## W1BRI portable repeater project.

Purpose is to deploy on someone else's (hotel etc) WiFi network just using SSID and passphrase WITHOUT the need to log into someone else's router only to mess things up 🙁 Thus the need to get AllStarLink proxy working !

I already edited a list of places I visit for WiFi credentials in the wpa\_supplicant.conf file.

First place is to deploy at my nephew's Scituate beach home on his WiFi network while I walk along the beach with my HT and tie the portable repeater to my home EchoLink node 3819 (W1BRI-R) in Milford, MA.



Audio delay box to remove squelch crash. (Same circuit used in Scom 7330 controller)



Uses a pair of cheap Mini HTs

https://www.ebay.com/itm/2pcs-LEIXEN-VV-108-MINI-16Channel-Walkie-Talkie-UHF-400-480MHz-USB-Power-500mAh/123680850786?hash=item1ccbf40362:g:ejYAAOSwrx1cgeEc



Need to remove and replace with AllStarLink hardware ??



The two boxes mate with a DB9 connector, can separate off radio box if desired to run RM1 repeater to save battery power.

Repeater can run on R\_Pi controller or on a Midian RM1 repeater controller (mini Keypad controller). I'll probably hardly ever need to use the RM1 controller 😊



 $\pi$  he ORP Mini Repeater fits in Ammo Box except for the power source (Battery).

Mini circuits (ZFLP-450+S+) low pass filters needed because the harmonics of the Mini HT are so bad they ride right through the mobile type notch duplexer and desense the receive radio.



Front panel hack job label.



Testing it out photo, Repeater transmits at around 350mW out of duplexer.



Main Milford MA, W1BRI repeater and EchoLink station 3819 (W1BRI-R) Repeater: DR1X Fusion repeater: 446.825 (-5 MHz) PL = 100 Hz In and Out.

EchoLink (W1BRI-R) is running on a fan less Liva Computer with ULI interface box. Also Liva runs my APRS station.

## About Me:

W1BRI

Technical officer for the MMRA repeater network in eastern MA, built most of their repeaters over the last 25 years or so.

https://www.mmra.org/repeaters/repeater index by location.html