

# NARS NEWS

The Northwest Amateur Radio Society

Houston, Texas

August 1989

## AUGUST 18 MEETING TOPIC ALL ABOUT WIRE AND CABLE

Coax is just coax, right? I mean you have either RG-59 or RG-8 and that's it, right? Wrong, oh great polyethylene insulation breath, as Johnny Carson might retort. The world has become more complicated and so has coax. You now have coax that is cellular, semi-solid, with or without double braid shield, different diameter sizes of the center conductor and different thicknesses of insulation. They are built to regular, JAN or MIL standards. Some have low loss signal specs and some are not and of course all these types of cables come with their own trade-offs and prices.

To the uninitiated this may sound terribly complicated and time to consult an electrical engineer, but if you attend the meeting this month all of this can become uncoiled and connected for you. Then you can be prepared to make the right decision for what type of feedline you need for your next antenna installation.

To do all this unraveling and connecting will be Lori Sturgeon, the sales representative in Houston for Belden Wire and Cable. She will walk us through the vast array of coaxial cable on the market (of which Hams use only a small part). Lori will touch on the basic properties and advantages of coax over other types of feedline wire; introduce a few new products which may or may not be familiar to Hams and some tips on handling coax, plus handouts and a slide show.

This will be a good meeting to expand your knowledge of materials and help you the next time you put up an antenna.

## FROM THE PRESIDENT by RICH MACDOUGAL, KG5LZ

Dear NARS members:

With the passage of last week's tropical storm I realized how unprepared I was from a power supply standpoint. We at NARS claim as Amateur Radio Operators to be able to respond to emergencies by providing reliable communications. Did you have your HT-battery packs charged? How many of you have portable generators? We are still in the middle of hurricane season - why not consider making our club a strong emergency communication alternative for the community by being "power" prepared.

Who knows, you may also be able to save your groceries, or the next time your neighborhood loses phone service and power, you may help a family in need of medical assistance. Think about it, and when you see a good deal on a generator let your fellow NARS members know.

## JULY MEETING RECAP

At the July meeting, the speaker was Dick Hawkins, W5DWI, who is now the Division Manager, Emergency Management and Operations, for the City of Houston. Dick gave an excellent presentation regarding the current status of emergency communications efforts in the Houston area. He also gave a slide show and described the City of Houston's underground communication center "The Cave", as well as other emergency equipment.

The door prize was won by Marleah MacDougal, N5MWZ. She won the book "VHF UHF Manual" by G. R. Jessup, G6JP, that was donated by Madison Electronics, 3621 Fannin, Houston. Phone: 713-520-7300.



\*\*\* PROPAGATION \*\*\*  
by ROY HRADILEK, AD5Q

15 Meters: We are now past the worst of the summer absorption period and 15 meters is still in great shape. This is a surprise to this writer, who has been expecting much more deterioration from the peak season of late spring. Nighttime paths are still very good, with nice openings around midday to places where it is late evening, like Asia. August is usually better than July, so we can expect more of the same on 15 meters. Later in the fall, the band will be closing at night, but daytime paths will improve. The attention of active DX'ers, however, will shift to another band: 10 METERS!

10 Meters: Remember last fall? The wall to wall DX? Openings to Europe all morning and half the afternoon? Rare DX in the new novice band? All this will return soon. The band will improve gradually during August and rapidly during September. It will then remain good through March. Be ready for the heavy action.

20 Meters: Until 10 gets going strong, 20 will be the band with most of the rare DX. Even after 10 returns, 20 will be loaded with rare DX. This is the nature of 20 meters. It is open to all parts of the world on a regular basis. 10 meters, at its best, opens to all parts of the world, but windows to some remote areas (like southern Asia and the Indian Ocean) are narrow. They are even more difficult later in the fall. On 20, the whole world is workable every day and all year when sunspots are high. Propagation is across nighttime paths, with reliable long path every morning and late afternoon.

LOW BANDS: DX is very workable on 40, but the heavy action is on the higher bands. There will be lots of activity on 40 later in the fall and winter. The 80 meter season will be poor this year. At the low end of the sunspot cycle DX signals are much stronger. Enjoy the high bands now. 5 band DXCC can wait.

\*\*\* FAR OUT \*\*\*  
by JACK DOUGLAS, KA5DNP

MicroSats were introduced briefly in our February column. Their launch from the Ariane "space port" at Kourou, French Guiana is now scheduled for the night of November, 9/10.

Two of the four are to be "PACSATS" which we have said are store & forward packet boxes using AX.25 protocol. That means the data will be "encoded" in the standard fashion utilized by your existing TNC's and computer programs. However, for several valid reasons (one of which is a 10-20 dB advantage over standard AFSK FM modulation) the "Manchester" PSK modulation system will be used. This means your existing TNC cannot do the job without help! What is needed is a Modem (Remember-MODulator-DEMODulator!) to go between your TNC and your Transceiver to adapt your existing Packet System to the Manchester system of the PACSATS. There are at least two designs (and sources!) for these modems. There is a G3RUH kit available from "RadioKit" and the TAPR version.

When you get your kit built (they cost about \$100) you are not yet through. You must go into your TNC and bypass the modem therein. Also, you should establish digital control of receiver frequency for automatically dealing with variations resulting from Doppler shifts. Then all you need is a capability to emit 100 watts ERP 2M/FM and receive 70cm/SSB with a "good" sensitivity (a GaAsFET preamp is recommended).

If your reaction is along the lines of "Is it really worth it?", I certainly can understand as I am grappling with that question myself. But, to those "ole hands" who have been heard to say, "Today's Ham Radio is just a bunch of button pushing operations (and Operators!)" I suggest you build yourself a MICROSAT/PACSAT capability. It does offer lots of CHALLENGE!!



## NARS NOTES

### NEW CALL SIGNS:

Congratulations to Steve Lhamon who is now N5OVP.

The new call sign reported last month for Billy Taylor was in error. His new call is really N5OSX.

### THE ADVANTAGES OF RADIO CLUB ATTENDANCE

You can always get excellent seats at all club meetings.

From your advantageous seat you can gawk at, smile at, ignore or enjoy the fellowship.

You're in a wonderful spot to see and say "Hello" to new members.

You never have to worry about what to wear except for your badge.

If you need advice about a problem you can collect a ton of it, free.

The cost of all these benefits, just one evening a month!

de "The Ham Radio Guide"  
Portsmouth, Virginia  
(submitted by Joe Green, WA4FGH)

## NARS BULLETIN BOARD

NARS MEETS the third Friday of each month at the Cypress Creek EMS Bldg. 16650 Sugar Pine Lane (beneath the water tower) which is one block east of Kuykendahl and two blocks south of FM 1960. Meeting time: 8 p.m.

\* Eyeball QSO's: about 7:30 p.m. \*

NARS BREAKFAST every Saturday 8 a.m. Strack Farms Restaurant, located at 5707 Louetta Rd. - Informal ragchew.

The Northwest Amateur Radio Society  
is an ARRL Special Services Club  
\* \* ARRL Club No. 2120 \* \*

### NARS NETS

NARS RAGCHEW - MONDAY 8 p.m.  
28.444 MHz (Ed, KB5AEL)

NARS INFO - WEDNESDAY 8 p.m.  
146.06/66 MHz (Ken, KA5AKG)

### EMERGENCY NETS

Northwest Harris County ARES  
WEDNESDAY 8:30 p.m.  
146.06/66 MHz (Scott, N5KEU)

Harris County OEM RACES  
SUNDAY 7 p.m.  
146.34/94 MHz (Bob, KF5ZL)

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

### NARS REPEATER FREQUENCIES

146.06/66 MHz 449.375/444.375 MHz

### NARS DIGIPEATER

Freq. (145.07 MHz) Alias (NARS)  
Call (W5BKK-1)

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