FRS1 frequency (462.562).

- 1. Call for check-ins based on chat pod.
- 2. Please transmit/call now if you live jacobs ranch
- 3. Please call now if you life in saratoga springs
- 4. Please call now if you live in Utah county
- 5. Please call now if you live outside of Utah county

WEEKLY NET!

THREE: be ready to hear HAM net

8pm MT, you may LISTEN only to the ERC net (weekly test of radio comms) to understand and hear a live radio net (similar protocol in the event of an emergency).

447.675

If you have a ham license, you may check in when called upon to do so (any missed or visitors wanting to check in).

I think I can teach most people everything they need to know via the blog/video or webcast, except programming the radios with memory channels. I'm happy to share my image/flash file, but you'll need a programming cable and some tech know-how. If we have time in the workshop, I'll demo how to program the radios.