

# NARS NEWS

The Northwest Amateur Radio Society

Houston, Texas

October 1998

## October Meeting on Propagation

The topic for the NARS October meeting will be Propagation. We will do more than watch the solar flux go up and down, as emphasis will be on the seasonal variations in DX propagation that effect each HF band. All questions and other observations are welcome, as the session will be very interactive. We can also expect digressions, as the subject may turn to antenna stories, pileup stories, contest stories, or whatever is directly or indirectly related to propagation and DX. This will be a fun meeting.

*de Roy - AD5Q*

## NARS - A Glimpse of its Ground Plane...

Many of our present membership would be hard pressed to remember when NARS was formed back in July of 1985. Some of those "founding fathers" have gone to other places, and a few, believe it or not, are still very much active with the organization. Let me list those that were on the Steering Committee back then: Bob Welch KE5IC, Paul Frantz WB5DBT (now KF5SB) Dee Logan W1HEO, Ken Edinborgh W5BKK (SK), Ken Harlan KA5AKG, Dan Wells N5IDE, Henry Freedenberg N5HF, Dick Rousseau KA4MFS (now KU4QK), Bob Jahn WA4JBV, Dick Combs N5DRM, Kirby Van Horn K7WOC, Dan Allen KA5PSO and Jim Stevenson W5KMN. Certainly, you should have recognized at least a few of these chaps.

Just weeks before, this little band of adventurers got together for their first Field Day operations, and under the call N5HF, managed to log in a whopping 474 contacts! By December '85, NARS was on their way with a total of 60 charter members, and now, thirteen years later, our membership is pushing the 200 mark.

I bring this up because many of us tend to forget where our roots are, or how our ground plane is laid out. We Nartians are committed to our hobby, we get involved, we help others when in need, and most importantly, we're open to others' ideas. If there's a better way to do it, then let's hear about it! But even I, the ever so humble KD5KR, become complacent and have to be reminded every so often, that it just doesn't happen by itself. That reminder I received a few days ago via e-mail. It was a note from Dee Logan - Mr. NARS himself. I decided that this was not sent just to me, but to NARS as a whole. His comments follow...

*Continued on page 4*

## Important Dates

**Friday, October 16, 7:30 PM** - NARS monthly General Membership meeting, Spring Cypress Presbyterian Church - Eyeball QSOs, 7:00 PM.

**Saturday, October 24, 8:30 AM** - VE License Exam Session, Tomball Community Center, S. Cherry & Market streets (just South of Main).

**Tuesday, October 27, 7:30 PM** - NARS Board of Directors meeting, Terra Nova Clubhouse, 5200 Woodville

### Contests:

**October 24-25** CQ WW DX, SSB

**November 7-9** ARRL CW Sweepstakes

**November 21-23** ARRL SSB Sweepstakes

**November 28-29** CQ WW DX, CW

### Notice:

NARS membership dues is \$20 per year, renewable on anniversary of last year's full payment.

*Deadline for articles to appear in November issue - Saturday, October 31.*

## BREAKFAST

### at Victors

4710 W FM 1960

**Saturdays**

**8:00 AM**

## President's Corner

October 1998

Well now, if you missed last month's feature speaker, you missed one good presentation. Jim Kirk, the one and only KJ5X, enlightened us on the workings and wonders of Dayton '98, the "Mother of all Ham Fests!" His slide presentation, along with the Jim Kirk brand of homespun humor, made it a delight to be part of. It was the next best thing to being there (Well, maybe that's a bit of a stretch!). If I had a popcorn concession, I'd have made a fortune! But alas, just as in the stock market, we'd all be millionaires, if only...

The coming months will continue to bring us stimulating programs. Of course, in October we will be taking nominations for the 1999 board positions available. Here's your chance to make an impression on the NARS membership. Here's your chance to get involved and participate in the workings of what makes this organization great.

What's KD5KR going to do next year? I'll still be on the board as one of the directors, helping to guide our new movers and shakers in the administrative maze. And, you can bet your five element Yagi that I will continue providing you with the freshest coffee and day-old donuts that money can buy. Is this a wonderful country, or what?

One other reminder – the December meeting will highlight the annual "Show-n-tell" night, where you all get the chance to present and brag on your favorite do-it-yourself project. We even hope to have an auction of sorts to unload many items of value donated to NARS by Dick Rousseau, KU4QK, when he relocated to Florida. See you all on October 16th!

*Joe Sokolowski KD5KR*

## Public Service Events

### *Your radio skills are needed.*

**SIRE 6th annual Ride-A-Thon, Saturday, October 17**

Contact: Keith Dutson, 281-351-7683

Here's a chance to take part in an event that NARS members have supported with radio communications since Saddle Up For SIRE started six years ago. With reasonable weather, it is always fun and requires only a 2 meter HT, fresh batteries and a few hours time. Volunteers are stationed along a ten mile trail near Montgomery where participants ride horses to raise money for SIRE, Self-Improvement Through Riding Education, the charity dedicated to the rehabilitation of children and adults with disabilities. For more information, call Keith Dutson.

## *NARS Board of Directors Meeting 7/30/98*

**Treasurer's report** – Bank balance was \$3446.12 on August 31, 1998.

**November program** – Election night, be sure to attend and vote. Also, Keith Dutson will present program on the design and installation of his new TOWER.

**Rose Hill Node** – Currently underutilized. Consideration being made to convert it to a DX cluster digipeater.

**Public Information Officer** – NARS new PIO is George Levandoski KD5AYF.

**Public service events** – SIRE October 17, Texas Endurance Run December 12. More volunteers needed, please sign up at general meeting.

*Bob Argo KC5JZO, Secretary*

## Buy – Sell – Trade

### Wanted:

Need copy of manual for Kenwood AT-130 antenna tuner. Can anyone help?  
Joe Sokolowski · KD5KR · 281-353-2196 · kd5kr@juno.com

## *VE Session Results*

Thirteen candidates were examined in Tomball on September 26. Several of these were from the recent class at Compaq. Of the 28 elements on which the candidates were examined, 15 were passed. Two of these were 5WPM Morse Code, and one was 13 WPM. One General Class licensee upgraded to Advanced Class. Three Technician Plus licenses were earned, and three Technician licenses were certified. NARS VEs participating included Bill K8CSG, Bob N5ET, Dick W5VHN, Paul N5NXS, Vicki AC5EW, Bruce WC5CW and Jack WA6GHZ. Walter K5WH from Compaq also participated.

*Bill Gary K8CSG*

# DX News

*Now, DXers, whoever you may be, If you want to rise to the top of the tree, If your soul is not fettered to a balky mule, Be careful to be guided by this Golden Rule - Stick close to your lists and never lose your hold, And you all may be atop the Honor Roll. . .*

*The sun belched forth a mighty proton flare last month, causing propagation to virtually disappear. Local hams were asking each other if their receivers had died, or if their antennas had fallen. No one could hear anything except for a few meager domestic signals. Lacking other alternatives, some of the QRPers came over and visited The Old Timer to discuss the problem. "How many years have you worked DX," he asked one of them. Learning that he was talking with virtual newcomers to the DX game, The Old Timer leaned back under his shade tree. "It's like this," he said. "When you have been through a couple of these sunspot cycles, you will begin to understand that sunspots sometimes resemble the stock markets. Some days the numbers go up; on others they go down. Asking Loyd to try and work on the Big Bend Sundancers probably won't do much good when conditions are this bad. All they can do is make a lot of foolish noises and sprain some ankles stomping around in their silly dances. Go home and play with your kids for a while, and talk with your wives for a change. Don't worry about propagation and DX; it will all come back, and perhaps sooner than you may think."*

September opened with good propagation numbers, accompanied by pretty good DX. On August 31 the solar flux index hit a new high point for this cycle --178.5. This was the highest level since Feb. 10, 1993. The early September propagation numbers were ~180, 18 and 4, and the DX early in the month included 3D2-Rotuma, A41-Oman, 3B8-Mauritius, ZB2-Gibraltar, and 6W1-Senegal among others. Propagation conditions over the long Labor Day weekend were pretty good, with an abundance of good DX to be worked. The numbers were generally 165, 5 and 1. By mid-September, the SFI had declined to around 120 with A & K at 4 and 1 or 2. Not particularly bad, but little DX on the bands except for a few decent spots. As the end of the month approached the SFI was in the 140+ range, with A and K indices of 12 and 4.

**LOCAL EVENTS:** K5LBL worked 4X4MU in Israel, perhaps surprising himself. Walter worked 3B8CF (Mauritius). K5VUU says his DXCC cards are coming in nicely. K8CSG worked bunches of stations in the Asian contest and in the European Field Day. KD5CML reports working several DX stations, reflecting the improvement in band conditions. KB5JZO worked a JA and one other new country. W5PDW received a QSL for his contact with the Aland Islands OH0.

New DXCC member in NARS! Michael Scott, KM5LA, became a new NARS member of the DXCC when his certificate arrived during the last week in September. Congratulations, Mike; a nice achievement.

**DX WORKED:** VK4NEC Australia 10m 0055Z; FP/N9PD (St. P. & Miquelon) 12m 1816Z; 3D2DX (Rotuma) 15m 0228Z; A41LZ (Oman) 20m 0252Z; 3B8CF (Mauritius) 20m 0300Z; 6W1QV (Senegal) 17m 2012Z; JY4MB (Jordan) 20m 0259Z; 3D2DX (Rotuma) 20m 0939Z; DU1KT (Philippines) 20m 1155Z; DS4BBL (So. Korea) 15m 0203Z; RU9VA (Siberia) 15m 0236Z; JAs by the dozen in the Asia contest 15m; ZS6KOB (So. Africa) 20m 1432Z; UA9FAR (Asiatic Russia) 20m 0152Z; VR98BG (H.Kong) 15m 2326Z; DU8DJ (Philippines) 20m 1337Z; S21J (Bangladesh) 15m 1426Z; HS1NGR (Thailand) 15m 1608; JT1CC (Mongolia) 20m 1010Z; UR2IWA (Ukraine) 20m 2019Z; HL3ERJ (So. Korea) 15m 0216Z; EX7MM (Kyrgyzstan) 15m 0239Z; VU2ELJ (India) 20m 1148Z; KC4AAA (So. Pole) 20m 0244Z; ZK1JD (Rarotonga) 20m 0919Z; DU8DJ (Philippines) 20m 1328Z; HL1ALA (So. Korea) 15m 2339Z; 9H1EL (Malta) 15m 1506Z.

**DX HEARD/NOT WORKED:** ZG2IT (Gibraltar) 12m 2215Z; JW2PA (Svalbard) 20m 1600Z; 5R8FU (Malagasy Republic) 20m 1446Z; 6K0ZW (So. Korea) 15m 0145Z; V63KU (Micronesia) 20m 1130Z; E31AA (Eritrea) 20m 2207Z; ZD7VC (St. Helena) 20m 0041Z.

**QSL ROUTES:** TL5A via PA3DMH; 3D2DX via EA4CP; S21J via K1WY; 5R8FU via SM0DJZ; ZP50P via ZP1AB.

JT1CC, a YL operator in Mongolia, turned up on 20 meters on a Sunday morning. Naturally, she attracted quite a pileup. With her relatively weak signal, controlling her transmit frequency was a bit difficult. Perceptive observers noted the high number of stations with 1x2 and 2x1 call signs in what I often refer to as a "pack in full bellow." One wonders at the apparent linkage of vanity and stupidity in such situations. Perhaps there is something to this business of experience after all.

For much of September local DXers have had to make out without the help of the TDXS DX cluster. During the onslaught of the storm early in the month, the backbone link to K5DXC in LaMarque was knocked out. Without that connection, the TDXS cluster had only the few spots put up by absolutely local DXers. Most of us had to resort to our old style of finding DX to work --tune and tune and listen and listen.

There had been a bit of rumbling in the weeds

about putting Eritrea (E3) on the air in recent months. Two individuals/groups were talking about plans for the attack. On September 22 E31AA appeared out of the blue on 14195, listening 200-205. His signal here in Texas was not especially strong and the pileup was typical --loud and raucous. After listening for a while, I was still unable to identify who was executing the operation, but it didn't sound like any of the earlier rumored sources. Fortunately, it did not sound like Romeo, either. . . I later found it was supposed to be Jacky, F2CW, even if it was not publicized widely. He should be back in Eritrea for several weeks in October.

Jacques, FR7ZU, should be operating from Glorioso Island as FR7ZU/G during the last three weeks in October. This is a tough country for many DXers to work, and this will be a good opportunity for those who need it. Be prepared for a big pileup!

The ARRL Outgoing DX QSL Bureau will increase its fee effective January 1, 1999. The new rate will be \$6.00 per pound of cards (approx. 150 cards), or essentially \$.04 a card. Still a bargain when compared to any other means of QSLing.

Three new DXCC counters in one year! --not bad for a fellow without a new one in the last three years. ARRL has announced they will accept cards for Temotu, the Australand the Marquesas Islands beginning October 1, 1998. Since the cutoff date for inclusion in the 1998 DXCC Yearbook is September 30, it does no good to send them until later. Perhaps something else new will turn up by then --who knows? At any rate, the three new ones bumped my total up to 352.

An American group is planning a DXpedition to Navassa during the fourth quarter of 1998. The callsign is supposed to be N1V. Navassa is an interesting DXCC entity, in that although it is not far away it remains somewhat rare in more recent years. This is mainly because DXpeditions there have become a bit more difficult --predominantly in the area of proper landing permission. In any case, this is another one to watch for and try to get into the log.

George, K5VUU, has confirmed 62 countries for DXCC. Michael, KM5LA, worked 5R8EE (Malagasy Republic) recently on 20m SSB. Larry, WA5SAJ, now has worked 114 countries but lacks confirmations for DXCC. John, W5PDW, was overheard working VK6NZ in Zone 29; he now needs only three zones for Worked All Zones.

*Bill Gary K8CSG*

## Contest Connection

### Upgrading Your Old Rotor

Most of you know that for the past several months I've made a commitment to rid myself of the dreaded wires in favor of a more conventional approach of getting my signal across the nation and hopefully around the world. In my good ham radio spirit most of the crucial components will be scrounged, traded and begged. Cheap is the operative word.

In thinking putting up a sizable beam one always has to think about the appropriate rotor. If you have priced new ones lately you know they ain't cheap. You could pay as much as a grand for one. Since I have never had a beam antenna and a tower before, I started investigating rotors. A quick trip to the Rotor Doctor's web page revealed a very interesting article on the history of the bell shaped CDE Hy-Gain rotors. The pioneer of these rotors is the reliable old Ham M. It was designed many years ago for the lightweight tribanders. As beams got bigger the Ham II, Ham III and Ham IV evolved. The Ham IV is still sold today for the larger beams for a bit over \$400.00.

In my process of negotiations I came up with an old Ham M with the old style brown control box and the slider switch

across the bottom. Since I had decided to put a Hy-Gain TH-6 (that's another story), the Ham M did not have any kind of brake control other than when you pushed the direction switch the brake pulled in and released immediately before rotation is stopped. The TH-6 has a 24' boom and that is a problem having that big boom stopping instantly. The torque would surely strip the gears. A few weeks back at the Texas City swapfest I picked up a new style control box for \$25.00 that allows you to release the brake manually after the rotation has stopped.

My study of the rotors told me the biggest difference between the Ham M up to the Ham IV was the brake and stainless steel ring gear drive. My inquiry to the Rotor Doctor found that for approximately \$80.00 of parts the old "M" could now be converted to an IV. This includes a 7-second brake delay circuit board that the Ham IV doesn't normally have.

So if you have an old Ham M, Ham II or Ham III you can upgrade it to a Ham IV for under \$100.00 including shipping. Pretty good deal! These rotors also are very easy to work on. I might add, the good Doctor sells

reconditioned Ham IV's for about \$250.00 without the control box, depending on availability.

One note on the Tail twister (TX2) - This rotor was designed to handle the big heavy beams. It has a heavy-duty case and an extra set of bearing to handle the heavy loads. Most rotors have two sets of 49 bearings each. The TX2 has 3 sets. One of the little known facts about the TX2, according to the Doctor, is that it has the same motor and gearing as the Ham IV.

So don't through throw those old rotors away and look for them at a bargain price at a swapfest. For a few bucks they can be converted to top of the line.

The Rotor Doctor, actually Craig Henderson N8DJB in real life, operates a company formerly called C.A.T.S. which is advertised frequently in CQ and QST. He is one of the few people you can e-mail and get a return in a couple of hours. His e-mail address is [craig@rotordoc.com](mailto:craig@rotordoc.com), or link via [www.rotordoc.com](http://www.rotordoc.com).

Let me know if you need more information.

Bill W5SB [bdenton@tenet.edu](mailto:bdenton@tenet.edu)

## NARS - A Glimpse of its Ground Plane - Continued

*Continued from page 1*

Greetings from one of the NARS founders (I know that, because your editorial said so!). It has been quite a few years and at least one sunspot cycle since we met in my living room in Spring and talked about starting a new radio club. I had done it once before when I worked for GE in Fairfield, CT. I knew it was much work, and that it would take the cooperative efforts of several like-minded licensees. As you say, the rest is NARS history. But you're so right about a radio club growing and prospering through a variety of individuals who pitch in, but don't burn out. That's the sad fact of life up here in Lake County, Ohio. The same people doing the same jobs over and over again. Eventually they cry "enough," and split without so much as a "73."

I congratulate NARS for its ability to reinvent itself and emphasize fresh blood through licensing classes and keeping an active schedule of club activities. I started writing an article on how to keep your radio club alive and well, and kept coming back to NARS as a great role model. Certainly, one rule of survival must be "Have fun!" Keep business among the board and try to make the club meeting a fun experience. If not, why attend a meeting?

Anyway, Joe, I enjoy reading the NARS News each month, and noting your sage words of wisdom (And the DX column that is a mini-encyclopedia of DX details!). Please pass along my greetings to the members. Most won't remember "Dee" Logan, that wandering W1 whom agreed with the idea that there really should be a radio club in Northwest Houston. And what a club it's become!

Perhaps I'll run into some of you if you go fishing for DX on the low end of 20 meters or jump up to the 17-meter band and rattle the Bencher when I do. Anyway, 73. - Dee Logan, W1HEO

So there you are - a quick glimpse of your "roots." It just doesn't happen by itself, does it? It takes work, cooperation, and the desire for a group such as NARS to succeed. NARS is in its thirteenth year - we must be doing something right! But again, every so often we need to be reminded of this tenet. I know, I do. Besides, now that I'm in the "autumn of my years," my memory is starting to slip; in fact it's getting worse all the time. First I began to forget faces, then names, then to zip up. Yesterday I forgot to unzip! Hoo boy...

Joe Sokolowski KD5KR

## Remote Tuned Mobile Antenna for HF Fans

The standard model HS-1500 (High Sierra Antennas) has a 72-inch stainless steel whip. The manufacturer says it tunes 3.5 to 30 MHz by remote control. The remote control panel is mounted on the dash of your vehicle. High Sierra recommends their HS-1500 as the best choice for general use by hams.

### Basic description of operation

A unique variable center-loading coil is the key to the antenna's operation. The coil is partially inside the two-inch mast. The portion of the coil visible above the mast is the active inductor; the portion in the lower mast is rendered inactive by their exclusive decoupling assembly, which connects the top of the mast to the bottom of the coil. They note that no copper fingers are used to contact the coil

as one of their design goals was to eliminate these trouble prone contacts.

The decoupler utilizes a uniquely shaped stainless spring which makes contact with the coil. The company chose stainless steel for superior corrosion resistance. The spring resides in a machined collar to provide constant contact pressure and a very low contact resistance, because lead lengths are only a fraction of an inch. Since the loading coil is variable and remotely controlled, you can tune the HF spectrum from 3.5 MHz up without leaving the driver's seat, in any weather. An end of travel indicator light lets you know when you reach the tuning limit. An SWR meter (built into most transceivers) is used to sense resonance.

The company offers a wide variety of mounting hardware to match the bumpers of many vehicles; prices vary accordingly. The company also makes other antenna versions. RV accessory packages are also available.

The HS-1500 antenna with control panel kit including basic mounting hardware, less whip, is \$275.00. The HS-110A 72-inch stainless steel whip is \$20.00. Prices vary somewhat depending on the type of vehicle specified. Contact the company at 530-273-3415, or write to High Sierra Antennas, Box 2389, Nevada City, CA 95959.

Harry Gage N5WIZ

## Two Members are 98/99 Foxes

The 98/99 Fox season starts in October with hundreds of the nation's QRP stations searching for a single "fox" station on 40 Meters each Tuesday and Thursday evening. The more foxes that one finds, the higher is one's score. This year both K5ZTY and WA8GHZ have been chosen to be part of the 21 fox stations from around the country.

Look for them at 7.04 +/- with 5 Watts max during their 2-hour operating scheds (Remember all times are ZULU - Tuesdays and Thursdays local). They'll be calling CQ FOX and the exchange is RST, State, Name, and Power (559 TX Bob 5W).

| WEEK | GMT DATE | FOX OP | FOX QTH | START TIME(Z) |
|------|----------|--------|---------|---------------|
| 2    | 10/14    | WA8GHZ | TX      | 0100          |
| 6    | 11/13    | WA8GHZ | TX      | 0200          |
| 11   | 12/16    | K5ZTY  | TX      | 0200          |
| 22   | 3/5      | K5ZTY  | TX      | 0200          |



by Keith Dutson

*Beth and I returned from our vacation September 5th as planned. We did not make it all the way to San Diego and headed back east before reaching Los Angeles. We got to visit the Force 12 factory and meet its president, Tom Schiller, a gracious host who gave me a tour of the facility. We logged just over 6300 miles on the Goldwing. Glad to be home.*

*Thanks to Bill Gary K8CSG and Jim Kirk KJ5X for publishing the September News.*

*Sign up today as a NARS News reporter; see me for details. You do not have to be a writer or photographer, but it will help if you can do either. Call me at 281-351-7683, or send email to kdutson@swbell.net.*

**HOUSTON**  
AMATEUR RADIO  
SUPPLY, INC.

George DiLetto, KDORW  
President

Exit 68 I-45 North  
181 Cypresswood Drive  
Spring, TX 77388

800-471-7373  
281-355-7373  
Fax 281-355-8007

# Welcome

*Join us for our monthly meetings!*

## NARS Resource List

### General Help:

Bill Stietenroth K5ZTY, 713-893-3901  
Allen Majeski WA5REJ, 281-353-8652  
Bill Denton W5SB, 281-469-8331,

### Antennas

O J Quarles K1OJ, 281-955-1555, HF  
Larry McCain WA5SAJ, 281-469-6709  
Madison Jones W5MJ, 281-350-4330,  
CW  
Bill Gary K8CSG, 281-537-9240, DX  
Bill Rister KC5EZQ, 281-537-8596, ATV

### Satellite:

Deral Kent K5WNO, 281-548-7476,  
RS12/13  
Dick Rooney W5VHN, 281-288-8424

### Electrical Design, Troubleshooting:

George Carlson KC5RCC, 281-376-8307

### Packet:

Don Bedell KA3BKU, 281-370-6576

### VHF:

Brian Derx N5BA, 713-894-5942

### Computer Operating, Win'95:

Bob Argo KC5JZO, 281-288-7430

### Computer Programming:

Keith Dutson WD5DXL, 281-351-7683

### Interference:

Harry Gage N5WIZ, 281-370-7488, Basic  
Advice

Mark Tyler K5GQ, 281-587-0256

### Card Checking Awards Managers:

DXCC - Bob Walworth N5ET,  
Linda Walworth KE5TF, 281-363-0209  
WAS, VUCC - Brian Derx N5BA;  
713-894-5942  
WAZ - Bill Gary K8CSG; 281-537-9240

### NARS Public Information Officer:

Open (apply to Board if interested)

## NARS Information

### PRESIDENT & BOARD CHAIRMAN

Jo Sokolowski KD5KR 281-353-2196  
kd5kr@juno.com

### VICE PRESIDENT

Dianna Hudspeth KC5VSF 409-447-2737  
74744.3562@compuserve.com

### SECRETARY

Bob Argo KC5JZO 281-288-7430  
bobargo@infohwy.com

### TREASURER

Keith Dutson WD5DXL 281-351-7683  
kdutson@swbell.net

### DIRECTORS

Jim Kirk KJ5X 281-376-0718  
jkirk@wt.net  
Walter Hock KK5LO 281-350-6633  
kk5lo@flash.net  
Bill Gary K8CSG 281-537-9240  
bsnn87a@pprodigy.com  
Allen Majeski WA5REJ 281-353-8652  
wa5rej@flash.net

### VE EXAM COORDINATOR

Bill Gary K8CSG 281-537-9240  
bsnn87a@prodigy.com

### ADMINISTRATIVE SECRETARY

Marian Denton KB5SGV 281-469-8331  
w5nc@juno.com

*Call Marian for general information about  
NARS. Send address, phone, email and other  
changes to:*

NARS Administrative Secretary  
PO Box 690342  
Houston, TX 77269-0342

### NETS

10 M Ragchew: Monday 8:00 PM, 28.444  
Coordinator: Jim Kirk KJ5X  
jrkirk@wt.net 281-376-0718

2 M Information: Wed. 8:00 PM, 146.660  
Coordinator: Bill Gary K8CSG  
bsnn87a@prodigy.com 281-537-9240

### WEB SITE

URL: <http://www.flash.net/~nars/>  
Webmaster: H O Townsend WA5MLT  
wa5mlt@flash.net 281-955-8216  
Trustee: Walter Hock KK5LO  
kk5lo@flash.net 281-350-6633

### REPEATERS

2 M - 146.060 / 146.660 (KA5AKG)  
70 cm - 449.375 / 444.375 (KA5AKG)  
Digipeater - 145.71 (W5NC alias NARS)

### MEETINGS

**Monthly General Membership** at Spring-  
Cypress Presbyterian: third Friday, 7:30 PM  
**Saturday Breakfast** at Victors Restaurant:  
8:00 AM  
**Wednesday Lunch** at Various Locations:  
11:30 AM (Info on 146.660)

NARS NEWS is published monthly by  
Northwest Amateur Radio Society

Editor: Keith Dutson WD5DXL  
281-351-7683  
email kdutson@swbell.net

Send all articles and materials other than  
email for the Newsletter to:

NARS Newsletter  
24415 Deep Meadow  
Tomball, TX 77375,

Northwest Amateur Radio Society is a  
Special Service Club affiliated with the  
American Radio Relay League.

ARRL Club No. 2120