

# NARS NEWS

The Northwest Amateur Radio Society

Houston, Texas

January 1989

## "ALL ABOUT PROPAGATION" SCHEDULED FOR JANUARY 20 MEETING

At this month's meeting on the 20th, some bands are going to be open and some will be closed, but our speaker will definitely be wide open well into the evening hours with path openings from Antarctica to Yugoslavia to the back row of the room.

Let's hope you have your good CW ear on for copying because the rapid fire delivery of our speaker, Roy Hradilek, AD5Q, will challenge you to stay up with him at 200 or so words a minute. All his ducks will be quacking so come ready to learn what band is best to get into Asia, or where are the hot CW contacts now, or how you can hear Europe with your antenna. We will all be tuning around on all these questions plus much more.

Roy writes the \* \* PROPAGATION \* \* column for the NARS News, in case you missed the connection here, and he stays up on all the happenings around the world in regard to band conditions. In his briefly allotted time (his words), he will attempt to brief us on a band by band analysis, contest tips and strategies, how to hear the Japanese, Europeans, exotic islands, recommend books, as well as provide a special handout.

A "1960 MHz" NARS band window, or door, will open around 7:30 p.m. on Friday, January 20th, and will peak from 8 p.m. on into the late evening hours. Don't miss this rare opening for some unusual contacts with other local Hams plus some hot information about propagation and DXing from our local guru on these subjects.

## 1989 NARS ANNUAL BANQUET SET FOR JANUARY 28

The 4th Annual NARS Award Banquet is to be held on Saturday, January 28th at The County Line restaurant located at 13850 Cutten Road, about a mile north of FM 1960. There will be a cash bar starting at 6:30 p.m. with dinner starting at 7:30 p.m. Dinner will be served family style; entrees include beef, sausage, and chicken with potato salad, slaw, and beans. Cost is \$12.50 per person and we encourage the attendance of spouses as well as friends. Annual NARS awards in many categories will be presented following dinner.

For reservations, please call Ken Edinborough, W5BKK, 376-7660. Send checks made out to "NARS" to Ken using the enclosed envelope.

## DECEMBER MEETING RECAP

Terry Alexander, WB5EXY, Emergency Services Officer for the Civil Air Patrol, briefed us on the mission of the CAP and how they deal with emergency communications by answering calls both on land and sea... Ken Edinborough, W5BKK, said that planning meetings for the 1989 Houston Convention get under way in January. The Sheraton Crown Hotel will again be the site... The door prize was won by Jerry Reimer, KA5QAP. He received the 1989 North American Call Book donated by Madison Electronics, 3621 Fannin, Houston.

## 1989 NARS DUES ARE DUE

Send your 1989 NARS dues check (\$10) made out to NARS to Bob Welch, KE5IC 7811 Theisswood Rd. Spring TX 77379.



\* \* P R O P A G A T I O N \* \*  
by ROY HRADILEK, AD5Q

January is the month which brings the lowest temperatures here in the northern hemisphere, and also the lowest MUF's. The high solar fluxes (over 200!) help a lot in the daytime paths. Both 10 and 15 open promptly at first light, but shut down soon after dark. 20 meter activity in the evening is down sharply, but some openings remain, mostly to points in the southern hemisphere. The nighttime situation on 20 should bounce back quickly during February, with broader openings on 10, 15 & 20 as we move into spring.

HIGH BANDS: Morning Europeans are easily workable for several hours on 10, but the darkness over the pole effectively blocks the path to most of Russia and Asia. Openings on 15 are slightly broader, but absorption of signals is greater because the optimum frequency to Europe is well above 21 MHz. 20 remains open all night almost everywhere south of the Tropic of Cancer, opening paths to many exotic DX locations. The time to take advantage of this starts in mid afternoon with a pipeline eastward to Africa, and long path to VK and the western Pacific. Toward sunset the opening swings south to the Antarctic with long path to Asia.

LOW BANDS: If you like CW, 40 is the place to be in the evening. Lots of nice countries can be found calling CQ. The pileups build rapidly as the news hits the east coast repeaters, bringing countless lids on frequency to make things impossible for everyone. 40 fone is always a mess because of the foreign broadcasts. SSB DX ops might have some luck on 80, but the sunspots are really working against us this year. Europeans have been very weak here, and little can be heard without a beverage. Sunrise sweeps across Europe after midnight now, so conditions peak while most are asleep. At our sunrise we get a nice grey line path to Scandinavia and Russia on 40. With a beam you can work long path on 40 along the morning and evening grey lines.

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

If you have listened to Amateur Satellites or if you do so in the future, you will find that the signal usually varies a great deal during any "pass" (period of line of sight access). There are many reasons for this. One that is very important for satellites in elliptical orbits is the ATTITUDE of the satellite, i.e. the orientation of the "bird" and its antennas with respect to Earth.

NADIR pointing is the attitude that results in the antennas pointing directly at the center of the earth at APOGEE (the point at which the satellite is furthest from the earth). This would tend to give the best signal during a pass. However, this might not put the solar panels of the bird in a good position in regard to the sun. But the panels must get sun or the batteries will die!! Therefore, AMSAT Controllers are continuously compromising between signal levels and power budget of which a major factor is the SUN ANGLE.

Such considerations led to a recent situation where the antennas of Oscar 13 pointed about 30 degrees westward and 2.2 degrees southward from earth's center, at apogee. This meant the SQUINT ANGLE - angle between your line of sight to the bird and the bird's antennas direction - was large at apogee resulting in reduced signals. In a typical pass this angle was about 30 degrees at apogee but later in the orbit it fell to 5 degrees.

If one knows the BAHN coordinates of Satellite Attitude, most but not all tracking programs can accept these data and produce squint angle as an output. Then you can know when in the orbit the squint angles will be low and the signals will be GOOD. So, now we need to know BAHN coordinates as well as the Keplerian data (re: our recent column in the November 1988 issue of the NARS News).



## NARS NOTES

- UPGRADE AND NEW CALL SIGN - -  
Congratulations to the following:

Curt Furtado, KB5BCL, upgraded  
to General Class.

Roger Berry's new call sign is  
KG5OW (Not the KF5OW reported  
here last month).

- PLEASE WELCOME new NARS members:

Marleah MacDougal, N5MWZ  
Barbara Peat, KB5GEZ

- SEE NARS INFO - January QST, p.142

### AWARD NOMINATIONS OPEN FOR NARS BANQUET

The NARS Award Banquet is this month and many awards will be presented. Nominations are open for those Hams you feel deserve this recognition. Send or call in your nominations to Ken Edinborgh, W5BKK, by the January meeting day. The following is a list of the main awards: Public Service Award; Elmer of the Year Award; Operator of the Year Award/Multimode; Operator of the Year/Specialist; Operator of the Year/Beginner; and the Madison "Outstanding NARS Member" Award. Ask Ken for a description of each of the awards.

### LIFE MEMBER PRESENTATION MADE

As the result of a generous donation to NARS Lonnie Strebeck, WB5EQX, was approved to become a Life Member of the club. On December 10th, four members, Bruce Cline, N5FD, President; Joe Green, WA4FGH; Joel Empie, N5HWU; and Bob Welch, KE5IC, met at Lonnie's home. The purpose was to appraise him of the club action and, as he had already paid his dues for 1989, to return his check to him. We expressed our appreciation for the donation and to congratulate him on being a full-fledged Life Member. Lonnie's words left no doubt that he appreciated the NARS action.

de Joe Green, WA4FGH

## NARS NOVICE COURSE STARTS JAN. 31ST

A new NARS Novice Course is now well along in the planning stage and will start on Tuesday, January 31st, at 7:30 p.m. It will be held at the Prince of Peace Catholic Community, 19222 Tomball Parkway (FM 149) in Northwest Houston. The location is about a mile north of FM 1960 near the intersection of Perry Road and Tomball Parkway.

Under the tutorage of Joe Sokolowski KD5KR, the 12-week course will prepare the participants to take an FCC Novice Class exam which will be given at the end of the session. The text to be used is the ARRL book, "Tune in the World With Ham Radio", which can be purchased at local radio stores.

Registration fee for the course is \$10 per person. Preregister by sending a check made out to "NARS" to Bob Welch, KE5IC; 7811 Theisswood Rd.; Spring TX 77379. Please include your address and telephone number.

Please volunteer to assist with this program! Those who would like to help are asked to participate in an orientation session on Tuesday, January 24, at 7:30 p.m. in the classroom building at the Prince of Peace location. For any further information about the course, or to offer your help with the class, please call Joe, KD5KR, at 353-2196, or Bob Welch, KE5IC, at 376-4814.

### NEW BOARD MEETING LOCATION

Beginning with the regular "second Friday of the month" NARS Board of Directors meeting scheduled for January 13th, the new meeting place is the Prince of Peace Catholic Community located at 19222 Tomball Parkway (FM 149) at Perry Road. Check the parking lot for members' cars for the exact room location. It will not be in the classroom building. The meeting starts at 7:30 p.m. and is open to all NARS members. Please plan to attend.



# 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) 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.

NARS REPEATER FREQUENCIES  
146.06/66 MHz 449.375/444.375 MHz

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

NARS NEWS is published monthly by Northwest Amateur Radio Society  
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Editor, 1842 Knoll, Houston 77080  
Tel: 984-9028

BOB WELCH, KE5IC  
7811 Theisswood Rd.  
Spring TX 77379

NEW BOARD MEETING LOCATION  
Beginning with the regular "second Friday of the month" NARS Board of Directors meeting scheduled for January 15th, the new meeting place is the Prince of Peace Catholic Church - 1711 Louetta Rd. (at Berry Road). Check the (FM 143) at Berry Road. Care for parking lot for members' cars for the exact room location. It will not be in the classroom building. The meeting starts at 7:30 p.m. and is open to all NARS members. Please plan to attend.

# NARS NETS

RAGCHEW - MONDAY 8 p.m.  
28.444 MHz (Bob, KF5ZL)

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

## EMERGENCY NETS

Northwest Harris County ARES  
TUESDAY 8 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