

The Northwest Amateur Radio Society

Houston, Texas

November 2003

## November Meeting - Let's Talk About Towers

From time to time we hear of injury or damages related to Amateur radio towers and the people who work on them. Most of these accidents can be prevented by understanding some basic principles and applying some common sense to this significant part of our hobby. At our November meeting we'll take a look at some of the critical safety issues related to towers and antennas and how we work on them. Come find out some of the DOs, DON'Ts, AND WHAT-IFs so your next tower project will have a happy ending.

## NP2B CQWW SSB DXpedition - St Croix

The site of this year's CQWW SSB moved from the QTH of N1LN to across the Caribbean to St Croix US Virgin Island, home of John Ellis NP2B (no relation to our own W5PDW).

After we arrived and had a good night's sleep we started putting together the station. I had shipped down my FT1000MP. It was mated with a big Dentron amp for the second station. John's primary station was two Ten Tec Paragons and a Ten Tec Titan Amp. We had to raise a 40 meter beam, a tribander and construct a 160 inverted L antenna.

We heard on CNN that a major solar flare would probably put us out of business for the weekend. That really didn't happen except for some problems on Sunday. Band conditions were generally very good.

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## **Important Dates**

**Friday, Nov 21, 7:30 PM -** General Membership meeting, Spring Cypress Presbyterian Church - Eyeball QSOs, 7:00 PM.

### **Saturday, Nov 22, 8:30 AM -** VE License Exam Session, Tomball Community Center, S. Cherry & Market streets (just South of Main).

**Tuesday, Nov 25, 7:30 PM -** Board of Directors meeting, Terra Nova Clubhouse, 5200 Woodville.

### Contests

Nov 29-30 CQ WW CW DX Dec 5-7 ARRL 160M Dec 13-14 ARRL 10M

### Wednesday Lunch Bunch

Nov 19 Pepperchino Nov 26 Luby's Cafeteria Dec 3 Jason's Deli Dec 10 Horn's Texas BBQ Dec 17 Woodlands House

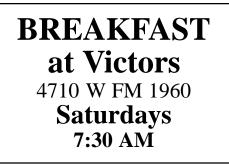
### Wednesday Lunch Bunch - West

Nov 19 Chili's Nov 26 Fuddrucker's Dec 3 Escalante Mexican Dec 10 Jason's Deli Dec 17 Luther's BBQ

**Monday "Tail Draggers" Lunch Bunch** 12:00 Noon Aviator's Grill, Hooks Airport

**Notice:** NARS membership dues are \$20 per year, renewable on anniversary of last year's full payment.

Deadline for articles to appear in the next issue is the last day of this month.



## **Public Service Events**

### Your Radio Skills Are Needed

Events officially sponsored by NARS include March of Dimes WalkAmerica (April), Buffalo Bayou Regatta (May), SIRE Ride-A-Thon (October) and Sunmart Texas Trails Run (December).

Plan to help with one or more of these events in 2003.

### Sunmart Texas Trails Endurance Run

Looking forward to a nice Saturday in the park? Well I have a deal for you. December 13, 2003 we will provide radio communication for the SUNMART TEXAS TRAILS ENDURANCE RUN. We are looking for volunteers and their Ham radios. We need about 12 people to help with this event.

About 1000+ runners traverse a course through the tall pines of Huntsville State Park. They will be running in two races, one is 50 kilometers and the other is 50 miles. Yes I said MILES. This will last all day long. All of the runners, which are ages 18 to 80, have been the most appreciative for our continued help with this event.

12 volunteers will allow us to work in relief. Some will be needed in the morning and the other will be afternoon. You don't have to worry about lunch or refreshments. These will be provided by the race committee.

All volunteers, and spouses, have been invited to attend a pre-race banquet at the Wyndham Greenspoint Hotel. Friday December 12, 2003 from 4:30 to 7:30 p.m. Dress is extremely casual. With this event you can have a dinner, too!!! What a deal!!!

So mark your calendars for December 13 and contact me to sign up for a most enjoyable time. If you don't believe me, ask someone who was there last year.

Walter KK5LO 281-350-6633 or kk5lo@swbell.net

# **VE** Session Results

At the NARS VE Test Session held October 25, 2003 there were four candidates. The results were two new Technicians, and one upgrade to General. Elements administered totaled four with three passed.

The VE's were Bob Walworth N5ET, Walter Holmes K5WH, Manny Garcia W5MG, and Keith Dutson WD5DXL.

Thanks go to Jerry Whiting KB5VGD and all of the VE's for their help.

The next NARS VE Test session will be held on November 22, 2003. See ya there.

Walter Hock KK5LO NARS VE Session Manager

## NP2B CQWW SSB DXpedition -St Croix

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Due to some unfortunate equipment problems that hampered our efforts quite a bit, we managed around 6,000 Q's. A lot less that we had expected. We had a very good time and John was a good host and made sure we had plenty to eat and drink and were entertained.

We are already making plans for next year to put on a major effort. In the meantime John is looking to replace some of the 16 year old Ten Tec equipment.

Not pictured was Larry N4FD who joined us on Sunday afternoon.

Bill W5SB

## Yap DXpedition

Cal, WF5W, and Paul, W5PF, will arrive on Yap (OC-012) on November 22. They will operate as V63WC and V63PF respectively until November 29. They will use 100 watt radios, wire dipoles for 30 and 40 meters and a 2 element SteppIR Yagi for 20 thru 6 meters. Operation will be CW and SSB with no digital modes planned at this time. Some limited operation in CQWW CW may be possible. QSL via W5PF.

More detail can be found at http://www.dutson .net/Ham/Yap/Index.html. Keep checking this web page for continuing updates, including some photos that will be posted while Cal and Paul are operating.

# Ham and "Sheez" Update

Believe it or not, the Ham and "Sheez" group will celebrate our second anniversary in February. This came to mind as I sat down to write the update for this month and I noticed that several "annual traditions" are discussed. I guess you know that a group is really established when it has multiple annual events!

As usual, we've had a busy month! The first weekend of October marked the second annual trip to Canton for Trade Days. Four of us (Anita Townsend, Nancy Kinard, Schalee Lodge, and me) left mid-afternoon on Friday and headed to points north. We really enjoyed the trip up to Terrell, where we stayed on Friday night, and got to know each other even better during the ride. To ensure that we were prepared for the shopping in Canton, on Friday night we stopped at the outlet mall in Terrell to practice browsing, comparison shopping, and, yes, purchasing! The problem was that the outlet mall was only open for about half an hour after we arrived. After a leisurely breakfast on Saturday, we drove to Canton and quickly found that we were among several thousands of folks who had decided that Canton was the place to be that weekend. Taking on the challenge of maneuvering through the crowds, we took our wheeled pull-cart and began the adventure. By the end of the afternoon, our cart was literally overflowing with treasures and a few holes were found in the soles of our shoes. We found some great bargains and were able to get a head start on the holiday shopping. For those who were not able to join us, please be sure to mark your calendars next year for the first weekend of October. You'll have the opportunity to join in the third annual trip to Canton!

Just to keep everyone on their toes,

we changed the October meeting from the last to the third Monday of the month. After playing musical rooms (there was a banquet in the room where we usually meet, another meeting in the second room we went to), we finally rearranged a classroom for our meeting. Flexibility is definitely a key in most situations! The evening was spent making early holiday gifts using plain white tiles, doilies, stencil brushes, paints, and a little imagination. The outcome was very nice holiday trivets to brighten up our festive tables. I will be the first to say that there are some very talented and creative ladies in our group. We also spent some time talking about a few gardening ideas that we had been bantering around. A few of us are going to attempt to grow wild flowers from seed and propagate other plants from our gardens. Then, we can share the flowers and plants with others in the group.

Being sensitive to the hectic holiday season that will truly start at the end of November, we will not be holding our monthly meeting in November. However, we will have our second annual Holiday Party on Saturday, November 22 for the ladies of Ham and "Sheez". The party will be held at the Frantz residence in Tomball and will begin at 6:30 pm. [Many thanks to Georgina for hosting the party!!] There are quite a few fun activities planned for the evening - a foot spa to let us pamper ourselves a little; our traditional holiday gift exchange, limit of \$15, please; and great food and friends. Please RSVP to either Georgina or me by Saturday, November 15, and let us know the type of finger food that you bringing. Further will be information, including directions to the Frantz residence, will be sent shortly under separate cover. Ladies - please be sure to join us!

While you have your calendars out and have marked November 22 for the Holiday Party, make sure you reserve Sunday, December 14, for Schalee's 3rd Annual Holiday Baking Party. More information about this event will be included in next month's update and also sent via email. Trust me - you don't want to miss out on this great tradition! The guys love it as well since we each bring home a goodie bag filled with the cookies, brownies, and other treats that we bake.

### Monthly recipe:

Pork Chops with Cranberry Balsamic Sauce (From the Campbell's Kitchen)

4 pork loin chops or pork center-cut chops, 1" thick (about 2 lbs.)

2 T butter or margarine

2 cloves garlic, cut into thin slivers 1 (14 oz.) can chicken broth (1 3/4 cups)

1/2 cup dried cranberries or dried cherries

1/4 cup balsamic vinegar

Season chops with lemon pepper seasoning. Cook chops in a nonstick skillet for 20 minutes or until browned and done. Remove chops and keep warm.

Heat one tablespoon of butter in the skillet. Add garlic and cook until tender. Add broth, cranberries, and vinegar. Heat to a boil. Cook over medium heat for 10 minutes or until sauce is slightly thickened and reduced to one cup. Stir in remaining butter. Spoon sauce over chops. Serves 4.

Enjoy!

Laurie Meier, N1YXU n1yxu@arrl.net

# **QUA\* George Eberhart KD5WUZ?**

Have you ever met someone who has come through many difficult circumstances and comes out on the other side even better than before? I've just finished speaking with KD5WUZ, George Eberhart. We actually have a few things in common; we met and then married our respective spouses over long distances and we both see the world from a different view than most.

George was born in Latrobe, Pennsylvania. He arrived with eyes that had a vision impairment caused by cataracts and complicated by glaucoma. Fortunately his parents realized that in order for him to experience life at it's fullest he would need to participate in the same things as all other boys his age.

His father was Scout Master of his Boy Scout Troop and they eagerly joined in events such as simulated Search and Rescue coordinated with other emergency groups in Pennsylvania. They carried the "rescued" person out of the surrounding hills.

His father was friends with the chief of the Seneca Nation Indian tribe and had his troop participate in their activities. They were camping with the tribe and woke up in the morning to snow on the ground. His father said they needed to learn to acclimate to all conditions, so they remained with shorts and short sleeves. Through those experiences George became a blood brother of one of the tribe boys.

When George was just out of high school he was riding with a friend who had just returned from Germany. When a car pulled in front of them, there was no way to avoid broad-siding it. George was in a coma for three weeks, but survived to get his Business Administration degree from Pittsburg Community College. He then found a job with the IRS and was transferred to Arkansas and then Denver. But, later George was part of the "reduction in force" and returned to Pennsylvania. He then began working for PenDOT where he discovered a knack for computer hardware and software support; everybody was bringing their problems to him! He decided to get his degree in Computer Technology.

In 1987, as George was leaving a convenience store he was mugged by four juveniles. They crushed his skull and then dropped him head first down a stair well - for the \$10 in his pocket. He was the third of four victims that night. By coincidence, the fourth victim was totally blind.

George recovered, finished his degree in Computer Technology and went on with his life. He was on the internet in 1997 and met someone who spoke his language. She said, "Every day above ground is a good one!" They began to talk more often on-line and on the phone. Louise says of George that she just knew he was special. In 1999 she flew to Pennsylvania, rented a truck and drove him back to Houston. She mused that she gets lost in Houston when she is off her own street, but never made a wrong turn all the way from Pittsburg!

George received his Technician license in June of this year. Louise has upgraded to General with the call N5LOU. They have an ICOM 718 with a dipole and a 2 meter/440 rig. He hasn't had much of an opportunity to have "favorite" contacts, but is looking forward to upgrading and getting a better antenna. Jim Kirk generously helped them with the dipole.

George was awarded the "Courage Under Fire" award in Pittsburg. He was given the Olympic Gold Medal won by basketball player Suzie McConnell. It is in a place of honor in his home.

George says of his life that he has "learned from his experiences to keep going and make life better." Well, George, you are as shining an example to all of us as is that gold medal you treasure.

Schalee Lodge, KD5WLL Ham & Sheez Reporter

\* QUA: "Q" signal meaning "Have you news of ... ?"

# **DX** News

## "For All the NARS DX News Fit to Print"

These are indeed exciting times in the world of DX with the sun dancing wildly and hurling geomagnetic gases millions of miles into space. As I pen this column the SFI is 249 with an A index of 65. Wild times! Keep your ears peeled to the bands at all times.

Lee K5AVY says he enjoyed working the locals who made it to St. Croix for CQ World-Wide. He worked the group on 40, 20, and 10 meters. But, he missed the group on 15 meters. DX stations worked in October of interest; S9SS, Sao Tome Is., KL7FAA, Alaska FAA AR Assoc., GP0STH, Guernsey Is. QSL cards received: 9Y4SF Trinidad & Tobago, RU9TS Orenburg Russia, UA4LCH Ulyanovsk Russia and S9SS Sao Tome Is. Confirmed DXCC count is 58, up from 56 last month.

Lee logged 105 QSOs in the CQWW this past weekend and got some new countries: ED7VG Cadiz, EA4WF Madrid, EA8AD Canary Is., CT8T Portugal, CT9L Madeira Is., D4B Cape Verde on 20 and 10, OA40 Peru, C5Z The Gambia, FY5KE French Guiana on 10 and 40.

John W5PDW says that Cal WF5W and Paul W5PF are making final arrangements for their trip to the Pacific. Nearest I can figure, the heading is about 284 degrees to Yap Island.

I had work the weekend of CQ WW, but still managed to join the pack for a couple of log pages. During my first contact with NP2B, Bruce introduced me to their host, John Ellis (NP2B). We had a nice visit; he sure seems like a really nice guy!!

I worked 27 countries mostly on 10 meters. If the band ever died, I missed it.

I stopped by Cal's last night; he was knee deep in outgoing QSL cards, grumbling, reshuffling and grumbling some more. You would think that this annual event would be more fun!

Just got an envelope from the buro. 8N1OGA, Chichi-jima in the Ogasawara Islands plus CE2, HK3, CX8 es VP2. A lot of the DX cards out there have beautiful color photography; some give some history on the country or island they are from. I urge all you guys and gals that like to work DX to send a QSL and start a really unique collection of cards. Some of my "Purtiest" cards live on our coffee table in a photo album.

Paul W5PF reports the best DX was 3C0V for number 323. Let's hope it counts! Also worked a few new band countries in the CQWW contest. The most fun was talking to the gang down in St. Croix; sounds like they had a great time. Around the shack the new SteppIR antenna is getting closer to the top of the tower. All that remains is to round up the required rigging and a couple helpers to get it in the air. The other major event is my upcoming trip with WF5W to Yap, Micronesia for a week in November. We will be operating as V63WC, Cal, and V63PF from November 23 - 29. Look for us; it will be great to hear a voice from home.

Al W5ADF says that his October report is a bit meager; however, it looks pretty good. Here goes: 3COV Annobon Is. 17M, V63ZT Yap Is 15M. And during the CQWW Al worked PT0F Fernando de Noronha 10M; HB0/HB9AON Liechtenstein on 10M. These four are all new entities. 203 confirmed on an old Yaesu and a stick in the ground.

Bill N5LYG reports a good CQWW outing at KM5VI's station. They worked 809 Qs, 166 zones, and 355 countries for a score of 1,010,766 points. Probably some of the most notable contacts where: VK9LA on 10m, 3XY1L on 20m, 5U7JB, 5I3A and 5Z4IC on 10m.

H. O. K5CX Needless to say my outing to St. Croix with Gregg W5IDX, Bill W5SB, and Bruce N1LN was the biggest highlight ever. A big thanks goes to John NP2B for being the perfect host. Several thoughts keep coming back to me: 1 - There's nothing like hearing a DX pile-up from the islands; 2- there's nothing like working your friends back home; and 3 - there's nothing like a DX outing with the best of friends. See the pictures at: http://www.k5cx.net. Click on the various pictures to navigate and see a larger image.

In closing, thanks Terry for entrusting the DX column with m this month.

73 gd DX to all, H. O. -- K5CX

# **Prediction of Radio Wave Propagation**

In the last two installments of this column, I talked about propagation, first concentrating on the sun and then on the ionosphere. It made is seem like one could just set down and predict where and when you could work another station, but that is just too good to be true. The prediction of radio wave propagation is even less exact than predicting the weather and we all know how accurate that is currently.

The reasons why we cannot predict propagation are many and varied with the lack of knowledge probably the most significant reason. Our knowledge is good enough to get the big things right but not good enough to put a sharp edge on our tools. There are many irregular variations that are not very well understood. These irregular variations are the topic for this column.

The first to be considered is "Sporadic E" propagation. The Sporadic E is a cloud like patch of unusually high ionization found at heights of the normal E layer. The mystery is how and why they form. It has been observed that they vary significantly with latitude and appearing at the higher latitudes seem to be associated with the aurora. The density of these ionized clouds varies as well as their size. Some of the areas may be very small or nearly transparent to the radio wave having little or no effect on them and at other times they may be hundreds of miles in extent and very densely ionized. They are good and bad in these ionized clouds depending on how you view them. Weak clouds may just act as additional attenuation of the signal but still allow the normal path with reduced signal strength. A heavily ionized cloud may completely block the normal path and reflect the signal in a different direction or back on its self. You may have to point your

beam to the west in-order to work a station to your east. Another way of looking at it might be you are able to work stations that would normally be in the zone that is skipped over (basically closer stations) by a chosen frequency. The Sporadic E may occur during daylight or dark. It doesn't appear at the same time for all stations and it just suddenly forms and just as suddenly disappears. The duration may be a few minutes to a few days. In addition, its density determines which frequencies will be affected. A condition with a fickle existence like the Sporadic E is a forecaster's nightmare.

Another fly in the ointment is the "Sudden Ionospheric Disturbance" (SID). The SID is not a good guy from the amateur's perspective as it pretty much shuts down the HF spectrum causing a blank-out. The blank-out is often enough to make one think their receiver is broken as no stations are heard on any band. The source of the SID's is the sun as it has been observed that a very bright solar eruption occurs and is followed by an unusually intense ultraviolet burst. The ultraviolet light causes a sudden ionization of the D-layer and frequencies above 2 MHz are completely absorbed by the D-layer. These bursts may last from a few minutes to several hours and we have no knowledge of what causes them or when they will occur. SID is just another forecaster's nightmare.

The Ionospheric Storm is another spoiler for the propagation forecaster. Ionospheric storms are disturbances in the earth's magnetic field. They appear to be associated with solar eruptions and the 27 day solar cycle. However, some appear to be caused by occurrences coming from other sources in space. The ionospheric storms associated with the sun result from particle radiation and usually occur 18 hours or more after the event on the sun. Ionospheric storms tend to occur suddenly without warning and recovery to normal conditions may take several days. The prominent effect of an ionospheric storm is a turbulent ionosphere and sky wave propagation is very erratic. This destroys the propagation for the higher HF bands but has little effect on the lower bands.

There are a few other things that get in the way of the forecaster that are referred to as transmission losses. The transmission losses are due to absorption (most of what we have been discussing), ground reflection losses and free space loss. The ground reflection losses occur on multi-hop paths. RF energy is lost each time a wave is reflected from the earth's surface. The amount of the energy lost depends on the frequency, the angle of incidence, ground irregularities and the conductivity of the surface. None of these is really very predictable and just add to the forecaster's nightmare list. The one thing that is for certain is all represent a signal loss, but the magnitude of that loss is anyone's guess.

Other factors that are irregular are man-made interference, QRM, and natural interference, QRN. These are for the most part unpredictable for the amateur as real time knowledge is required. I guess that is why it is just best to get on the air and see what you can work, when you have the time to enjoy your hobby rather than spend your time trying to predict when to get on the air. It is best to just use the big rules of thumb and not worry about the small stuff.

Terry KQ5U

# NARS Repeater Changes

What's With This Tone Stuff On The Repeater?

The NARS 146.660 repeater is up and running again after being out of commission for awhile. We have replaced the old Motorola unit with a new, used General Electric Master II commercial repeater that has been converted to the Amateur frequencies. The Motorola unit is going to be repaired and will serve as a backup unit.

You now have to use the sub-audible tone feature of your two meter transceiver to access the new repeater. We have used the standard PL tone of 141.3 Hz on the input and output of the repeater. To access the repeater your transceiver must transmit the tone on its carrier to open the squelch circuit on the repeater so you can be heard.

Without the 141.3 sub-audible tone on your carrier the receiver will ignore

your signal. This is called TONE SQUELCH. The old repeater used AUDIO SQUELCH. You have been using AUDIO SQUELCH on your VHF and UHF radios all along and you know that when you set it just above the noise to quiet the radio you also squelch out some of the weak signals too. The old repeater squelched out some of the weak signals too.

TONE SQUELCH quietens the radio by squelching out anything that doesn't have the sub-audible tone on its carrier. So, we can turn the audio squelch wide open and catch the weakest of signals if they have the tone on them and catch nothing if the tone is not there. The new repeater will be more sensitive to weak signals and ignore some of the interference that caused it to kerchunk a lot.

The transmitter portion of the repeater also transmits a 141.3 Hz sub-audible

If you turn on the TONE tone. SQUELCH feature of your transceiver and set it to 141.3 Hz then your receiver will act just like the repeater and receive only a signal that has that tone on its carrier and ignore all other carriers and forms of interference. What is this good for you ask? If you live or work in or travel through areas that have lots of other radio emitting devices in it and you have been plagued by interference on your two meter transceiver, this TONE SQUELCH will eliminate the problem. People who work downtown or in the medical center have this problem.

If you don't need or want to use TONE SQUELCH on your transceiver or it is not equipped with it, no problem; you will still be able to use AUDIO SQUELCH as before and hear the repeater just fine.

Bill K5ZTY

## **SIRE RIDE-A-Thon 2003 Results**



Thanks to a great team of NARS volunteers, excellent planning and control by SIRE's organizers and fantastic weather, the 2003 SIRE Ride-A-Thon was a huge success. The event resulted in proceeds of

more than \$38,000.

The photos shown here are two from those posted at http://www.dutson .net/Ham/SIRE/2003/SIRE2003.html. This web page also has details of the event, including links to the SIRE and 7IL Ranch web sites.

Keith WD5DXL SIRE Event Team Leader

# Welcome, Congratulations and Condolences

Welcome new members Richard Volker N8PKY and Robin Volker.

### NARS Resource List

General Help: Bill Stietenroth K5ZTY 281-893-3901, k5zty@juno.com Allen Majeski WA5REJ 281-353-8652, wa5rej.tx@netzero.net Bill Denton W5SB - Antennas 281-469-8331, w5sb@arrl.net O J Quarles K1OJ - HF k1oj@ditdit.com 281-955-1555, Larry McCain KN5Z kn5z@arrl.net 281-469-6709, Madison Jones W5MJ w5mj@houston.rr.com 281-350-4330,

#### Satellite:

Deral Kent K5WNO - RS 12/13 281-548-7476, k5wno@juno.com Dick Rooney W5VHN 281-288-8424, dickrooney@usa.net

PRESIDENT & BOARD CHAIRMAN Gregg Erlenbusch W5IDX 281-970-6860 W5DIX@qsl.net

VICE PRESIDENT Bruce Meier N1LN 936-271-1096 n1ln@arrl.net

SECRETARY Bob Walworth N5ET 281-363-0209 n5et@arrl.net

TREASURER Tom Hoherd KK5YU 281-370-2941, kk5yu@att.net

DIRECTORS Danny Richards N5BE 281-999-4481 n5be@arrl.net Terry Myers KQ5U 281-443-6042 kq5u@arrl.net Rob Nixon KD5BXZ 281-890-7074 kd5bxz@arrl.net George Levandoxki KD5AYF 713-895-0700 kd5ayf@arrl.net

ACTIVITIES CO-CHAIRMEN Terry Myers KQ5U Danny Richards N5BE Web Authoring: Keith Dutson WD5DXL 281-351-7683 wd5dxl@arrl.net

Packet: Don Bedell KA3BKU 281-370-6576, DonKA3bku@aol.com

*VHF/UHF:* Brian Derx N5BA 281-894-5942, n5ba@arrl.net

*PC Programming and Operations:* Keith Dutson WD5DXL 281-351-7683, wd5dxl@arrl.net

## **NARS Information**

ADMINISTRATIVE AND GENERAL INFORMATION Joe Sokolowski, KD5KR 281-353-2196, kd5kr@arrl.net

Send address, phone, email and other changes to: NARS PO Box 90387 Houston, TX 77090-0387

NETS 10M Ragchew: Mon 8:00 PM, 28,444 ssb Coordinator: Jim Kirk KJ5X 281-376-0718 kj5x@swbell.net

WEB SITE URL: http://www.w5nc.org Webmaster: H.O. Townsend K5CX 281-376-7416 k5cx@arrl.net

NARS REFLECTOR NARS@mailman.qth.net Coordinator: Peter Wang KF5ND 281-550-3864 kf5nd@yahoo.com

TEXAS QSO PARTY Coordinator: H.O. Townsend K5CX 281-376-7416 k5cx@arrl.net Interference (Basic Advice): Harry Gage AC5XD 281-370-7488, hjgage@aol.com Mark Tyler K5GQ 281-587-0256, k5gq@juno.com

Card Checking Awards Managers: Bob Walworth N5ET - DXCC 281-363-0209, n5et@arrl.net Brian Derx N5BA - WAS, VUCC 281-894-5942, n5ba@arrl.net H O Townsend K5CX - WAZ 281-376-7416, k5cx@arrl.net

NARS Public Information Officer: Peter Wang KF5ND 281-550-3864 kf5nd@yahoo.com

#### REPEATERS

2M: 146.060 / 146.660 (KA5AKG) 70 cm: 449.375 / 444.375 (KA5AKG)

#### MEETINGS

Monthly General Membership Third Friday each month at 7:30 PM Spring Cypress Presbyterian Church, 6000 Spring Cypress Road

Saturday Breakfast Victor's Restaurant 7:30 AM

Wednesday Lunch 11:30 AM Various locations (Info on 146.660 and listed on front page in Important Dates column)

NARS NEWS is published monthly by Northwest Amateur Radio Society

Send all articles and materials for the Newsletter to:

Editor: Keith Dutson WD5DXL 281-351-7683 , keith@dutson.net

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

ARRL Club No. 2120