

# The Digital Communicator Quarterly

The newsletter of the New England Fusion Group



Spring 2021



Welcome!

Welcome to the first installment of *The Digital Communicator Quarterly*, the newsletter of the new England Fusion group. I've been a ham since 1994, and I can't think of a method, mode, or modulation type to make as strong a splash than "Fusion Radio." Arguably, the recent explosion in interest in the new digital mode FT-8 is right up there, but FT-8 generally appeals to a subset of HF operators. Fusion, on the other hand is accessible to all licensed amateurs, and due to its inherent flexibility, appeals to a myriad of people globally. Whether you like simplex FM, or simplex C4FM (digital modulation,) or regular repeater use, or digital to analog repeater use... or if you like the idea of digital communications using computer networks... well, you see why Fusion is appealing to so many. Most new hams make their first radio purchase a Handi-Talkie ("HT"), and with the many options of how to employ a radio that works with Fusion, it's no surprise why Fusion radio is taking off – built in value! I know I fell head over heels for the whole Fusion system: the ability to encode my GPS location into my conversation, along with having my callsign show up on the other hams' radio... take my money!

I spent the better part of the next two years figuring out Fusion, what it meant, what it could do. I'm one of those types who will actually read the manual of my new radio, but technical manuals rarely go into "how" and never "why" a certain function is available on a radio. Couple that assertion with the fact that the Fusion system as a whole is documented over several disjointed manuals to get all the hardware to work together, something needed to be done to tie it all together. The great folks at Yaesu corporate have done a fantastic job of developing training materials through videos and podcasts, but these resources sometime get buried in the internet, and sometimes without context, well meaning hams on social media have occasionally forgotten about these resources or provided bad advice. Wouldn't it be nice to centralize, and build upon these resources? Wouldn't it be easier if a bunch of hams worked together? Shouldn't those early adopters who built nodes have a support net?

Hams have always taken a DIY approach to system building, and I think a "hams-teaching-hams" approach helps build the community. Our first duty is to read and understand the manuals and videos from the manufacturer. Our next duty is to understand the interoperability of radio, computer, repeater, and the other devices. Finally, as hams we should be "elmers," (ham radio's favorite term for teacher.) Where do you find a bunch of elmers who are passionate and experienced with Fusion radio?

The past year of 2020 has taught me plenty of lessons, but the most prolific was the realization that people can

Quick Stats: Total Membership as of 04/24/2021: 20 Vanity Club Callsign issued: <b>N1EFG</b> Number of Radios Documented: 9
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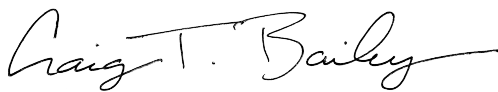
effectively communicate from distant locations. That should come as no surprise to ham radio operators, since we've been "working remote" for over 120 years. The real epiphany happened when clubs started pivoting to holding their meetings virtually. Then ham radio testing sessions started to go online, and people could become licensed amateurs from their kitchen table.

Fusion radio here in New England has a great example of a regional system – The "Wolf Pack Network." We owe a big thanks to WO1VES, for having the guts and foresight to try a brand new mode, and setting up a pair of Fusion linked repeaters in Massachusetts. It wasn't long before Brian's small network started to grow. In future articles I'll do my best to get Brian to tell us the whole origin story.

With the ever-increasing interest, and just a modest amount of advertising (kudos to N1ERA for the Facebook coverage!) it became clear that hams really appreciated the regional nature of linked Fusion repeaters. Hams were also clamoring to step up from their single HTs, to build more complex nodes, and some of us even went so far as to set up linked backyard repeaters! As hams do, some of us resolved that a club should be started. We intend to help all hams who venture into Fusion, we will do our best to gather all our collective thoughts – including the good material from Yaesu – and educate, and eventually help operators with hardware. I promise we'll keep the club about the hobby, and although there is a very real, and rather unglamorous side of club governance and operations, I promise this will be fun and educational for all of us.

Thanks for joining the club. If you haven't yet joined, give the website a peruse and I'm confident that you'll see New England has a great new resource to turn to; visit us at [www.n1efg.org](http://www.n1efg.org), and don't forget to check in on our Facebook group "New England Fusion group." Let us all contribute to this newsletter: perhaps you have some tips n' tricks, maybe you have a project that you'd like to document? I'll be reaching out to the Charter Board members to get their bios for future newsletters, and it would be nice to have some "regular" columns and authors.

Thank you & 73



Craig T. Bailey, N1SFT

New England Fusion Group  
Charter President



Figure 1. NEFG Colorful Logo #1

### NEFG Quarterly Business

After a handful of proposal meetings in February and March 2021 held over Zoom to gauge interest by as many hams as we could find, the club officially was launched on March 23, 2021 when the charter members Craig Bailey, Mike Arnold, and Steffan DeSimone decided "why not?" and, "how hard could it be?" Fateful last words! Our first "quarter" has been really busy!

On March 23, 2021 the three charter members decided to make application to the State of NH as a non profit organization, and on March 30<sup>th</sup>, 2021 the New England Fusion Group was approved with State of NH Secretary of State business ID #866630, Certificate #0005341641. **Finally**, the club was real, and we had something that people could finally join!

Over the next few weeks the Charter Board of Directors took shape, and we even had a handful of “joining nights” Zoom calls. A handful of Board of Directors meetings were held to iron out roles, policies, and procedures. Finally on April 23<sup>rd</sup>, 2021 the first full membership meeting was held to discuss the current work being done.

The meeting was held virtually over Zoom, and the proceedings were recorded for posterity, and to assist in the development of the minutes. If members wish to watch the hour-long video, lets us know and we’ll post them to YouTube as non-public videos.

The last bit of “business” that we wish to pursue is becoming an official 501(c)3 organization. This will solidify the fact we are indeed non-profit, and if folks wish to make donations towards fusion repeater or node owners, there are no pesky taxes or personal “gifts” that need to be filed. In order to fulfill Federal IRS 501(c)3 status, we need one final filing at the State of New Hampshire. We’ve been asked to incorporate a Conflict of Interest clause into our Constitution. Some proposed language has been proposed at the meeting on March 23<sup>rd</sup> 2021, and we will proceed with a final vote using electronic means – which is in conformance with our Constitutional amendment procedure.

### Communicating with the Club

We have signed up for a free email reflector service, offered through “groups.io”. This reflector provides a single email address that we can ALL use to send email correspondence to ALL members.

The Groups.io email address is [n1efg@groups.io](mailto:n1efg@groups.io) The Board of Directors email address is [n1efg-BOD@groups.io](mailto:n1efg-BOD@groups.io) All members receive an invitation to join the group upon joining the club. Plus, you can search for NEFG through [www.groups.io](http://www.groups.io) and you will find us. As long as you sign up through the groups.io website, and use the same email address you used to sign up with, you simply compose an email in your email program and send it to [n1efg@groups.io](mailto:n1efg@groups.io) the Reflector will handle the rest. You will also notice the subject line of each email has prepended to it “[nefg]” which makes it easy for you to sort emails in you inbox. The last best part of Groups.io, the email traffic is saved on the groups.io website, so you can’t “lose” any important emails.

### Proposed Fusion and Radio topics

This is a radio club afterall, so what have we been up to on the Radio front? Well – the website [www.n1efg.org](http://www.n1efg.org) and the Facebook group has been growing by leaps and bounds. Mike has started a fantastic library of FAQ’s, tips & tricks, and other great resources all geared to helping the Fusion enthusiast. The guys have been helping new nodes come online and helping hams that reach out for basic help.

We’ve literally only been a club for 30 days as of this writing, and it is truly amazing how far we have come in that short



Figure 2. An Engineers' rendition of a Logo :)

amount of time. A radio club is for members to help members do what is fun: operate radios! Let's keep the momentum up, and everyone is encouraged to start documenting a project they are undertaking: for example, maybe you are trying to setup your first PDN? Maybe you are trying to help a local community college come online with Fusion? Maybe you just want to get that brand new radio on the air. Take some notes. Take some photos. Maybe make a video on your phone. What ever you are up to with fusion, let us know and as they say... "just send it!"

The Board will do our best to publish this newsletter quarterly, to coincide with our quarterly membership zoom meetings. Thanks again, and remember this club is your club – lets take it where we want to take it.

