The Northwest Amateur Radio Society

Houston, Texas

December 2006

December Meeting - Show and Tell

Join us for a show and tell of ham radio home brew projects. Bring your creation if you have one.

Important Notice! December meeting rescheduled for Saturday, the 16th.

Due to a conflict in scheduling with the Spring Cypress Presbyterian Church, our December meeting has been moved to Saturday afternoon, Dec. 16th. Seems that the SCPC School will be using the Fellowship Hall (also known as the lunchroom,) and since they have "seniority," NARS was forced to either cancel the December meeting or reschedule it for another time. Since the Show–N–Tell program is important to many of our membership, we decided to try for the only practical slot available, that of the 16th. Meeting will commence at about 2 p.m. We'll have the coffee brewing early, so if you can, get there a little early and partake in some refreshments. We apologize for this inconvenience, but under the circumstances, we didn't have much say in the matter.

Recently, the SCP Church and School has undergone some management changes, resulting in the restructuring of class rooms and changes in their school activities. The impact of these changes has had an effect on NARS, especially during the holiday season. Some will recall that our October meeting had to be held in the church sanctuary. In "decoding the handwriting on the wall," we anticipate further disruptions in our monthly meeting schedule as time goes on. The Board of Directors, therefore, has decided to look for another site to hold our meetings. In the meantime, we'll still have access to the SCPC facility during 2007. We'll let you all know how this turns out in the near future.

Time to Pass the Baton

Next February NARS NEWS will have a new editor – actually two editors. The job is being split into three functions: editor, publisher and distributor. Here is the new team:

Editor: Paul Frantz W5PF and Ken Harlan KA5AKG

Publisher: H O Townsend K5CX Distributor: Keith Dutson NM5G

So I will be passing the editor function and Beth, my wonderful XYL, will be passing the publisher function. Since I developed the database to keep the membership roster and publish the member list page (and several other reports), it made sense for me to retain the distributor function.

I took over as NARS NEWS editor from Ken Harlan KA5AKG in 1995. Bill Gary K8CSG, the Old Timer, now silent key, took the job in January, 1999, for two years while I was tied up with personal affairs that got in the way of being an effective editor. Sadly, Bill passed away a month before I could resume as editor. Thankfully, Steve Niles N5EN took the helm for December, 2000.

Thank you for allowing me to be editor for almost 10 years. I have enjoyed every minute!

73, Keith NM5G

Important Dates

Saturday, Dec 16, 2:00 PM – General Membership meeting, Spring Cypress Presbyterian Church – Eyeball QSOs, 1:30 PM.

Saturday, Jan 27, 8:30 AM – VE License Exam Session, Tomball Community Center, S. Cherry & Market streets (just South of Main).

Tuesday, Dec 19, 7:30 PM – Board of Directors meeting, Ponderosa Fire Station, 17061 Rolling Creek drive.

Contests

All Year 2007, CQ DX Marathon
Dec 16 OK DX RTTY
Dec 16–17 Croatia CW DX
Dec 30 RAC Winter
Dec 30–31 Stew Perry Topband Challenge
Jan 1 ARRL Straight Key Night
Jan 6–7 ARRL RTTY Roundup
Jan 7 Kid's Day
Jan 27–28 CQ WW DX 160M CW
Feb 24–25 CO WW DX 160M SSB

Wednesday Lunch Bunch - North

Dec 20 Jason's Deli Dec 27 Baker Street Pub and Grill Jan 3 Sweet Tomatoes Jan 10 BJ's Restaurant & Brewery Jan 17 Casa Imperial Mexican

Wednesday Lunch Bunch - West

Dec 20 Willie's Grill 290 Dec 27 Fuddruckers 290 Jan 3 Fajita Willies 290 Jan 10 Jason's Deli Jan 17 Goode Co BBO

Wednesday Lunch Bunch - Medical Center

Dec 20 Pappas Barbecue Dec 27 Fred's Italian Corner Jan 3 Jason's Deli Jan 10 Buffalo Grille Jan 17 DJ's Old Timey Hamburgers

Monday "Tail Draggers" Lunch Bunch 11:00 am, 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 Denny's

7720 Louetta
Saturdays
7:30 AM

President's Corner

December 2006

The church has informed us our normal meeting place is not available. The Sanctuary is not acceptable for show and tell. Please watch the reflector and listen to the repeater for the latest on the meeting.

The January Banquet is approaching. It makes it easy to plan the food, if we know in advance who is attending. Surprise everyone and pay early!

For those of you that wish to learn about the building and technical side of ham radio, QRP forums seem to have it.

http://kd1jv.qrpradio.com/

ATS-3A is the smallest, lightest, 4 band CW transceiver available anywhere! This is a kit with surface mount parts. I have built one and used it during the Spartan Sprint – first Monday of the month.

http://www.arsqrp.com/ars/pages/spartan_sprints/ss_rules_new.html

One can submit your results and post comments.

December 31 is 2007 ARRL Straight Key Night:

http://www.arrl.org/contests/rules/2007/skn.html

This event runs 24 hours. After you finish you can post you comments at http://www.arrl.org/contests/soapbox/?con_id=100

Just look at what people said earlier this year.

Mark K5GQ

Events

Your Radio Skills Are Needed

Events officially sponsored by NARS include Buffalo Bayou Regatta (October) and Sunmart Texas Trails Run (December). Events supported by NARS members include Houston Marathon, MS 150 and Wings over Houston.

Plan to help with one or more of these events in 2006.

Public Service

It's December, the Sunmart run is over and the call has gone out for volunteer communicators for the Houston Marathon to be held next month on Sunday, January 14th. There are three different runs from the George R. Brown convention center, the marathon, a half marathon and a five kilometer run going in different directions. Last year there were 150 communications volunteers working 5 different nets to help insure the safety and welfare of over 8000 runners and uncounted spectators at this event.

We start at 4:30AM near the G.R.B. for instructions and packets before heading out to stations along the routes. We have to be in place before they start closing the streets to traffic at about 6:00AM. This is a half day event and can be done with a five watt hand held transceiver from many locations. Make sure you have enough battery power to last the whole event. A good accessory to have for these events is a spare battery case for your hand held that holds AA cells.

Alkaline AA cells are readily available everywhere and are easy and safe to carry and provide as much or more power than the rechargeable Ni Cad battery. Wings Over Houston furnishes AAs for Hams with this accessory at their event. Another good addition to your hand held for these events is a 1/4 wave replacement antenna for the rubber duck antenna that comes with most hand helds. It will greatly extend the range of your radio and many times allow you to use low power transmit and save battery life.

A portable station, a 2 meter or 2 meter/70 centimeter dual band mobile radio suitably rigged so it and an antenna can be quickly installed (2 minutes) in a vehicle, is needed to work with the various pace, police, official and press vehicles. This is a good piece of emergency communications gear to have in a jump kit for any kind of emergency.

If you want to help with the marathon send an email to Dr. Carl Hacker, KB5LDY, at Carl.S.Hacker@uth.tmc.edu and give him your name, contact information and some information about your radio equipment and experience so he has some idea where he can use you. Dr. Hacker would like to hear from new hams and other volunteers who would like to work this event. Several volunteers who did not have ham licenses provided support as drivers, loggers, runners, etc. last year.

It has been quiet on the home front lately. No emergencies needing ham radio communicators. Need something to stave off the boredom? Try checking in to some of the traffic nets. The oldest weather net in the country, The Badger Weather Net (BWN), holds forth every morning from 5:00 til 7:15AM central time on 3.985 MHz. They collect high and low temperature and precipitation reports from around the country and report to the appropriate National Weather Service office. They are always looking for new reporting stations. Visit http://www.crh.noaa.gov/mkx/?n=badger=weathernet for details on the reporting format and suggested measuring instruments.

Another good training net is the Texas Traffic Net that meets on 3.873 MHz at 6:30 PM local time. Listen for KK5LO to check in on this one.

Every once in a while they have a piece of traffic for the Houston/Spring area. Try picking up an official NTS format message and passing it on. It takes some practice. Which brings up the real purpose for the ARRL National Traffic System. The NTS has been improperly characterized as outdated by today's electronic world. Not so. There never has been and never will be a need for slow cross country emergency traffic. That is not the purpose of the NTS. The NTS is a training ground for net operators and message handlers. If you want to get good at something, practice it. Do it for 10 minutes every day. Tune in to one of these nets and listen to the proficiency of some of those NCOs and message handlers. They didn't acquire that proficiency by reading the book, they turned on the radio and grabbed a message or two. This is an easy way to get some valuable experience working in a net environment and get comfortable with handling formal messages. The Net Control Operators are always happy to hear new people that are interested in message handling.

I have been contacted by a Ham who is a doctor at St. Luke's hospital in the Woodlands. He wants to investigate the possibility of starting a Amateur Radio emergency communications support group for that hospital. It will take a dozen or so Hams who live in close proximity to that hospital to do this project. Are there any hams willing to commit to the task in that area? If you are interested, send me an email at k5zty@juno.com and I will start a roster. To get a look at an Amateur Radio emergency communications support group for a hospital take a look at this web site: http://members.aol.com/emcom4hosp/.

Especially read the FAQ for Hams and for hospital administrators.

I want to wish everyone a merry Christmas and a prosperous new year.

Become Active! K5ZTY

DX News

"For All the NARS DX News Fit to Print"

DX IS! Yes . . .

DX IS . . . what you make of it.

Member reports:

Chuck, NO5W; a covenance-impaired resident of The Woodlands has shown that with wires and 100 Watts, you can fill the log pages up fast with DX. During this recent CQWW-CW contest; a casual start in the contest ended with numerous log pages filled with DX contacts. Chuck initially felt he would make just a few QSO's, so he paper-logged and used the paddles. Turned out he should have computer logged; but it was too late! Continue on! Of course, paper logging leads to a lot of duping and wasted effort. A little time developing an Excel spreadsheet served to eliminate the dupes.

Chuck made some fine QSO's during the test. Examples: P3F (Cyprus), TZ5A, Mali, on 40 and 20 meters, HZ1A, Saudi Arabia on 20M, UA0AGI on 40M and E51YAQ (old ZK1), South Cooks on 40m.

Some of these were all-time DXCC "new-ones" from his current location. A lot to be said from diploes up 25 feet and 100 Watts. We all know that Chuck's contesting skills played a big part in this.

DX-ing and contesting is, to a large degree, work hand-in-hand. You members who talk about being zoning-impaired, etc. Think about this. Thanks for the report Chuck and, I feel, a lesson to some of the members.

Bruce, N1LN (a.k.a. NC4KW), our displaced North Carolina member has put up a temporary tower and antenna until he has everything ready for the big stuff. You just can't wait! A 44 foot tower and a Cushcraft A3S and some wires. He spent a little time operating the CQWW CW test and managed to pick up some "new-ones" for his DXCC band-counters: T77EB, San

Marino, (EU) 40 SSB; 5A7A, Libya, 20 SSB/CW; E51PDX, South Cook, 40 CW; 9J2VB, Zambia, 17 SSB; S9SS, Sao Thome, 40 CW and 4O60BH, Montenegro, 75 SSB. All good ones to pick up; especially in this phase of the low of the sunspot cycle.

Bruce also tells about operating a few hours from another North Carolina station during the later part of the CQWW CW on 160 meters. Seems the guy has a "Beverage on the ground" or "B.O.G.". Bruce was able to hear and work about 12 different EU countries. He didn't think much of the BOG receive antenna, though. Bruce was going to help the chap put up some conventional Beverages for the ARRL 160 test.

I don't know if the Beverages will be any better, though. I understand that all the "Right Coast" (east coast) has to do for a low-band receive antenna is throw a little wire out the window, HI! "Hello Vladimir; your only S9+ 10 this evening" – and we can't hear Vladimir at all!

John, W5PDW, has received all 17 of his "Route 66" special event QSL's and the certificate. Should make a nice collection.

He has also received a K6P POW-MIA special event QSL and set of V31 QSL's from the local boys Belize efforts. (V31EA, V31MR and V31UU) That's a bunch of outlaws!

His DX contacts for the month are: 20m SSB: XF4K, S9SS, 9J2VB, HH2/PS7EB, 4N6FZ, and VP8LP. Also on 20m, he was able to work a couple of USA special event stations: K0AIR (SAC) and W5KID (USS KIDD). On 15 meter SSB: 3XM6JR, 5A7A and ZD7FT. Those are all some nice ones to contact, John.

Madison, W5MJ, waiting to go to VU7-land has offered up his DX report for the month; thanks barrister.

Probably in preparation for his trip to the Laccadives (VU7), Madison has been practicing up his RTTY skills. No DX to report in the digital mode, though.

On 40 meter CW: E51PEN, 7Q7BP, CT3/DK3QZ. 30 meters: 9J2VB and on 20 meter CW: 5Z1A. 80 meter CW: 5A7A and on 15 meter CW: HK0GU, TZ5A, VY2TT, PY2NY and 9Y4AA.

A good month for you, Madison! Come back next month. Oh, that's right; you will be at VU7RG and it is publicity-limited.

Cal, WF5W, worked about 325 QSO's during the CQWW CW contest the weekend of December 2, 3. No new ones to report but enjoyed "the chase". He reports 238 multipliers (Lots of S&P?); 80 countries and 20 CQ Zones. Used a TH3 Jr and a 160 meter dipole.

He now has his new all-band HyGain HyTower up. It's a single element vertical about 60 feet tall. The bottom 2/3 portion has a normal tower appearance. After recovery from some surgery he will plant some radials to complete the install. Cal's using a weedwhipper with a very large tooth saw-blade, of sorts, to do the radial trenching. He skewed the blades a bit more to obtain a little wider trench.

Mike, K5UO, will be fixing up his 3 element 40 meter Yagi. Its working but one-half of the director element broke loose during the high winds that occurred in November. Also brought down the inverted L for 160 meters!

That was an easy fix; thanks to a moonlighting tree-trimmers works months back. There were some very large limbs across the path of the horizontal portion of the inverted L that had prevented getting the horizontal portion stretched out at the same plane as the top of the vertical portion.

Continued on page 4

DX News continued from page 3

New band-counters worked this past month:

3X2DZ, 160, 30 m CW; 3XM6JR, 12 CW, 5A7A, all CW: 17, 30, 80 and 160 meters. Makes 141/147 for Topband. Still need them on 10 and 12 meters. 5H3EE, 12 m CW; TR8CA, 12 m CW; VK9CGG, 17 and 80 m CW. Makes 253/256 on 80m and E51PEN, South Cooks new prefix, 17 CW.

Activity happening or soon to be happening:

VU7RG, another Laccadive DXPedition is scheduled for January 15-25. This will be predominantly foreign operators; including our Madison Jones. The current all-Indian operation has hardly been worked by the locals. Seems the group has been favoring EU - or it's a more convenient time for them to operate. A particular www site that I subscribe to gathers all DX spots that you want listed and emails you report each day. December 4 they showed 343 spots for VU7LD. About 300 were by EU stations on almost all bands. The handful of spots by North American stations were for, primarily 20 meters and some for 40 meters. The NA stations were primarily from the "Right Coast".

It's a difficult path for 5-landers; especially on the lower bands as the mutual darkness times are very short. A focus by VU7LD is needed to come up on 40, 80 or 160 at those times more than once or twice.

Borrowed from the CTDXCC Reflector after the first week or so of the VU7LD "Operation":

"Only place I heard them (fairly weak) was 20ssb, but I didn't give chase. A few Austin folks have worked them on 20. So far as I know they haven't been REALLY heard here on any other band – just whispers. (Correct me if I'm wrong guys).

I still believe the best bet from W5 should be long path. W5 is much further from the S Pole than the N pole, so for any given size of auroral zone,

the ANGULAR blockage south (LP) is less than north (SP). Doesn't mean that we can't work them SP, but for W5 the odds favor LP. But it's frustrating to hear people both east and west of us sliding past those auroral zones.

Timing isn't so critical on 20M, because the openings are longer, but I question whether these ops know where/when to get thro' on 40M, especially on SSB. They need to be on RIGHT AT their sunset which is currently 1257Z. I sent Sarla an e-mail about a week before she left, but it wasn't QSL'd, and I can understand that she may have been much too busy. Also they love 7065 on 40M SSB, which is THE WORST frequency in the band for southern USA, as it's a prime XE ragchewing spot. I suggested the usual 7042/47/52/57.

So, things look a bit iffy, but keep the faith. I plan to e-mail the VU7RG team about 40M well before they leave.

73, John NT5C

John is an active SSB-only DXer; but the same thing, of course can be said for the CW portions of the bands.

LIGHTHOUSE ACTIVITY/NEWS Lighthouse Christmas Lights QSO Party will be held between December 16th and January 1st (2007). More details about awards, certificates, prizes and rules for the ARLHS 2006 Lighthouse Christmas Lights QSO Party (LCL 2006) are available on the following Web page at:

http://arlhs.com/LCL-2006-guideline s.html

Members of the Texas Lighthouse Radio Society will activate their club station W5TLH from the Kemah Texas Lighthouse (ARLHS Number Pending; Texas' Newest Lighthouse!) on December 27th (1900-2300z) and December 28th (1500-2100z). Suggested SSB frequencies are: 21240, 14260 and 7260 kHz. The Kemah Lighthouse, completed earlier this year, stands at 144 feet (the tallest in Texas) and is topped by a 3rd order rotating lens. It is reported that the 1000 watt light can be seen for 23 miles. QSL direct to W5TLH, c/o Jim Martin, 637 Newberry Dr., Richardson, TX 75080–5622. For a QSL card use a #10 business size return envelope (SASE). For a QSL card and an unfolded certificate send a 9" x 12" return envelope (SASE). More details available at: http://www.w5azn.com, E-mail: w5azn@arrl.net

In conjunction with the "Hello -Celebrating 100 years of Voice Over Worldwide", Radio the Texas Lighthouse Radio Society (W5TLH) will also be activating the Lydia Ann Channel Lighthouse (USA 018) near Port Aransas, Texas, December 30th (1500-2000z). Suggested frequencies are: 21240, 14260 and 7260 kHz. The U.S. Lighthouse Service established a radio beacon at this location in 1928. Built in 1857, it is now privately owned by the family of HEB grocery fame. Web link at: http://www.lighthousefriends.com/lig ht.asp?ID=158

QSL direct to W5TLH (see details above).

Operators Chris/K8QV, Jim/N4AAC, Rick/KG4MRH, Tracy/KG4MRG, Mike/N4MAA and Mike/AI4JD will activate W4A for the first activation of the Terria Verde Lighthouse (ARLHS USA-1335) located on Cunningham Key (NA-034, USI FL-284S, Pinellas County), Florida, December 8-11th. Suggested SSB frequencies are: 3875, 7235, 14310 and 21330 kHz. QSL via K8CXM (QRZ.com).

NEW OFFICERS FOR 2007. The members of the Texas DX Society are pleased to announce its officers for 2007:

President: Mike Davidson – N5MT Vice President, Membership: Steve Smothers – W9DX

Vice President, Programs: Madison Jones – W5MJ

Secretary/Treasurer: Keith Dutson - NM5G

Thanks-gudDX es 73, Mike Bragassa, K5UO

Annual Awards Banquet scheduled for Jan. 19th

Wow! Another year has passed and we're fast approaching the NARS Annual Awards Banquet. Many of us can recall last year's event when NARS celebrated its twenty year anniversary. Now, NARS has reached the age of twenty-one, the year of maturity, some might say. Clubs come and go with time, but it's satisfying to know that NARS with its 180 plus members is still a healthy and vibrant organization after all these years. It's only fitting that we celebrate, once again, our fortune, good by gathering together to enjoy good eats, good conversation with our companions, recognize and accomplishments of those who worked so hard to keep NARS what it is today.

Now, in order for NARS to have a party, we need to know who will be attending, and that's where you come in. Reservations are limited, so you need to get your name on the

list as soon as possible. What? You need more info before making a commitment? Ok, here goes.

When: Friday, January 19 – Doors open at 6:30 p.m.

Where: Wyndehaven Terrace, 12716 Cutten Road, about 1/2 mile south of FM 1960.

Cost: Still \$20.00 per person – no increase over last year.

Dress code: Most anything goes, but, hey, no tank tops! This is no beer bust you're going to.

Refreshment Bar: Available at additional cost.

And last but not least, a Four Star meal as seen on the Food Channel. Well, maybe 3–1/2 stars, and yes, we'll have plenty of potatoes!

Reservations will be accepted during the December general meeting on the 15th or you can mail in your checks to NARS, P.O. Box 90387, Houston, TX 77090-0387. Please indicate who will attending as we will require names of individuals and call signs (if applicable) for name tags. We're keeping door prizes to a minimum, but the few that we do have will be real keepers. Also, as an added bonus, the first 75 who register will be entered in a special drawing for some "mystery" prizes.

Don't procrastinate. Get those reservations in now! "We don't got no operators standing by, just a couple of da boys who are willing to assist you in making da right decision, if you can't decide." So stay healthy. Put down the remote, get up off your derriere and write that check now while there is still time.

VE Session Results

There was no session in November.

The ARRL will be notified of our 2007 VE schedule; the regular Tomball VE sessions for 2007 are;

January 27 February 24 March 24 April 28 May 26

June - NONE

July 28 August 26 September 22 October 27 November – NONE December – NONE

The next regular VE session will be held on 01/27/2007.

73

Norm Covey/K5OS NARS VE Session Manager

Welcome, Congratulations and Condolences

Welcome new members Patrick Compton KE5LEB, Harding Goodman KE5KSZ, Scott Patout K5DD, Marvin Volz W5MTV, and Ski Zielinski KE5GTG. Condolences to the family of Bill Ribble W5BIL who became a silent key November 15. Get well wishes to Millie Bedell, XYL of Don Bedell KA3BKU.

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
Madison Jones W5MJ
281-350-4330, w5mj@hal-pc.org
Larry McCain KN5Z
281-469-6709, kn5z@arrl.net
Deral Kent K5WNO - Antennas
281-548-7476, k5wno@juno.com

Satellite:

Dick Rooney W5VHN 281–288–8424, dickrooney@usa.net

Digital Modes:

Don Bedell KA3BKU Packet 281–257–6425 donka3bku@ev1.com Gregg Erlenbusch, W5IDX PSK/RTTY 281–970–6860, W5IDX@ARRL.net

VHF/UHF:

Brian Derx N5BA 281-894-5942

PC Programming and Operations: Keith Dutson NM5G 281-351-7683, keith@dutson.net Interference (Basic Advice): Mark Tyler K5GQ

281-587-0256, k5gq@juno.com

Terry Myers KQ5U

281-443-6042, tmyers1031@sbcglobal.net

Card Checking Awards Managers: Bob Walworth N5ET – DXCC 281–292–2221, rwalworth@charter.net Brian Derx N5BA – WAS, VUCC

281-894-5942

H O Townsend K5CX – WAZ 281–376–7416, k5cx@arrl.net

NARS Public Information Officer: Joe Sokolowski, KD5KR 281–353–2196, kd5kr@arrl.net

NARS Information

PRESIDENT & BOARD CHAIRMAN Mark Tyler K5GQ 281–587–0256, k5gq@juno.com

VICE PRESIDENT
Jerry Whiting KB5VGD
281–583–5588, g whiting@sbcglobal.net

SECRETARY
Charles Sanders NO5W
936–321–0053, no5w@txucom.net

TREASURER Joe Sokolowski KD5KR 281–353–2196, kd5kr@arrl.net

DIRECTORS
Marty Fitzgerald W5MF
281-251-4301, fitz6@swbell.net
Mike Lodge K7LEX
281-255-2202, lodgem@swbell.net
H O Townsend K5CX
281-376-7416, k5cx@arrl.net
Tom Atkins KD5EIJ
281-447-4347 tom_sts@hotmail.com

ACTIVITIES CHAIRMAN TBA

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

NET

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: Bill Buoy N5BIA 281-370-3510, n5bia@arrl.net

NARS REFLECTOR NARS@mailman.qth.net Coordinator: Keith Dutson NM5G 281-351-7683, keith@dutson.net

TEXAS QSO PARTY Coordinator: H.O. Townsend K5CX 281–376–7416, k5cx@arrl.net

VE SESSION (ARRL) Manager: Norm Covey K5OS 281–252–8285, k5os@arrl.net **REPEATERS**

2M: 146.660 / 146.060 (KA5AKG)

Tone: 141.3

70 cm: 444.375 / 449.375 (KA5AKG)

Tone: 103.5

MEETINGS

Monthly General Membership

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

Saturday Breakfast

Denny's, 7720 Louetta, 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 NM5G 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