

# WATTS UP



Volume 1  
Issue 2

A quarterly publication of  
The Northern Virginia FM Association

October, 2001  
NV4FM

## The Day The World Changed

by Jerry Shadle, WA3UTL

This article, is taken from a letter entitled "About Tuesday: A Letter To My Children" It reads in part as follows:

The world changed in a moment on September 11, 2001. It took just eighteen minutes to go from praying that it was an accident to knowing that evil had taken on a new face and that all of the old rules had changed. Everything became suddenly darker when those billowing black clouds of smoke drifted across the sky of New York, Washington, and Pennsylvania. The shadows that they cast fell upon the hearts of every American who has one. And how quickly we learned my friends, to tell the difference between Americans with hearts and those without.

Even as the tapping of survivors could still be heard coming from under the rubble of the wreckage, there were people whose only thoughts were of how to add to the mayhem. They called in false bomb threats to the airports, to bridges, to the sites of devastation in New York and at the Pentagon costing rescue workers to lose valuable time, perhaps even costing life itself. God himself will deal with these people, I will say no more of them.

Let me instead tell you of the heroes; the people of true heart; thousands upon thousands of them. Firemen, police and port authority personnel, amateur radio operators, civilians; people with no vested interest other than that of caring for their fellow man. Men and women who despite the overwhelming danger rushed forward towards harms path trying to help in any way they could. People from across the country who, wanting to do something, anything, stood in line for hours waiting to donate blood. Rescue workers and support personnel stayed awake and at the sites for not just hour after hour, but for days.

From this amazing display of resilience, I think we can find something to help us move forward too. All is not lost. What comes to mind is a term widely used in the steel industry; tempered, and I would like to tell you something about it. Steel is not very strong; not until you expose it to extreme heat that is. Once the steel is cooled by placing it in water it becomes amazingly strong; Tempered.

As Americans, our very souls have been tempered. Heated to the extreme by the massive fireballs that engulfed the World Trade Center, then cooled like ice by the thought that someone dare bring this terror to our homeland. We are further strengthened by the acts of those gallant firemen whose unselfish bravery left so many of them lying buried beneath tons of concrete, dead or dying. How can we let fear drive our actions now when so many others have acted so

fearlessly? We must use these actions to guide us to brave our new dangerous world. We must not cower before thugs. We must not bend to the will of terrorist and be ever mindful of the new dangers we face. We must stride ever forward determined to do the very best that we can.

**I would like to publicly thank each and every one of the countless rescue workers, Salvation Army and Red Cross volunteers, and all of the Amateur Radio Operators who unselfishly dedicated many, many hours in support of Operation Noble Eagle. You have not only my undying gratitude, but that of your fellow Americans as well. Job WELL DONE!**

May God watch over you, my friends. May He bless our families, our friends and our country.

## Membership Meeting Reminder!

The next membership meeting will be held on

**Thursday, October 18, 2001 at 7:30 p.m.**

at

Dominion Virginia Power  
3901 Fair Ridge Drive  
Fairfax, VA

(off Route 50, East of the Fairfax County Parkway)

Hope to see you there!

## New Callsign Arrives

Effective September 7, 2001 the official callsign of the NVFMA is now NV4FM. This is the vanity call sign chosen by the general membership at the January 2001 meeting. Keep an ear tuned for the change on the repeaters. As time allows, each of the repeater ID's will be changed to the new callsign.

## New NVFMA Web Site debuts

We have moved the NVFMA website to our own domain. Through the gracious generosity of Howard Cunningham, WD5DBC who is our new web host, our new website is now at <http://www.nvfma.org>. Please make a note of it. The old website will have a pointer to the new site. Please remember to change your bookmarks. We have also eliminated the juno email address. The new email address for your board of directors is [nvfma@nvfma.org](mailto:nvfma@nvfma.org). As always, please feel free to send comments, questions, suggestions, etc.. Also, please keep in mind that ALL board meetings are open meetings and all are welcome to attend. The board meets the third Wednesday of every month at 7:00 pm at Fairfax County Fire

Station 13 on Gallows Road. Tune in to the Wednesday night bulletin at 8:00 on the 146.790 machine the week of the meeting for any possible changes.

## Membership Reminder:

Just a friendly reminder; Kindly check your records. If you haven't yet renewed your NVFMA membership for the 2001-2002 fiscal year, please take a moment to write your renewal check and send it in today. As most of you know by now, we are in the midst of a major repeater rebuild for the 79 machine. Please support the association and help maintain our repeaters. The yearly dues are only \$20.00. Additional family members are only \$10.00. Once again, additional member donations towards the repeater fund will be graciously accepted. Thank You in advance for your continued support.

## Autopatch Codes:

A number of members have asked about new autopatch codes for the repeaters for the new fiscal year. Due to the overwhelming increase in popularity of portable cell phones, we have noticed a substantial decrease in autopatch calls on the repeaters. This, in conjunction with the idiosyncrasies involved in programming the ailing RC-85 controller at the .79 site, the board has elected to keep the current autopatch code in effect for 2001-2002. I ask, however, that everyone please continue to financially support the association. If you haven't already done so, please be sure to send in your membership renewals. We can all take pride in our natural sense of duty to support the repeaters that we use.

## 146.79 Update

Work is still ongoing in the rebuild of the 146.79 repeater. Red, KORAJ has been working



long hours in building the new repeater. He has made considerable progress. As you will note from the picture, the project is coming together nicely. Slot one in the cabinet is for the GE MASTR II PA. In slot two is the Vertex repeater which was mounted into a 19" rack panel. Slot three will hold the CAT-1000 controller. Red is in the process of mounting the audio switchboard and PL tone board into the enclosure. Slot four holds the new voter. Slots five through eight are for the Motorola remote receivers. One receiver is complete and ready to go. The faceplates on the remaining three are completed. These receivers will utilize a more 'modern' squelch circuit known as 'reverse burst'. The remotes will all be transmitting PL tones to the receivers to help eliminate noise and interference from the remote sites. Slot nine holds the new Astron rack mount power supply. The Ritron remotes are being modified to use only the transmitters and receivers. Red has hand wired a new main board and is operational. He is using a Motorola audio/squelch board to produce the COS. The repeater will be "capable" of requiring a PL tone to function. The outgoing PL will be controlled by the received COS. Red would most certainly welcome any participation from the membership to assist him in his efforts. As the saying goes, "Many hands make light work". This is certainly true in this case as well.

If we could get a couple of technically inclined volunteers to pitch in and give Red a hand, we could have the new system in place and operating for all to enjoy in a much more timely manner. If you would like to lend a hand, please contact Red at (703) 658-4090 or email him at [dek0raj@msn.com](mailto:dek0raj@msn.com). Both he, and the entire membership will be most appreciative.

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## Auction to be held

Calling all Hams; here's your chance to help clear out your shack and help the association at the same time. The NVFMA will hold an auction at the October 18, 2001 meeting. Please dig through your shack for 'hamfest' type goodies that you would like to see disappear from your shack. Your donations will be sold at auction at the meeting with the proceeds going towards the .79 repeater fund. It should be great fun to see what kinds of toys folks bring in & everyone will have that chance to take something home that 'you just can't live without'. Please remember to bring out those checkbooks, and hey, maybe we'll even have our own "Vanna White" on hand to display them for us! See you there!

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## President's Corner:

Ed Harris, KE4SKY

First impressions tend to be lasting, whether good or bad. What you say or don't to a new licensee or visitor to the area using our repeater for the first time also establishes their first impression of the NVFMA.

With everything that's going on in the world today, it is easier than ever to be pre-occupied in our own concerns, and to tune out or turn off the repeater. That's unfortunate.

I confess to being guilty of this myself, but after hearing the President's speech last night, I

realized that we must all make an effort to change that.

Today more than ever is a time for all Americans to stand together. It is also vital that the Amateur Radio community to stand together with one voice.

Many of us got into "the hobby" because it offered inexpensive, reliable local communication. Amateur radio is a brotherhood as well as a way for families and friends to stay together. It provides a sense of friendship and security.

Much of the nationwide decline in repeater use is because everybody now has a cell phone, so few people need to use the autopatch to make emergency calls. But, it is also important to realize that cellular and PCS become overloaded during emergencies. These systems are subject to single points of failure in their central offices and infrastructure.

When it hits the fan and you really need communication, that phone may fail you. Then what do you do? If you are a ham, you go back to what you know, amateur radio.

For amateur radio to be a comfort in these scary times, we all need to have confidence that someone is actually out there listening. Today this means more than just being friendly and cordial, though that is important too. It is a matter of safety and security.

It does nothing to inspire confidence in NVFMA if someone makes a call, asking if anyone is there, and to get no response other than dead air! If someone identifies that they are just monitoring, please ID and say that you are too, to reassure them that someone else is actually out there!

So please be helpful, friendly, cordial, and welcome all users. Encourage all amateurs to use and monitor our machines, whether they are members or not. Of course we should encourage them to join, but first they need to be reassured that there is something in it for them. A poor first impression is difficult to overcome.

So please be courteous, friendly and helpful, but above all, it is important to just BE THERE and answer that call.

73 de KE4SKY

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## Best Emergency Radio?

Ed Harris, KE4SKY

A common question among new amateurs just becoming interested in emergency and public service is "what radio should I get for ECOMM?" I am hesitant to recommend specific rigs, but offer my thoughts based on experience.

It's very tempting to look for "one" rig, which has "everything all in one box," such as the IC706 or FT100D. These are a compromise. They aren't the best 2-meter rigs, and they aren't the best HF rigs, but they do work. While I don't favor this concept, many people like it. If you lean towards a rig of this type I'd favor the IC706 simply because it has been in production long enough for them to get most of the "bugs" out of it. You don't see many used IC706s listed for sale when you consider that there are a million of them out there. Many FT100s and FT817s listed for sale, which suggests that their owners are less than satisfied. People keep radios that work. That says something about the IC706.

Personally, I don't find either the IC706 or the FT100 very user-friendly. Their small displays and controls, multi-layered menus and key

combinations that defy guessing, make using one without the manual all but hopeless, if you never have before. If you have only one rig and it fails, you have nothing. Nor do I recommend buying the newest rig with all the bells and whistles.

Multiple radios are better than one. I believe in proven radios which have been on the market long enough to have an established reputation for reliability. All should be simple to use, rugged and reliable. I recommend that you get an FM mobile rig first, because a good mobile costs no more than an HT, but has much better simplex capability.

If you don't drive, then get an HT first. Otherwise, get your HT as a spare and for "walk and talk" later. If you have a General license or plan on upgrading, an IC706 makes sense for your "go kit" instead of a straight 2-meter or dual-band mobile.

In rural areas, a single-band 2-meter mobile is a perfectly viable choice. In suburban areas I would recommend that you seek a dual-band mobile which also has DUAL RECEIVE. This is because in high RF environments 2 meters is often unreliable and sometimes not useable at all. Many emergency nets require you to work from inside, out of and around steel-reinforced buildings. In high RF urban conditions and within high-rise buildings VHF simply doesn't work very well. However, UHF and 220 do! Every urban RACES member should seek at least an HT, which works on either 220 or 440.

For 2-meter and dual-band mobiles, you want something simple and rugged with a display which anyone over 50 can read without their reading glasses, having at least 25w output per band, ten memories per band, CTCSS encode. Intermod rejection is VERY important, but many of the current amateur rigs which have wide receive outside the amateur band fail miserably in this respect. All RACES operators should carry a notch filter, such as the one by Par Electronics, which is well proven.

An HT for RACES must be able to operate from three power sources: 1) its NiCd or NiMH battery pack, 2) from AA batteries using a battery case which fits the radio, and 3) from an external DC cord which can be connected to a gel cell battery, auto cigarette lighter plug or regulated power supply.

Any rig used for RACES must be frequency agile and capable of being programmed from the keypad in the field, no software required. It should have at least ten programmable memories and at least CTCSS encode. CTCSS decode is desired, but not an absolute necessity. Intermod rejection is very important, but being able to receive outside the amateur bands is not.

In most ECOMM situations RACES members should monitor only their assigned net, so they aren't distracted by the other stuff going on. If leadership officials need to monitor public safety frequencies use a separate scanner; don't tie up a rig needed for communication.

The 220 band has much to recommend it for ECOMM. It enjoys a lower noise floor, much quieter signals, and fewer problems with intermod. "220" gets in, out and around buildings almost as well as UHF, but has better simplex range which is similar to 2 meters. Being a less-used amateur band, if you must tie up a repeater or simplex frequency for an extended period you don't inconvenience as many users. Another advantage of 220 is that most scanners don't receive it. While no amateur mode is "secure" in the national security sense, using a less-used band not

received by most scanners is more "discreet" for traffic you'd rather not have the general public listening to.

I recommend use of 2-meter SSB for the same purpose, if enough operators have it. This again weighs in favor of the IC706, which is why many folks like them, although I prefer separate 2-meter all-mode and HF rigs, which have better individual performance and provide the necessary redundancy for reliability.

My home shack equipment is not "permanent", but serves double-duty and can be deployed to the field in minutes, in rugged, waterproof containers. My primary 2-meter rig is a Kenwood TM255A all-mode. This all-mode rig has been discontinued, but is available on the used market for \$350-450. It has the best receiver and combined features of any 2-meter mobile. If limited one 2-meter rig, it would be the Kenwood TM255A!

I use quick-release mobile mounts at home in the shack and in the car. Separate, sturdy, waterproof Pelican boxes are used to carry the 2-meter all-mode, HF rig and a 32-amp power supply and headsets for portable ops. Field deployable 2-meter antennas are a KB6KQ loop for SSB, a take-apart 4-element beam for FM simplex and a compact, but rugged dual-band vertical such as the Diamond X-50N.

An MJ-89 mic switch which permits using either a hand mic or boom mic with headset connected to a foot switch for use in high noise environments. For field auxiliary power I carry a pair of BCI Group U1 AGM batteries in .50 cal. M2A2 ammunition cans, which provide 64ah capacity. I also carry an AC power supply, 6A-battery charger and 100 ft. heavy-duty UL-rated cord.

My HF rig is a Yaesu FT900CAT, also equipped with head set / boom mic and hand mic, switchable, mounted in a quick-detachable mobile mount in a Pelican box. If limited to ONE HF radio it would be the FT900, because all the controls are simple and straight-forward on the front panel, the display is large, the speaker loud, the built-in antenna tuner is effective, the noise blanker works, the receive and filtering are super, and you don't need the manual to use it if you are unfamiliar with it.

The primary field-deployable HF antenna consists of dual-hamstick dipoles for 40 and 75m on quick disconnects, with extra pairs of hamsticks for 10 and 20 meters. If the situation warrants and space is available I also have available a 10-80m Carolina Windom, two military mast kits, two Group 27 deep cycle batteries which provide 190 ah capacity and two Siemens SM20 solar panels for recharging.

The mobile rig installed in my vehicle is a Kenwood TM742A with 2m, 220 and 440 modules installed, using a tri-plexer to connect it to a tri-band mobile antenna. I chose the Kenwood to replace my former Yaesu FT5100, because it is the only tri-band radio which offers simultaneous receive on 2m, 220 and 440. My older FT5100 is now a spare cache radio, set up in a Pelican box with a 17ah gel cell battery, 25 feet of coax, dual-band mag-mount, extension cord and power supply which can be deployed quickly at a shelter.

The head-set with boom mic which I use on the TM255 all-mode will also work on the TM742 tri-band, if its multi-band receive is needed for a net control station. This rig is also in a quick-disconnect mount so that it can be readily removed from the car for portable use at a shelter or other fixed station.

A Group 27 deep cycle battery (96ah) will run it for 24 hours straight at NCS duty, full power if

needed. Good field deployable antennas are the Diamond X-50N or Cushcraft AR-270, which are compact and fit easily in a vehicle for transport. While dual-band for 2m and 440, either "works" at low power on 220 and VSWR is "acceptable" for a field expedient tri-band antenna.

My primary dual-band HT is a Yaesu FT50R. For it I have three NiCd battery packs, a AA case, external DC cord and auxiliary 7ah gel cell battery. My spare HT which stays in my "go kit" is an older Standard C558A, which I really like better for RACES applications better than the FT50R because it has dual receive.

In my go kit I keep three AA battery cases for the Standard HT, a Mirage BD35 dual-band brick amp, Comet CX722A dual-band half-wave rigid antenna with BNC, an extra CX72A flexible antenna, fused 20 ft. AWG10 gage power cord with battery clips for connecting the brick amp to a car battery, a KPC-3 TNC, laptop and a 17ah gel cell for portable operation.

My "Extra" loaner and spare HT is a converted GE M-PD public safety radio which is Class "C" type accepted, being OK for use outside the amateur bands, which has a total of 46 RACES, VHF-marine, CAP, ground-SAR, EMS, fire and local government frequencies pre-programmed for emergency use.

The above doesn't provide "all" the answers, but I hope will provide a good "thought starter" for your RACES equipment go kit planning.

### A bit of NVFMA History

Since the NVFMA is thirty years old this year, I thought it might be nice to provide the membership with a bit of NVFMA History. The following is reprinted from the 1975 NVFMA handbook. Many thanks to Tom Graves, W4PDW for finding this in his archives.

The Northern Virginia FM Association was conceived at an impromptu luncheon at the Clarendon Restaurant by Andy Cohn, K4ADL, Don Dunlap, WB4QAX, Howie Hoyt, K4PQL, Skip Reymann, W6PAJ (then WA4EAG) and Ernie Seering, WA4CHY in March 1971. They had become disappointed with previous club efforts to get a repeater on the air and decided to do something about it. Each man forked over \$10 which Skip put into an account. They decided to incorporate to assure continuity of the project and eliminate the possibility of someone "taking his marbles and going home". Skip immediately started to work on the Articles of Incorporation and prepared them for review. A final draft was made and signed on April 12, 1971 by the initial Board of Directors, Howie, Skip and Don.

Work began immediately to locate suitable equipment, ferret out possible sites, draft Bylaws for the Association and solicit new members. Don served in the offices of President and Treasurer. Andy was the Vice President, and Howie, the Secretary. Skip had to resign as a director, since he was leaving the area. John Williams, K4GGY filled the vacancy.

A meeting was held on June 20, 1971. The Association membership numbered 19 including the Directors. A rack mounted 2 meter FM base station had been purchased and a 4-cavity duplexer obtained. Sites were discussed, with Tyson's Corner favored and 31-91 was selected as the most desirable frequency pair.

Another meeting was held on the evening of August 3<sup>rd</sup>. The Treasury was temporarily in the black with 38 Full Members and one Associate Member on the books. The repeater had been

tested in a simplex mode and found capable of 40-50 watts output. The license application was ready to submit pending permission to use the site. Three additional Directors were needed and an election was held. Blackie, E4TA, Thom, K4LHB and Bud, K4ASU were elected.

The remainder of August saw the building which houses Telecom, Inc. firmed up as the repeater site. Final permission to use space in the building was granted and confirmed by letter on September 10<sup>th</sup>. Honorary membership was presented to Ross Bateman, W4AO and Jim Alghren, W4YHD for their work in assisting us in obtaining the site. Bud Webb, K4ASU was elected Treasurer.

The repeater license application was received on September 2, 1971. The machine was on the air on September 10<sup>th</sup>. The station was a mass of clip leads and so many boxes were stuffed into the rack that the doors on the cabinet couldn't be closed. Frank Hoose, K4RZ handled the initial tape log using a tunable Collins receiver to slope detect the signal and preserved for posterity all that was said through WB4QFP on a 5" reel-to-reel recorder. The ID unit was made from a surplus aircraft transponder donated by Dick Jordan, W4UM. It used a code wheel, but the wheel couldn't be modified for our needs. Don purchased a 15-cent plastic bowl, cut the bottom out of it and, with a knife and a file, proceeded to cut WB4QFP RPT into it's circumference. The IDer ran slow and fast, according to it's mood and sometimes stopped with the tone on, timing out the repeater. It served well until a diode matrix type keyer was assembled and installed under the direction of John, Don and Phil Deem, WB4EGA.

Thom took over minding the logging recorder in October. A membership meeting was held November 4<sup>th</sup> with 62 hams on the books. John began work on an autopatch system. Negotiations for permission to set up a receiver installation at the government tower near Tysons were conducted by Don and Andy. Final permission came through on February 5, 1972. Bob Payton, W4GPD joins the "working crew" and is instrumental in getting the new receiver site going. Our 100<sup>th</sup> member, Lloyd Wells, WB4EYU was enrolled on January 19, 1972.

A Name-the-Repeater contest was held in March, with Cal Cotner, K2ODL coming up with the winning combination—CARS for Capitol Area Repeater System. Somehow the name never stuck; but we're still trying! Blackie resigned at the end of March. Bob Payton was appointed to the vacancy. We learned that we must install a commercial line for the autopatch system, since it was to be located in a commercial building. A solid state repeater came available and was purchased along with another duplexer.

By June work was completed on the new receiver and it became operational. Talk of a second repeater began. The frequency pair 22-82 was proposed. The 91 transmitter was changed over to the solid state repeater with it's receiver going over to replace the tube unit originally installed.

Andy resigned on July 20<sup>th</sup>. We hated to see our Number One PR man go. You probably recall his excellent presentations of special slides covering the repeater and use of it. Thom Gooding, K4LHB was appointed to the office of Vice President. Charlie Raybuck, W4YEB was selected by the Board to fill the vacancy. On August 9<sup>th</sup> we became an ARRL affiliated club through Don's efforts.

In November of 1972 a complete solid state repeater and duplexer was located. It was

purchased for use in the second system. In January the terms of Don and Howie expired. An election was held resulting in the addition of Walt Lockhart, W3PWB and Phil Deem, WB4EGA to the Board of Directors. John Williams became the new President. Phil was elected Secretary and the other officers held their positions. Work began on the new repeater and firming up of the proposed Fairfax site. Bob Payton resigned since his work was taking him out of town. Will Gregson, K4GCM was appointed by the Board.

The license application was submitted under the new repeater rules on February 3, 1973 and turned into quite a hassle, but passed on the second round. The call sign WR4AAD was granted on May 4<sup>th</sup>. The new repeater went on the air June 2<sup>nd</sup> and was taken off the air June 6<sup>th</sup> due to interference with a government repeater. It became necessary to change the frequency pair from 22-82 to 19-79 to eliminate the problem.

A Bylaws committee was appointed in July to modify the existing Bylaws to make them more responsive to the needs of the Association. The first NVFMA transmitter hunt was held on July 28, 1973 under the direction of Will. The hunts were conceived to develop the members skills to allow them to deal with any malicious interference problem that should arise. The new Bylaws were approved by the members on November 4<sup>th</sup>. Work on a 220Mhz repeater was announced. This effort was headed up by George Miller, K4EJY. The license application was submitted on October 2<sup>nd</sup>. The machine is a Clegg repeater with a Phelps Dodge duplexer donated to the Association through the courtesy of Gemtronics.

January, 1974 saw the terms of John, K4GGY and Charlie W4YEB elapse. John decided not to run again. An election resulted in Charlie's return to the Board and the addition of George, K4EJY. George was elected President, with the other officers remaining the same.

Our 220Mhz repeater license was issued on February 1, 1974 under the call letters WR4AEY. George, Charlie and others set to work on the installation and the machine was on the air by the end of March. John left the area in April to begin a new job. Thom was appointed Trustee for WR4ABR in his place. Paul Duncan, WB4KRL was appointed to fill John's former position of Technical Director and Earl Dunn, W5LCT takes over as Chief control circuits designer, implementer, parts scrounger, etc. Wonder what John did in his spare time?

In July, we learned that Earl was going back to Texas. The board presented an engraved plaque to him at a surprise luncheon, thanking him on behalf of the membership for all the work he did for us. Ted Bennet, WA4GYF got the harness this time. Work on the duplication and refinement of the control circuits continued aided by Paul, Leo, W3EB, Steve, WB4YHD, Ted, K4MKX, Stu, W0DYJ and others.

Several important appointments were made during the first part of 1974. Charlie was Chief Bulletin Station until his departure for Jordan in July. Will was appointed in his place together with his previous appointments as Chief Transmitter Hunter, and Chief Engineer of the 31 receive site. Thom was named Autocall Editor. Walt was appointed Chief Monitor Station. Bill, K4MM was designated as our representative to FAR and NOVARC.

Bob Payton, W4GPD was reconfirmed as Chairman of the Site and Planning Committee. Bob Kuhn, W3BKI was appointed Technical Advisor to the President, and Bud Cone, WA4PBG became the Association Parliamentarian.

Association membership reached 590 by the end of the Fiscal Year.

June, 1974 saw a bounty of \$100 placed upon cockroaches – those who delight in making life miserable for other repeater users through unidentified kerchunking, malicious interference and causing the repeater to mute or bring up the dial tone and leaving it on. Later in the year, Tom Graves, K3ENN, was appointed Chairman of a committee to handle this problem. Several sources of interference were pinned down and plans mapped for attack.

All NVFMA repeater licenses were modified to update the control operators list and change the trustee of WR4ABR from K4GGY to K4LHB. It turns out to be quite a bout with the FCC; but, eventually all licenses come back with the proper changes and additions.

Past President awards were presented to Don Dunlap, WB4QAX, and John Williams, K4GGY, in recognition of their service to the association. The association books were audited by an outside CPA and found to be in excellent order, thanks to our treasurer, Bud Webb, K4ASU. We learned of Walt Lockhart's, W3PWB, departure from the area and the board prior to our September membership meeting. Walt was recognized for his outstanding contribution of time and energy during his time on the board. The members elected Ernie Seering, WA4CGY, to complete his term.

A plea was made for increased dues to accommodate the Association's greater expenses in operating three repeaters and administering a group of over 699 hams. The membership voted to raise annual dues to \$8, effective October 1, 1974. The cost of autopatch calls was also raised to .15 each and approved by the membership to make the system completely self supporting.

Members of the technical committee, under the able direction of Paul Duncan, WB4KRL, have put a great deal of work into designing, extensive testing and documentation of the various sophisticated repeater control system. The circuits are being refined and adjusted prior to installation for control of 31-91 and 220. Ted, K4MKX, Ted, WA4GYF, Steve, WB4YHD, Stu, WA0DYJ, and Doug, W3IVH have been working on the control system. They have been assisted by Joe, W4LBL, Pete, WB2JQG/4, Bob, W2HIJ/4, and Bruce, WB4OHD. We owe a great deal of thanks to these men who have put in many long hours of their own time for the benefit of us all!

Centralized logging is underway, too. We purchased a professional grade Sony tape recorder and additional tapes. A solid state receiver is being reconditioned for remote logging on one site.

Bill Grenfel, W4GF, was asked to serve as our FCC liaison and accepted the position. Bill will keep us up to date on FCC activities pertaining to repeaters in particular, and amateur radio in general.

In January, 1975, the membership approved the establishment of a 440 Mhz repeater. The frequency pair 449.75 – 444.75 was reserved. Space was provided through the courtesy of Pete Schenk, WA4GFY, of Telcom.

The terms of K4ASU, K4GCM and K4LHB expired in January. K4ASU and K4GCM sought re-election. The membership returned them to office and added Tom Graves, K3ENN, to the board. The board elected officers for 1975 was K3ENN as the new President and WA4CGY as the new Vice President. Phil and Bud retained their offices as Secretary and Treasurer.

**Editors Note:** *That's quite a bit of history of the early days of the Association. Thanks again to Tom Graves, W4PDW for the archived material.*

## N V F M A

### The Northern Virginia FM Association

Post Office Box 486 – McLean, VA 22101

#### Officers:

|        |                             |              |
|--------|-----------------------------|--------------|
| Pres:  | Ed Harris,<br>KE4SKY        | 703-280-1247 |
| VP     | Jerry Shadle,<br>WA3UTL     | 703-698-8215 |
| Sec.   | Michael Rhodes,<br>KD4LQS   | 703-716-4314 |
| Treas. | Howard Cunningham<br>WD5DBC | 703-425-6852 |

#### Board of Directors:

|                             |              |
|-----------------------------|--------------|
| Ed Harris, KE4SKY           | 703-280-1247 |
| Jerry Shadle, WA3UTL        | 703-698-8215 |
| Howard Cunningham<br>WD5DBC | 703-425-6852 |
| Shawn Stokes, KA3RQR        | 703-903-6866 |
| Wallace Johnson, KF4QQP     | 703-330-9240 |
| Mike Craven, AA4MC          | 703-241-7970 |
| Tome Graves, W4PDW          | 703-941-8629 |

#### The NVFMA Repeaters:

|                 |        |
|-----------------|--------|
| 146.19/146.79   | KB0PAL |
| 146.31/146.91   | KF4QQP |
| 222.50/224.10   | W4YHD  |
| 442.025/447.025 | KA3RQR |

(all repeaters soon to utilize the NV4FM call)

#### NVFMA Web Site:

<http://www.nvfma.org>

#### NVFMA e-mail address:

[nvfma@nvfma.org](mailto:nvfma@nvfma.org)

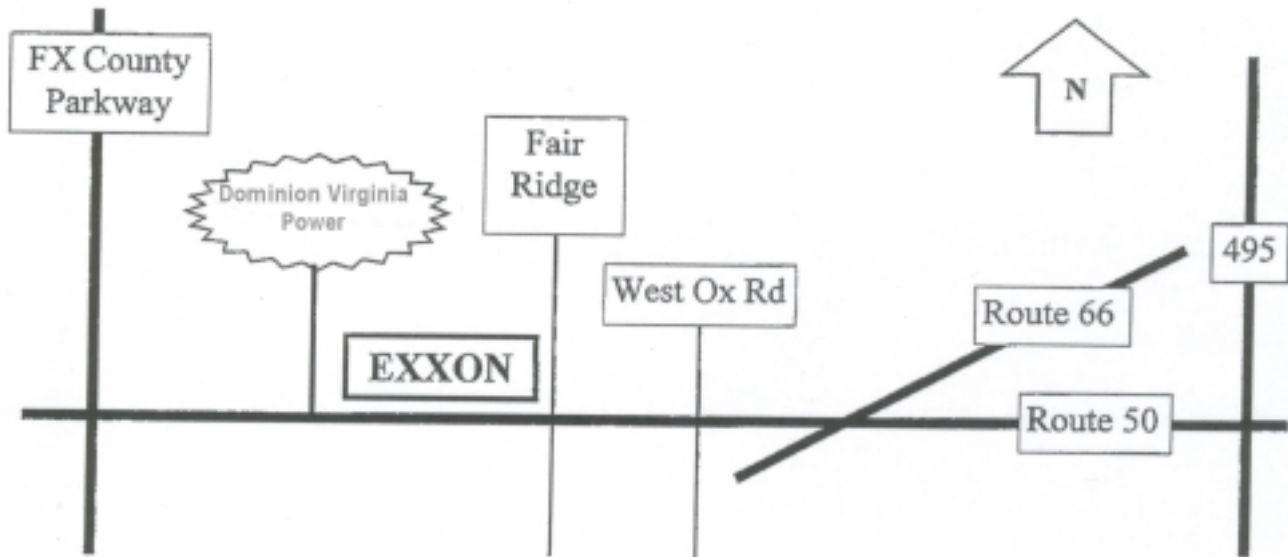
#### Bulletins & Nets:

NVFMA Bulletin  
Wednesdays at 8:00 pm on 146.79  
Bulletin Station: Steve, W4FMD

QCWA Open Net:  
Sundays at 9:00 am on 146.79

National Capital ARES Regional Coordination Net  
Sundays at 9:00 pm on 146.91

Don't forget the next membership meeting, on Thursday, October 18, at the Dominion Virginia Power offices at 3901 Fair Ridge Drive, Fairfax, VA (off Route 50 East of the Fairfax County Parkway) Hope to see you all there!



Northern Virginia FM Assn.  
P.O. Box 486  
McLean, VA 22101

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