

TO:

22 April 2021

FEDERAL COMMUNICATIONS COMMISSION 45 L STREET NE WASHINGTON, DC 20554

SUBJECT: Form 442 New License/Modification of License for Research Project

**1) Nature of Research Project.** Develop novel low power (below 5 watts) communications nodes capable of beyond line of sight (BLOS) connectivity using existing, commercial off-the-shelf technology for testing purposes. Developments made in this bandwidth are intended to serve as a proof of concept for greater investment by other interested commercial or government agencies that require a low cost, low power, long distance, reliable form of emergency communication.

## 2) Project Objectives.

- a. Long distance digital text and message file communication (>100km)
- b. Capable of error correction / message verification

**c.** Digital mode organic to transceiver (SDR programming, external soundcard built into transceiver)

d. unproto speeds of 150 wpm under adverse conditions

**3)** Justification. In order to prevent adverse effects on amateur bands, we are requesting bandwidth that falls within the private land mobile frequency allocation (13.87mHZ - 14mHZ). We recognize the importance of the 20m band as the magic band for worldwide amateur communications. For our purposes, we desire to test our equipment and concepts close to this effective frequency range.

**Kevin Pymm** Owner, Metaros Trading Company LLC 5266 Laurinburg RD Raeford, NC 28376

(910) 704-9500 Email: metaros@protonmail.com