

# NARS NEWS

The Northwest Amateur Radio Society

June 1986

## FIELD DAY DISCUSSION PLANNED FOR JUNE 20 MEETING

With Field Day this month, our program will coincide with message handling and contest strategies. We will have a slide show of last year's activities and discussion on operating techniques and what to expect during this year's Field Day.

NARS meets at 8 p.m. at the Cypress Creek EMS building, 16650 Sugar Pine Lane, one block east of Kuykendahl and two blocks south of FM 1960. Come early, bring a friend, and have a great time!

## KA5LUD CHOSEN AS ASSISTANT EMERGENCY COORDINATOR

Mike Pate, KA5LUD, will be the new assistant emergency coordinator and NARS liaison to ARES. He will help out Dick, N5DRM, NARS Emergency Coordinator. The emergency committee is formulating a tentative emergency support plan which we will commit to Cypress Creek Emergency Medical Services as our part in time of an emergency.

Mike is also the Secretary of the Board for the Cypress Creek EMS and will act as liaison between EMS and NARS.

## NARS LOGO SEARCH ENDS JUNE

The June meeting is the last chance to enter designs for the club logo. Bob, N5AER, will take them up at the end of the meeting. Entries will not be judged on artistic quality so don't let that stop you. The one whose design is chosen will win a copy of the 1986 ARRL Handbook.

## FIELD DAY CONTEST - IT'S HERE!

You've been hearing about the ARRL national Field Day contest for the last two or three months and now it's here; this month! The contest operates from 1 p.m. local time Saturday June 28, to 1 p.m. Sunday, June 29. Tom Roraback, KA5YSB, has been working very hard to line up committees, people and equipment. If you want to be involved in Field Day and haven't entered your name, call Tom at 583-2661, right now!

We need people who will operate at any time for even an hour. A decision will be made Friday, June 27, if NARS will compete in the one or two station category. This depends on the number of members who will participate. Right now we have about 20 operators which is not enough for a two station entry. Let's make Field Day a club show.

The basic schedule for Field Day is on Friday, June 27, the power generators, antennas, operating trailers and other major items will be transported to the site and set up. Set up will be from 1 p.m. that afternoon until everything is ready. Friday evening and Saturday morning the antennas will be matched to radios and everything tuned up and ready to go. By 1 p.m. Saturday operators and loggers will be standing by to commence operation. We will operate non-stop for 24 hours. Coffee, donuts and soda pop will be available. After 1 p.m. Sunday the site will be returned to its original appearance. Even if you don't want to actually operate we can still use people to help with the little chores. See you there!!



FROM THE PRESIDENT  
by KEN HARLAN, KA5AKG

RFI NOTE #4  
HARMONICS OR FRONT END OVERLOAD?  
by KEN EDINBORGH, W5BKK

During the formative stage of NARS there was a need for information and guidance in creating a radio club. We turned to the ARRL and got quick valuable response. When problems with local ordinances or deed restrictions develop, our first inclination is to contact the ARRL. For years the ARRL has acted as the radio Amateur's advocate, counselor, information resource, and all round representative. One of the first actions NARS took after its formation was to affiliate with the ARRL and we have already used their resources to our benefit in our recent Novice License Class. We will be participating in Field Day organized by the ARRL. There is no doubt in my mind that membership in the ARRL is beneficial, individually and collectively, to amateurs.

We need the ARRL and they need us. There is a drive on this year to increase membership. If you aren't a member already please consider joining now. Everybody gains - you will stay abreast of ham news, get interesting technical articles, find out about new equipment and much more as you receive monthly issues of QST. The League will have funds and support to represent the Amateur Radio community. But we won't send it all away to Newington because they rebate \$5.00 of the \$25.00 fee from each new member back to the local club, NARS.

Even if you are already a member we can benefit locally when you renew your membership. Just send the renewal to NARS with a check to the club and we will forward the renewal for you and retain \$2.00 in the process. Your support of the ARRL will surely return as support for your favorite hobby.

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Two primary causes of TVI are excessive harmonic radiation and "front-end overload". The first of these is normally a fault in the ham transmitting system, while the second is poor design of the TV set. It is important to determine which of these exists.

If you have trouble and are not sure which of these culprits is the cause, tune a battery-operated TV set to channel 2 and fire up the rig on your favorite frequency. Harmonics from 7, 14, 18 and 28 MHz bands, if present, will disturb the picture. Check channel 3. No harmonics from the above frequencies can appear on this channel, but the third harmonic of 21 MHz can. If harmonics are your problem, no interference should appear on channel 5. Figure 3 in Chapter 40 of the '85 and '86 ARRL Handbooks is a guide to harmonic interference. A low-pass filter and/or an antenna tuner should reduce harmonics sufficiently.

If in this process, you find that several of the lower TV channels (say 2 through 5) are "blackened out", then you have a case of "front-end overload". The fundamental frequency of the radio is disabling the TV set. This is a design fault in the TV set. Appropriate steps must be taken by you or the TV manufacturer. Often, a high-pass filter at the TV set is all that is necessary.

#### NARS NETS

2-MTR NET - Wed. 8 p.m. 145.43 MHz  
(Bud, KA6JDT)  
2-MTR EMERG. NET - Wed. after 2-mtr  
net 145.43 MHz (Dick, N5DRM)  
15-MTR - Mon. 7:30 p.m. 21.350 MHz  
(Jim N5FIX; June NC - Tom KA5YSB)

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FOR INFORMATION ABOUT NARS, PLEASE  
CALL KEN EDINBORGH, W5BKK, 376-7660



Radio Frequency Interference, RFI, was presented in a lively discussion with slides, questions and answers and explanations from experts in the private sector and from the FCC itself.

Charlie White, W5LPU, of the consulting firm of Lockard, White and Joseph and formerly with HL&P, started off the discussion with the difference between "a spark and an arc". An arc is a continuous source of energy. A spark is where RFI comes from.

In power lines the source of RFI is found to be in the connection between the line and the insulator. Basically White explained that the wire's protective coating is rubbed off at the insulator, oxidizes to zinc oxide forming a capacitor, which forms a magnetic field. The power line then acts as an antenna and transmits spurious RF energy. A special receiver was designed and used with a DF Yagi antenna to locate faulty connections. The small receiver became known as the "Aggie Box" and works very well.

Our next speaker was Allen Cantrell, Engineer-In-Charge of FCC District 9. Mr. Cantrell defined RFI broadly as "impairment of reception" leaving open the possibility that RFI can be found with the receiver as well as the transmitter. He listed the following household items in order as being the most involved in RFI cases: Touch-Tone wireless phones; answering machines; stereos and speaker wires.

Interference is proportional to the amount of power used. The rule is to use the minimum amount of power necessary to establish communications.

NARS extends hearty congratulations to those of the NARS Novice Class who passed the Novice test administered May 21st. Of the 16 who took the test, ten passed. A make-up test is planned this month for several who were unable to attend or want a second shot at it. The new novices are: Nell McComb, Erik Pacior, Jim Minor, Larry Lee, Ed Hinds, Ray Bohannon, Scott Byrd, Vince Mo, Ed Rausche and Bob White.

#### NEW NARS MEMBERS ANNOUNCED

Please welcome the following new members: Bill LaBelle, KE5EL; Ed Rausche, New Novice; Jim Minor, New Novice; Larry Lee, New Novice; Mark Allen, KA5YPU; John Conley, N5GQW; Paul Kowalik. WE NOW NUMBER 90!

#### NARS SATURDAY BREAKFAST

An informal breakfast get-together has been announced. Everyone is welcome to drop in on Saturday mornings at 8:30 a.m. for an eyeball QSO. Location: Uncle Tom's Kitchen, 17500 Kuykendahl.

#### NEW REPEATER ON 440 MHz (70cm)

A new 440 MHz repeater in this area is operated by Mark Allen, KA5YPU. He welcomes all NARS members and others to use it. Input is 447.250 MHz; output is 442.250 MHz. The system is equipped with an auto-patch and an RC-85 computer controller. A sub-audible tone of 103.5 Hz (Houston area standard tone) is required to use features, but not the repeater. Location is near Spring with antenna up 520 ft. For detailed info on using the talking S-meter, auto-patch and other features, S.A.S.E. to Mark Allen, P. O. Drawer 8249, Woodlands, TX 77387. Move up to 440 and give it a try.

73, KA5YPU