The Northwest Amateur Radio Society

Houston, Texas

February 2003

February Meeting – Understanding Antennas

Almost all Hams have played around with antennas to some extent. It could be stringing wire for a Dipole or soldering copper pipe to make a 2 meter J–Pole. Even store bought antennas need to be installed and tuned–up.

Antennas are an enigma; how could a simple collection of wire and tubing be such a difficult thing to design and evaluate? The more you study about how an antenna operates, the greater the mystery becomes. The key is to keep it simple. We will look at a few simple antennas during the demonstration and just maybe shed a little light on the subject and help you understand antennas a bit more.

George Carlson KC5RCC

[Ed note: George has made this presentation at two past meetings. It is fascinating to see how changes in antenna design affect the radiation pattern. If you have never seen this demonstration, you MUST be at this meeting.]

Banquet Photos

2003 Officers and Directors



Banquet Attendees

Important Dates

Friday, February 21, 7:30 PM – General Membership meeting, Spring Cypress Presbyterian Church – Eyeball QSOs, 7 pm

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

Tuesday, February 25, 7:30 PM – Board of Directors meeting, Terra Nova Clubhouse, 5200 Woodville.

Contests

Feb 15–16 ARRL CW DX Feb 21–23 CQ WW 160M SSB

Mar 1–2 ARRL SSB DX

Mar 9 North American Sprint RTTY, UBA Spring

Mar 9–10 Wisconsin QSO Party

Mar 15-16 Russian DX

Mar 29-30 CQ WW WPX SSB

Wednesday Lunch Bunch

Feb 12: Brown Sugar's BBQ

Feb 19: Red Lobster

Feb 26: Casa Imperial Mexican

Mar 5: Strack Farms

Mar 12: Pepperchino

Wednesday Lunch Bunch - West

Feb 12 Chili's

Feb 19 Fuddrucker's

Feb 26 Puma Mexican

Mar 5 Jason's Deli

Mar 12 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.

BREAKFAST

at Victors

4710 W FM 1960

Saturdays 7:30 AM

President's Corner

February 2003

Greetings, to all my fellow Narsians. Well the first month of the year has passed and Valentines Day is closing upon us. I want to thank all the participants who worked so hard to make the Banquet such a success. I regret I could not make the Banquet this year but I understand everyone had a great time. Many thanks, to Bruce N1LN and George KD5AYF for filling in at the last minute.

As with the New Year come new plans. The board members convened as we usually do last month for the January meeting. After some discussions and debates some new plans were born. As you know NARS participates in quite a few activities and programs. We have some new coordinators for these projects ranging from Field Day to programs for the monthly meetings and a club raffle and more. I am proud to say we have some new ideas and I believe you will enjoy the results.

Field Day will soon be entering its planning stage. We have made changes in the past few years; one is the site, and the other is the addition of Tom KD5EIJ as the head chef "Barbeque Connoisseur Deluxe," and his assistant Christy Richards KD5NKY. The Ham & Sheez ladies also provided the desserts. You all have done a fantastic job and we look forward to your cooking again this year as well. As you all know, "Ham & Sheez" is the NARS ladies group formed a year ago by Laurie Meier and named by Shalee Lodge. Hmmm no telling what we might see on the dinner table at Field Day this year. We have recently added a Go-To station to the lineup at Field Day and this year we are looking to make some more improvements. Please give some consideration on where you might like to participate during Field Day. NARS is looking to get back in the competition and win another Field Day exercise.

Through the year, as done in the past, the coordinators or board members will be looking for volunteers to help get these activities up and going. There will be some announcements as time goes on to let you know who these people are. If you would like to help or participate please let one of these individuals know your intentions.

Bill Denton "W5SB" is working on a project and is in need of any old photos, movie clips, etc. of past NARS activities. If you possess any of these items they would be greatly appreciated. H.O. WA5MLT is likewise in need of some more current information for updating the web site. I am working on an updated list of NARS inventory. If you have any NARS items please let me know so I can get our current inventory up to date.

On a more somber note, sadly we as Americans have lost some of our family. Although most of us never personally knew the astronauts we felt as if they were family. On this past mission three of the seven astronauts were Amateur Radio operators. Our heart–felt sympathies go out to all the surviving relatives and families.

Gregg Erlenbusch W5IDX

Banquet Co–Hosts



Public Service Events Your Radio Skills Are Needed

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

The next scheduled event is the March of Dimes WalkAmerica. This is usually held in April.

Other events officially sponsored by NARS include Buffalo Bayou Regatta (May), SIRE Ride-A-Thon (October) and Sunmart Texas Trails Run (December).

VE Session Results

At the NARS VE Test Session held January 25, 2003 there were seven candidates. The results were five new Technicians, and one upgrade to General. Elements administered totaled seven with six passed.

The VE's were Paul Frantz W5PF, Bob Walworth N5ET, Keith Dutson WD5DXL, Gregg Erlenbusch W5IDX, Norm Covey K5OS, H O Townsend WA5MLT, and Wayne Stovall N5MNT, the newest VE to break in his badge.

Thanks to all of the VE's for their help.

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

NARS held a Special Test Session for a shut in ham at his residence. I am proud to announce Randy Benoit KD5QQH passed the code element. He is now authorized to operate on HF. If you hear him on 10 meters phone be sure to give him a shout.

Thanks to Norm Covey K5OS and Paul Frantz W5PF for their assistance at this special session.

Norm Covey deserves special thanks. He lives near Randy and volunteered to help him become more proficient on his code skills. Norm would go by Randy's house to give him mock code tests. Norm did this for two weeks and the fruits of his labor showed in the second test session with Randy.

Walter Hock KK5LO NARS VE Session Manager

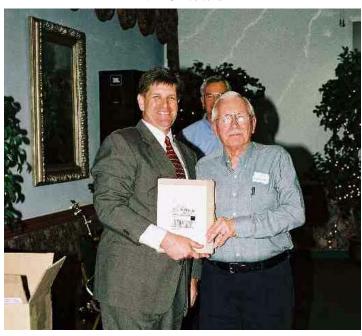
Banquet Photos



NARS Pickers



NARS Wins TQP Again



Joe Sokolowski – Ham of the Year



2002 Officers and Directors



TQP Top Mobile Op – Anita Townsend



Ham and Sheez Group

Banquet Photos



Listening to NARS Pickers



 $VE\ Session\ Coordinator-Walter\ Hock$



The Denton Family



NARS Pickers Leader – Jim Kirk



NARS Pickers Fiddler – Danny Richards

Ham and "Sheez," News

January Update:

Our January outing brought us to the Houston Museum of Natural Science where we saw the IMAX production, "Space Station". The show was extremely well done and very informative. Prior to the show, many of us traveled to Rice Village for a delicious lunch, Italian style. Post lunch, several of the ladies made a quick shopping trip into the village. The guys did not join them – surprising, huh?

The purpose of our January meeting was to make plans for the next few months. As you'll see from the activities listed below, we had a very lively discussion.

Upcoming Meetings and Activities:

Grab your calendars, ladies, and be sure to join us for the upcoming meetings and activities:

February: On Saturday, February 15, we will gather at the Meier residence to watch "My Big Fat Greek Wedding". It is supposed to be absolutely hysterical! The movie will start around 7:30ish. If you plan on joining us, please let Laurie know. Please plan on bringing a munchie to share. Drinks will be provided.

Our February meeting will be held on Monday, February 24, at 7:00 pm. The location is yet to be determined. It will be either Zebo's Restaurant in Tomball or the Spring Cypress Presbyterian Church (location of the monthly NARS meeting). Thanks to Pat White, Gina Giandrosich will join us and will bring

amber stones and jewelry, sourced from Poland and Russia. We will learn about the stone and have the opportunity to purchase amber jewelry that Gina will bring. Be sure to join us for a very educational and fun meeting. More information about the location for the meeting will be communicated shortly.

March: One of our March outings will be on Sunday, March 16, when we attend the closing show at the Houston Livestock Show and Rodeo. Alabama will be performing. It should be quite a lot of fun to see the closing show for the first year the Rodeo is housed at the Reliant Stadium.

Our March meeting will be held on Monday, March 24, at Tina Sinclair's home. We will be making Easter baskets for the elderly and shut-ins from the Spring Cypress Presbyterian Church. Please be sure to join us for this meeting. We hope to bring some smiles to the faces of many deserving folks.

The second March outing will be to the outlet malls in San Marcos. We will head to San Marcos on Saturday, March 29, and return on Sunday, March 30. Be sure to bring your walking shoes and shopping expertise. This promises to be a very fun outing! Further details about car pooling, etc. will come shortly.

April: Our April outing will be on Saturday, April 11. We will attend a demonstration and luncheon at Arbor Gate nursery in Tomball. The topic is herbs. Several of us have already registered. If you're interested in attending and have not registered,

please contact Arbor Gate directly. The cost per person is \$35, and their website is located at www.arborgate.com.

The topic of our April meeting is yet to be finalized. Information will be coming shortly.

As you can tell, we have several fun events planned for the next few months. Many additional ideas are being investigated for future months!

Monthly Ham Recipe:

Smoked Ham with Oranges (a la Crock–Pot!)

2 to 3 sweet potatoes, peeled and thinly sliced (1/4 inch thick)

1 large smoked ham slice, (about 1 inch thick), cut into serving pieces

3 seedless oranges, peeled and sliced 3 T frozen orange juice concentrate, thawed

3 T honey

1/3 cup brown sugar

2 T cornstarch

Place sweet potatoes in Crock–Pot. Arrange ham and orange slices on sweet potatoes. Combine remaining ingredients. Stir until consistency of thin paste. Lightly spread over ham and oranges. Cover and cook on low setting for 7 to 10 hours. 4 servings (about 2 1/2 quarts)

Enjoy!

Best regards, Laurie Meier – N1YXU 936–271–1096 n1yxu@arrl.org

Tail Dragger's Lunch

Today's lunch (Monday, February 3) became somewhat of a major event. Guests included world renowned DX'er K5NZ AND the mayor of Bedias. Super Bill had lots of HARC radio club history from the 70's.

Mike was proclaimed an honorary citizen of Tomball and given his City of Tomball Pin by city councilman Wayne Stovall, N5MNT. You gotta hear the story about how KB5BRM

became the mayor of Bedis. Lots of show and tell, good food and good company.

John Ellis W5PDW

DX News

"For All the NARS DX News Fit to Print"

The input from the local members was just great this month. The SFI was really good and the reports reflect an active group of DXers from the membership. If you have some input, please email me at KQ5U@arrl.net and put DX Column as the subject. Your information will be included in the next column. January's local activity report follows.

Bob, N5RP, reports Ben, DL6RAI and Roberto, IV3IYH (aka IK2MRZ) will be active (on 10–160 meters SSB, CW and RTTY) as 9Y4/DL6RAI (QSL via DL6RAI), 9Y4/IV3IYH (QSL via IK2ILH) from Tobago (SA–009) from 11 February to 3 March, including entries in the ARRL DX SSB and CW contests as 9Y4TBG (QSL via DL4MEH). It is a nice time of year for a trip to Tobago.

Bill, W5SB, reports that DX heard was 0 and the DX worked was 0. I hope Bill gets his station back in form soon.

Gerald, W5BA, reports D4B, FM5GU and FY5KE were new ones for me on 160. CU2CE and OE6MBG were new to me on 75. 8N1GOA and Z24S on 80 brings me to 97 on that band and within 3 countries of my goal of 5BDXCC w/100w & single dipole on all bands. Wow! Be sure to let us know when that 100th card comes in. That is an impressive job.

W5PDW, John, didn't have a report to speak of this month so he sent in a DX story of sorts. Oh yes! He did say something about some foreign stations he worked as well and some just plain out of this world. Here is the W5PDW report. "The Rotary Club of Tomball is hosting 11 Russian businessmen They are all building and women. contractors and here for 2 weeks on a fact-finding mission. The Russians are being hosted by local families. We are taking them all over Houston, Galveston, NASA, Austin. Dallas and showing them some real Texas hospitality. They have a translator traveling with them. When I was introduced to them at a breakfast meeting, I told them about my amateur radio hobby. How I enjoy talking to people all over the world. Then I passed my QSL from the Russian Space Station, MIR, around the room. They had lots of questions. Now folks! That is some serious bragging. I also have some DX to report for January. The DX is: N8Z; KM1CC on 3 bands; (Thanks to H.O. for firing me up on that one.); CE6M; LZ0A; ZK2GI and N5ET on 10 meters. N5ET may have been long path!! I also chatted with my old friend WB5YAM, in Buna Tater, BREAKING NEWS!!!!! Just in the log is T31MY, Central Kiribati, for a new one. That broke a long dry spell. The NARS banquet was a HOOT. Is there another club anywhere like NARS? I think not." John's report is

certainly different. If he just worked the T31MY on one band for a new one, maybe Cal's mailbox is safe for awhile? I'm sure John will let us know next month.

Cal, WF5E, has been busy this January and reports. My new antenna system is up and working. I put a gamma match on a 72' tower for 160. It seems to work well. I used the barn for a counterpoise. From the contacts I've made the biggest pattern is to the North and Northeast, which probably is right as the barn is to the Northeast of the tower. I worked the CQWW contest with 46 states, 11 countries, 408 contacts and a 29 per hour rate. No new DX contacts for the month, but I was active trying out the new tower. 80 meters saw 6 new countries bring my total on the band to 92. Now the hard part is getting the cards. Cal has been busy at the White house this month.

From the last several reports it appears there are a number of members active on 80M and they are well on the way to DXCC on the band. With some luck we will soon read about several who have completed DXCC on 80M.

Colin, KD5TMF, reports some contest and DX activity. He worked NAQP making 115 QSOs and almost WAS 20M. Since then he has been working CW on 20M and 40M. He only nailed one new country, HR1FJC, but had fun with his radio adventures and travel to Alabama. Colin received his very first DX QSL. The lucky station to be number one for him was VE7IPU, British Columbia. I know this was a big "ice breaker" for Colin and know there will be many more to follow. His HF antenna is a 10M dipole up about 10 feet. I'm sure Colin is hoping to get a substantial antenna farm. Colin is gearing up and studying for that Extra Class ticket so that he can operate in the DX zone of the bands. He has been listening on the Extra portion of the bands and just can't wait to operate there. We all hope to see Colin's name in this newsletter as being a successful candidate at one of the VE sessions. Sounds like you are off to a good start and the DXCC wallpaper will not be far away for you.

WA5MLT, H.O. & my predecessor sent in a log that is quite impressive. I think I know what he is doing with his newly found free time. He writes: "I'm always amazed when I actually make a DX contact any more, but thank goodness I made a few. No new cards this month, but I did log 44 DX contacts in January consisting of 34 prefixes, and 10 CQ zones (4, 7, 8, 9, 11, 13, 14, 15, 16, 20, 30, 31). I also worked the Marconi special event station KM1CC. Got 'um on 80, 40, 20, 17, 15, 10 meters! Almost a 7-band sweep!

The DX band breakdown went somethin'

like this: 3 on 10, 9 on 12, 6 on 15, 4 on 17, 9 on 20, 7 on 40, and 6 on 80 meters. Looks like they were pretty well distributed. The 80 and 40-meter contacts were new band countries for me. Here is the log: OH0B Aland Island; P49MR Aruba; VK3DZM Australia; OE8SKQ Austria; PY5EG and ZW1NE Brazil; LZ2KV Bulgaria; T31MY Central Kiribati; W5AA/TI8 Costa Rica; CO8LY Cuba; J79AK and J79WW Dominica; HI9/F5VHQ Dominican Rep; YS2MRL El Salvador; G3WYN England; DL4HRH Fed. Rep. of Germany; FY5KE French Guiana; TG9/N0AT and TG9ASO Guatemala; F2JD/HR5 and K9YNF/HR9 Honduras: YL2GP Latvia; PA3GSU and PA3EPN Netherlands; ZL4BO New Zealand; ZK2GI Niue; OM5XX Slovak Republic; ZS6WRL South Africa; 3DA0TM Swaziland; UY2VM Ukraine; CV1F and CX2TL Uruguay; YV50IE Venezuela; N8Z Virgin Islands; and N4BQW/KH9 Wake Island.'

Al, W5ADF, reports January was a month of slim pickings for him with only four new contacts on phone. These were OY9JD Faroe Island on 10M; A22HH Botswana on 15M; LZ0A South Shetland on 15M; N4BQW/KH9 Wake Is. on 10M. The cards received side wasn't much better. The new cards are 3XY7C Guinea; EW4MM Belarus; 7P8ZZ Lesotho. Al's card collection seems to have gotten a couple nice ones this month. Al has been struggling to get the 200 confirmed sticker for his DXCC certificate with 183 bagged so far. It looks like Al is about two thirds of the way to the Honor Roll and the pickins' are beginning to thin out for him.

Jim, K5JDB, had 49 DX contacts in January. Some of the new ones were J79AK, AL1G, 3DA0TU, T31MY, and AH3D. Cards received were S07L Western Sahara, S9SS Sao Tome & Principe, 5N6NDP Nigeria, 4L4TL Georgia (not the state), and TY4DX. Jim seems to have had a good month in the DX department.

Another Jim, KJ5X, also had a fine month and as he put it, "Things were a little more upbeat in the KJ5X shack in January, after a real downer when P5 left before I got him. Among those worked were V51 and V44 on 40M CW, JA6, ZK2 on 15M SSB, AH3D on 10M SSB. But the bright spot of the month is T31MY on 10, 12 and 17M CW, #321 and one I managed somehow to miss over the years. It was most welcome and the first new one since YA5T back in May. Still looking for 9N, S2, LU1ZA (S. Orkneys) and a host of others. Call. Reward." Jim if any of us hear and work any of these stations we would be more than happy to call you, even in the middle of the night.

Continued on page 7

DX News - Continued from page 6

N1LN, Bruce, is in with a fine report. He has been busy with the low bands and has an amazing number of good ones on 40, 80 and 160 meters. Bruce reports no new countries, but LOTS of new Band Countries as 80 and 160 are really opening up for the winter months. The band countries are: AH3D, Johnston Isl., 80 CW and 40 SSB; T31MY, Central Kiribati, 80 CW; CT3FN, Madeira Island, 80 CW; ST2X, Sudan, 12 CW and 40 CW; 4X4WN, Israel, 80 CW; ZS6QU, South Africa, 80 CW; A45WD, Oman, 40 CW; ZA/Z35M, Albania, 40 CW; ZK2GI, Niue, 75 SSB; F5LGE, France, 160 CW; 3C5XA, Equatorial Guinea, 40 CW; XT2ATI, Burkina Faso, 20 SSB; UA6AAY, European Russia, 80 CW; T97M, Bosnia, 80 CW; JT1CO, Mongolia, 80 CW; OH0R, Aland Island, 160 CW; LA3XI, Norway, 160 CW; 5B4AGN, Cyprus, 80 CW; PY2XB/PY0F, Fernando de Noronha 80 CW. Gee! It looks like those big antennas really pay off. I think Bruce might get a full night's sleep again when summer arrives and the noise level comes up on the lower bands. This is really good work Bruce.

Terry, KQ5U, received several new QSL cards confirming new countries. The cards are 4S7EA, Sri Lanka; 9S1X, Democratic Republic of Congo; and TY4DX, Benin. Five new countries were worked: 3A2MD, Monaco; ZB2FK, Gibraltar; UN/W0AIH, Kazakhstan; N4BQW/KH9, Wake Is; and T31MY, Central Kiribati Is. The log has 99 entries with 90 CW contacts and 59 of these on 40 CW yielding 40 DX QSOs on 40M. The 40M catches of note were: 9V1YC, ZS1EL, South OD5/OK1MU, Lebanon; T31MY, Central Kiribati: AH3D Johnson Island: and 4Z1JS. Israel. 80M is an issue here as RFI reared its ugly head again and the 80M antenna needs help.

Now from around the DX circuit.

The SFI for January started around the 117 mark with an A-index around 17 and then during the second week jumped to the 150s with an A-index near 9. The luck held and old sol produced a third week with the SFI passing 175 with an A-index holding near 9. The hot times were tempered the following week when the SFI dropped to near the 120 mark with an A-index again passing 17. The SFI follows a near 27-day cycle because of the solar rotation, which should be bringing us a good DX period as you read this. The NASA forecast for February is for the activity on the east limb, a potentially active region, to rotate onto the visible disk. This is expected to result in isolated moderate levels early and then lower during the middle of the month.

Doto	CEI	Δ.	K
Date	SFI	A 12	
2003 Feb 01 2003 Feb 02	150 160	12 8	3
2003 Feb 02 2003 Feb 03	160	8	
2003 Feb 03 2003 Feb 04	170	10	2
2003 Feb 04 2003 Feb 05	140	10	3 3 3 3 3
2003 Feb 03 2003 Feb 06	140	10	2
2003 Feb 00 2003 Feb 07	145	10	2
2003 Feb 07 2003 Feb 08	150	10	2
	155	8	2
2003 Feb 09			3 3 3 3
2003 Feb 10 2003 Feb 11	160	8 10	3
	165		
2003 Feb 12	170	10	3 3 3
2003 Feb 13	165	10	3
2003 Feb 14	155	10	3
2003 Feb 15	150	12	3
2003 Feb 16	145	15	3
2003 Feb 17	140	15	3
2003 Feb 18	130	15	3
2003 Feb 19	125	20	4
2003 Feb 20	120	20	4
2003 Feb 21	120	15	3
2003 Feb 22	115	15	3
2003 Feb 23	120	12	3
2003 Feb 24	120	10	3
2003 Feb 25	125	8	3
2003 Feb 26	120	12	3 3 3 3
2003 Feb 27	120	12	3
2003 Feb 28	125	8	3
2003 Mar 01	125	8	3
2003 Mar 02	135	8	3
2003 Mar 03	135	10	3

DXER'S MOST WANTED COUNTRIES (ENTITIES).

A list has been released by "The DX Magazine" and "425 DX News." The top ten look pretty much the same. The top 10 most wanted are:

"The DX Magazine"

- 1) VU4 Andaman
- 2) BS7 Scarborough
- 3) VU7 Lakshadweep
- 4) P5 North Korea
- 5) 7O Yemen
- 6) FR/J Juan de Nova & Europa
- 7) 3Y/P Peter I Island
- 8) KP5 Desecheo Island
- 9) KP1 Navassa Island
- 10) YV0 Aves Island

"425 DX News"

- 1) VU4 Andaman
- 2) BS7 Scarborough
- 3) VU7 Lakshadweep
- 4) 3Y/P Peter I Island
 - 5) FR/J Juan de Nova & Europa
- 6) KP5 Desecheo Island
 - 7) KP1 Navassa Island
 - 8) YV0 Aves Island
 - 9) 7O Yemen
 - 10) FT8X Kerguelen Islands

From the various DX resources, here is some DX that will be active this month:

T31, CANTON ISLAND. T31MY has been heard on10 meters CW/SSB (check 28005 and 28450 kHz after 2000z). Activity was also reported on 40/30/20 meters. QSL via OM2SA

VP8, FALKLAND ISLANDS. Mark, VP8CSA, will once again be active from here between now and February 11th. QSL via DL1SDN.

MACQUARIE ISLAND, VK0/m, AN-005. At the moment Peter, VK0MQI, is very active on 21365 kHz every Sunday from 0400-0500 UTC. Most of the times he will then QSY to 24940-24945,18130-18135 or 28630 kHz. Peter has been QRV on 15 meters around 0000z and 10 meters around 0100z. He is here until mid-March. QSL via JA1ELY.

CHAGOS ISLAND, VQ9. Diego Garcia, IOTA AF-006, is active on 80 to 6 meters using CW, SSB, RTTY and FM.

LEBANON, OD. OD5/OK1MU has been QRV on 30 meters around 0300z. QSL via the OK DX Foundation, Czech Republic.

BHUTAN, A5. Wangpo, A51WD is usually QRV on 20 meters SSB daily from around 1000 to 1300z. QSL via F8IJV.

Until April V31JP: Belize * by K8JP 27/01–02/03 S21YV: Bangladesh by KX7YT. His operating times are 1200 to 1600z daily. QSL KX7YT 30/01–10/02 VR2/VE7TLL: Lantau Island (AS–006), Hong Kong 04/02 VP6EM: Pitcairn Island (OC–044) * by W2SN 09/02–15/02 3B8/DK7AO: Mauritius (AF–049) * by DLs 09/02–23/02 5X1DC: Uganda by DL7AFS & DJ7ZG; QSL DL7AFS web http://www.qsl.net/dl7afs/

Looking for some more DX? Try the ARRL DX CW contest on February 15–16, 2003 for some good DX. You can get a heads up of who is playing from some DX locations and have announced their operations at http://cpcug.org/user/wfeidt/Misc/adxc2003 html. If CW is not your thing, there is another performance in SSB on March 1–2, 2003 and the information on announced operations can be found at http://cpcug.org/user/wfeidt/Misc/adxs2003.html.

PA3CQR has a good GRAY LINE program that is free at http://www.iri. tudelft.nl/~geurink/grayline.htm and a tutorial on gray line propagation. I used this program effectively while chasing DX on 40M. I successfully nailed some DX in the Indian Ocean this month. It is a good tool, works in DOS, fits on a floppy and is free.

Gud DX Terry, KQ5U

Welcome, Congratulations and Condolences

Welcome new members Bob Pearson KA5AQP, Dan Pearson KI5JB and Charlie Pitts N5CEP.

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
281–955–1555, k1oj@ditdit.com
Larry McCain KN5Z
281–469–6709, kn5z@arrl.net
Madison Jones W5MJ
281–350–4330, w5mj@houston.rr.com

Satellite:

Deral Kent K5WNO – RS 12/13 281–548–7476, k5wno@juno.com Dick Rooney W5VHN 281–288–8424, dickrooney@usa.net 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 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 HO Townsend WA5MLT – WAZ 281–376–7416 wa5mlt@arrl.net

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

NARS Information

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 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 WA5MLT 281–376–7416 wa5mlt@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 WA5MLT 281–376–7416 wa5mlt@arrl.net

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