upated 8/27/2017

900 Notes : Falmouth 927.85000 Mhz 902.0625 PL Rx&Tx 88.5

Contact WA1GPO if there are questions. Hope to see you on 900 !!!!

Thanks to Rick N1RCW, Ralph N1YHS, Jeff N1ZZN and Steve KC1HO the 900 repeater in Falmouth is operational and is linked into the NEAR900 network. See NEAR900.com for more regional information regarding 900 mhz activity.

I have a number of Motorola MCS2000 model III radios I will be making available to FARA members on a first come basis. The nominal output is around 12 watts. Included will be the radio, speaker, fused power cord, microphone, mount, antenna adapter cable (Mini-UHF >> BNC / UHF), and a NMO mobile antenna. You will need to provide a suitable NMO mount. The radio's are preprogrammed with a number of channels, mainly E. MA and RI, and are displayed by location on the alpha-numeric display. If anyone has a need for other channels I will program your radio on an individual basis. These are not your typical ham radios; other than a volume and channel selector there are not many active controls. The squelch (PL /DPL) is preset. I have implemented the following functions on the model III's: Hi/Lo Pwr, Scan, and Zone selection (Near 900 & 900 Mhz). Talk-around (Simplex) is also available on all channels. The programming requires specific hardware and software not generally available in the public sector. [Cost $ 135]
There are also a limited number of Motorola GTX radios. These are 10 channel, with a microphone, antenna adapter, and fused power cable. No antennas or mounts are included. [Cost $ 85]
There may also be a couple of GTX HTs. [Cost $ tbd]

The GTX radio's are programmed with the following 900 networked repeaters.

Ch	Location	Ch	Location
1	Simplex 927.5 (100/100)	6	Boston
2	Falmouth	7	Cumberland
3	Barnstable	8	Marlboro
4	Dartmouth	9	Feeding Hills (Springfield)
5	Marshfield	10	Warwick

Many of the accessories and radios can be found on EBAY if so desired, see note below.

A few random thought concerning 900 operations in no particular order.

- Line loss vs. antenna height is a prime consideration. You need to use good quality cable. The typical RG-58 doesn't cut it, note the cable loss/100 ft. You loose 3dB (1/2) of your Tx power in 15 ft of RG-58 cable! LMR-240 (RG-58 size) is about 7.6 dB/100 ft. Use the LMR series whenever possible.

Loss*	RG-174	RG-58	RG-8X	RG-213	RG-6	RG-11	RF-9914	RF-9913
900MHz	27.9 B	20.1dB	12.6dB	7.7dB	6.0dB	5.4dB	4.9dB	4.2dB

- You should review the RF Safety exposure limits. In general, I would recommend that you maintain a minimum of 10 feet between your body and the antenna.
- Radios can be found on EBAY and other places. Based on my limited experience I've found about 15% are unusable in the amateur allocation w/o modifications and about 5% simply won't work. Look for radio's that state they are working on the 33cm band or the 900 amateur band. If you purchase a radio I'll be happy to program it for you. Look for the Motorola MCS2000, GTX lines and Kenwood TK-981 radio's, I can program these.
- 900 Mhz may also be useful for public service events as it's a little more 'secure' and more difficult to hack.
- Thursdays are 900 days. If you make at least 1 contact your call will be recorded and placed on the activity log on the NEAR900 site. There is also a monthly dinner gathering in Plymouth, see the NEAR900 WEB site.
- Warranty – I will replace or refund (my option) any non-working radio upon initial receipt.