

February 2016

Important Dates

Monthly club meeting: Third Friday of each month, 7:30 pm. Cypress Creek Christian Community Ctr. 6823 Cypresswood Drive

Board of Directors Meeting

Tuesday, February 23, 2016, 7:30 pm. Ponderosa Fire Station 17061 Rolling Creek Drive, Houston

VE License Exam:

Saturday, February 27, 2016 Tomball Regional Hospital, 1st floor, Conference Room, 8:00 am.

Lunch Break—North

Feb 10, Sweet Tomatoes Feb 17, B.J,s Brewery Feb 24, Gianna's Mar 2, Spring Creek BBQ Mar 9, Pei Wei Mar 16, Panera Bread

Lunch Break—Medical Center

Feb 10, Silver Palace Chinese Buffet Feb 17, Pappas BBQ Feb 24, Morningside Thai Mar 2, Pronto Cucinino Mar 9, Jason's Deli Mar 16, Buffalo Grille

Tail Dragger's Lunch Bunch -

Mondays, 11 am. Aviator's Grill, Hooks Aerodrome

Notice: NARS membership dues are \$20 per year, renewable on anniversary date.



NARS NEWS

The Northwest Amateur Radio Society an ARRL Special Services Club #2120

Texas QSO Party - 2015 finals! Friday, 19th.



Program will be a presentation of final results of the 2015 Texas QSO Party, given by Keith Dutson NM5G

All scores will be shown by category. Texas Club Aggregate scores and scores for individuals contributing for each club will be shown.

Some very interesting statistics will be discussed. The log checking process will be covered, and finally, Suggestions on how to avoid logging problems in the future!

"Are you ready for 2016?"

A special Thanks to Chuck Sanders NO5W, who created the document..

President's corner -2016 – A Year for NARS Renewal

A bout thirty years ago NARS was formed by a group of hams including businessmen, professionals and others working to earn a living. Many argue that this group grew into the best club in this area. Most will also say those days are now gone.

I joined NARS in 1994 and found a very strong group that achieved many accolades in ham radio and various public service events. I had a lot of fun learning from these leaders and hard workers.

As time passed, many of the original members retired from work and spent less time contributing their talent and energy to the club. Unfortunately, no real efforts were made to recruit new talent, so the club membership and activity level began to decline. So, in one sense, those strong times have gone away.

As president in 2011, and now again in 2016, I aim to recruit new members to NARS who will be willing to take the tasks of running and re-vitalizing the club. I also see some current members who, in my opinion, are capable of these tasks, but seem reluctant to come forward. So, I challenge everyone to help in this effort to make 2016 a year of NARS renewal.

Consider learning, helping, and eventually taking the lead in one of the following tasks:

- 1 monthly meeting programs planning
- 2 newsletter reporting and editing
- 3 field day planning and coordination
- 4 public service event coordination
- 5 board of director position

Thank you for your support this year.

73, Keith Dutson NM5G



4721 Watonga Blvd. Houston, TX 77092 www.ofarc.org

V.E. Exams every 4th Saturday of the month at 9:30 a.m. Contact: John Westerlage N5DWI@oafrc.org for further info.



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US House Cosponsor List for Amateur Radio Parity Act Grows

The list of cosponsors for the US House version of the Amateur Radio Parity Act of 2015 (H.R. 1301) continues to grow. The addition of Rep Stevan Pearce, KG5KIQ (R-NM), and Rep Beto O'Rourke (D-TX) as cosponsors on February 1 raises the total to 120 from both sides of the aisle. Pearce and O'Rourke are among four cosponsors to sign on to the bill since the start of the year. The other two are Reps Robert Brady (D-PA) and Marcy Kaptur (D-OH), who became cosponsors on January 12 and 13, respectively.

One of a small handful of hams in the US House, Pearce got his ham ticket in November, after reaching out to then-Rocky Mountain Division Director (now Second Vice President) Brian Mile-

shosky, N5ZGT, and New Mexico Section Manager Ed James, KA8JMW, to find out more about ham radio. He joins his House colleagues Reps Daniel Benishek, KB8TOW (R-MI), and Greg Walden, W7EOI (R-OR), who chairs the House Subcommittee on Communications and Technology. During a January 12 hearing on H.R. 1301, Walden called the Ama-



teur Radio Parity Act "a commonsense bill" and urged his colleagues to support it. Brady, Kaptur, Pearce, and O'Rourke may have heeded his advice.

A League-led effort to encourage members to urge their lawmakers to become cosponsors of the House and Senate measures continues. League representatives will be at the 2016 ARRL National Convention February 12-14 in Orlando, Florida, hosted by the Orlando HamCation, to assist members in writing their members of Congress.

H.R. 1301 would direct the FCC to extend its rules relating to reasonable accommodation of Amateur Service communications to private land-use restrictions, such as deed covenants, conditions, and restrictions. An identical US Senate measure, S. 1685, has attracted three cosponsors. It cleared the Senate Committee on Commerce, Science, and Transportation last November. More information about the legislation is on the ARRL Amateur Radio Parity Act web page.

146.660 Repeater News

Anyone wishing to help defray the cost of replacing the repeater, antenna, connectors, etc. can make a donation to the Repeater Fund by making checks payable to NARS and designate "Repeater Fund" in the Memo field.

NARS, P.O. Box 90387, Houston, TX 77290-0387

Saturday, January 23 VE Test Session Results at Tomball Regional Hospital

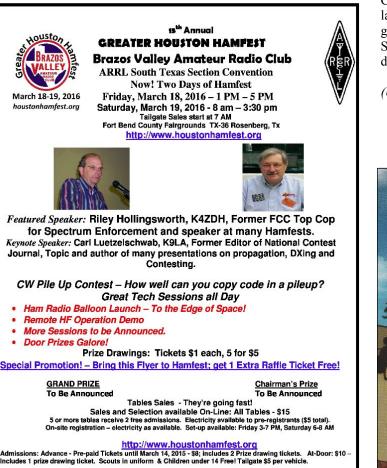
We had 5 candidates taking 7 tests. Element 2 tests given: 5; passed 5 Element 3 tests given: 2; passed 0 Element 4 tests given: 0; passed 0

Congratulations to: Christopher Boyce - new Technician John Kacher - new Technician William Allcorn - new Technician Gerzain Mata - new Technician Larry Moore - new Technician

Thanks to the VE's in attendance: Sheree Horton KF5LMJ Martin Rogoff N5GPS Ron Horton KF5LFL William Hielscher KG5WPH Ship Ferguson K5LLR Mike Bragassa K5UO

The next monthly session will be held 0800 Saturday, February 27, at Tomball Regional Hospital, 1st floor conference room. Anyone who wants to observe and/or participate in a session is always welcome. Just let me know if you want to learn more about becoming a volunteer examiner.

73, Keith Dutson NM5G, NARS VE Session Manager



LEARNING THE LANGUAGE OF MORSE

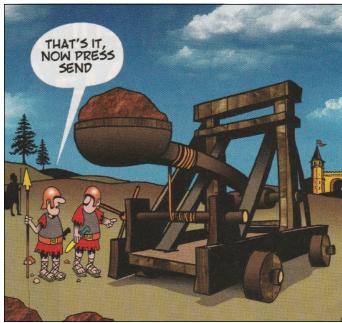
The tie between the Navy and Morse Code also remains strong these days. At the Naval Air Station Pensacola Corry Station in Florida, Morse Code training has been a continuous effort since 2005, when the coursework was moved to the learning center there for easy delivery with training in cryptology, intelligence and other disciplines. Corry Station is where students train as CTRs - cryptologic technicians. The last class of CTRs has just finished their program as of late January, and these students were the first to make use of a new revised Basic Manual Morse Trainer and updated software used by the Department of Defense.

Military trainers say Morse is one of many tools to stand the test of time, which is why the Department of Defense has once again renewed its commitment to Morse training, investing in it now, more than ever. That, of course, is no secret to hams. But it's no military secret either.

The course supervisor, Gabriel Albarran, a Cryptologic Technician (Collection) First Class, said, "Morse code is not only used in military operations but also in commercial navigation. Search and rescue, science navigations and weather status are frequently passed in automated Morse code."

Cryptologic Technician Mary Kaitlin McKeeby adds: "It's a language. If you have a knack for languages, Morse Code is going to be easier to pick up." She should know about that: She beat the course record during the pilot program by two days, completing the self-paced instruction in 39 days.

(U.S. NAVY, DEFENSE VIDEO AND IMAGERY)



Repeaters made easy — Part I

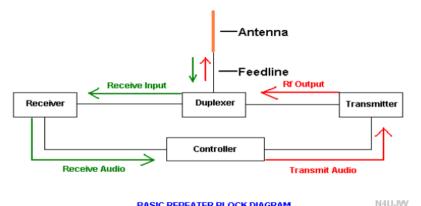
N ARS is in the process of a major upgrade to our repeater. Back in 1985 we had little competition and enjoyed 2 meter communication with little or no interference. But the growth in commercial and private com systems prompted us to make plans for the relocation of our 144.66 repeater to a more reliable site. That is now being done and soon NARS will be back in operation. Many of our newer members are vaguely aware of why a repeater is required, but how it actually works is something else. We'll try to give you a clearer picture of just what a repeater consists of and why it's so danged complicated in programming that HT of yours.

What is a Repeater and Why is it Needed, and How Does It Work?

It's a two-way radio system that receives on one frequency, then re-transmits what it receives on another frequency; at exactly the same time. It's nothing more than a "dumb electronic machine" with some smart people behind it. Why it's needed: Your mobile or hand held transceiver, has a limited range due to it's antenna height with respect to the radio horizon and rf attenuating surroundings. Repeater systems are used to "transfer" your transmitted and received signals to much higher levels electronically using large, very efficient high gain antennas, low loss feedlines and a transmitter and receiver that is rated for heavy or continuous duty. A repeater "gets out" your signal and receives the station you are talking to with a far greater range and coverage area! You take advantage of the repeater's higher elevation to increase your effective transmitting and receiving coverage versus your mobile or hand held transceiver!

How does a Repeater work?

Here's a simple block diagram of a repeater below:



BASIC REPEATER BLOCK DIAGRAM

The Basic Repeater Components:

Antenna

Most repeaters use only one antenna. The antenna is used on transmit and receive signals that are going into and out of the repeater. It usually is a high performance, high gain, heavy duty, and very efficient antenna located as high on a tower or structure as we can get it above the surrounding terrain.

Lots of repeater system antennas are located on a high hill or mountain. Antenna systems for repeater use are usually very costly and have an omnidirectional pattern.

Feed line

The feed line used on most repeaters is not just a piece of standard 50 ohm coax cable. A type of specialized feed line called "hard line" is usually used. It is very similar to cable tv line that you see strung between power poles around town. Look just above the telephone lines and you will see much larger "aluminum" cable. The signal loss with hard line versus regular coax is much lower than in standard coax, so more power gets to the antenna and weaker

signals can be received due to the very low loss of the "hard line".

Duplexer

This device serves a major role in a repeater. The duplexer separates and isolates the incoming signal from the outgoing and vice versa. It prevents the receiver and transmitter from hearing one another by the isolation it provides. A duplexer has the shape of large tall cans and is designed to pass a very narrow range of frequencies and to reject others. It helps to reject very strong nearby frequencies from other repeaters or rf producers from getting into the repeater system.

Receiver

Receives the incoming signal. This receiver is generally a very sensitive and selective one which helps weaker stations to be heard better by the repeater. It is set to receive the input frequency. It's also where CTCSS (Continuous Tone Coded Squelch System) or "PL" decoding takes place.

Transmitter

Most "machines", as repeaters are sometimes called, have a transmitter composed of an exciter and a power amplifier. The exciter modulates the audio coming from the receiver which is tuned to the transmitting stations's frequency at the proper transmit frequency, and the power amplifier simply boosts its level so the signal will travel further. Lots of repeaters use 100 watts or more. It simply takes the weaker received frequency from say a mobile or ht and retransmits it (repeats) at a higher power level on a different frequency. On the 2 meter band, this separation between transmit and receive frequency is usually 600kHz either positive or negative in relation to the transmit frequency. On the 440 (70cm) band it is usually 5mHz positive or negative in relation to the transmit frequency.

The "transmit" frequency is the frequency you tune your radio to and is usually listed in various sources. For instance, if you see a repeater listing that says: 146.90mHz, minus or negative offset, Pl tone, 100....then you would program your radio to 146.90mHz, minus 600kHz with a PL tone of 100 into the memory for that specific repeater. NOTE that most newer radios automatically set the offset (your actual transmit frequency) so you won't have to.

Controller

This is the brain of the repeater. It handles repeater station ID using either CW or voice, activates the transmitter at the appropriate times, and sometimes performs many other functions depending on the sophistication of the repeater. Some also have a DVR (Digital Voice Recorder) for announcements and messages. The controller is a small computer that's programmed to control a repeater.

In the March issue of the NARS News we wind up the discussion with info on offset and tones and why they are so necessary. Stay tooned!

Awards Banquet 2016 now history!

 \mathbf{F} orty two Narsians and their guests met at Nona's Italian Café in Tomball and welcomed newly elected board members for the year 2016. Service accomplishments were recognized with the presentation of a variety of plaques and certificates to former board members and for those who made significant contributions in public service arenas.



Board of Directors — 2016 (Left to right) Deral Kent K5WNO, Les Mignerey KB0MEF, Ron Horton KF5KFL, Sheree Horton KF5LMJ, Martin Rogoff N5GPS, Richard Nelson KF5WRD, & Keith Dutson NM5G (Public Info Officer, Joe Sokolowski KD5KR in background,)



President elect, Keith Dutson NM5G presenting Past President Plaque to Brad Nelson WD5GNI



NARS in rewind.... May, 2008

Teacher reflects on a journey beyond cool!

L ollie Garay KD5WZM,, a teacher at Redd School, recently traveled on a seven-week expedition to the Antarctic. Garay was one of 36 U.S. teachers chosen to participate in a scien-

tific campaign to advance the understanding of polar regions. "I can still see, hear and smell the experience," Garay remarked.

Garay's journey, which was from November to January, began at the tip of South America before landing in the Amundsen Sea among ice floes and penguins. "Though this was a personal accomplishment in my life, it was a good way to be a role model to my students. I think we learned so much."



Affectionately known to all as "Miss Lollie, is an honorary member of NARS and a periodic speaker at many of our monthly meetings.

Buffalo Bayou Regatta 2016 - Saturday Mar 12

It's time for the Buffalo Bayou Regatta again. This is always a fun and worthwhile event to raise funds for the cleanup project organized by the Buffalo Bayou Partnership. See the following link for details:

http://buffalobayou.org/event/44th-annual-buffalo-bayoupartnership-regatta/

NARS has long supported this public service event with communications. We report the start just west of Voss Road, and the passing of boats from many bridge crossings along the way to the finish at Preston Street Bridge.

I have contacted the team from 2015 and most have signed up again for this year. However, there are a few positions still open. I could use at least three more volunteers. I want to get everything finalized by March 1, so please let me know as soon as possible. I will need your shirt size and whether you want the lunch that is usually provided.

We will use the TDXS repeater on 147.36 MHz, plus offset, tone 100.0 as the talk-in and primary frequency. The Transtar repeater on 145.37 MHz, minus offset, tone 123.0 will be used for the secondary race frequency, and will be monitored for traffic from sweep boats.

We will meet at Whataburger at 6405 San Felipe St at 7:30AM. The race is usually over by 2:00PM. Thanks.

73, Keith NM5G

Welcome, Congratulations and Condolences

Welcome new members, Michael Deaver KG5JBJ

NARS Resource list

General help: Allen Majeski WA5REJ 281 528-0673 wa5rej@yahoo.com

Deral Kent K5WNO 281 548-7476 k5wno@juno.com

Al Manard N6VQO 281 292-3113 almanard@gmail.com

Digital modes: Marty Fitzgerald W5MF 281 251-4301 fitz6@swball.net VHF/UHF: Brian Derx N5BA 281 251-4301 PC Programming & Ops: Keith Dutson NM5G 281 516-1466 keith1@dutson.net

Building Electronics & kits: Mark Tyler K5GQ 281 587-0256 k5gq@juno.com

Interference (Basic advice): Terry Myers KQ5U 281 443-6042 tmyers1031@sbcglobal.net

NARS Information

President & Board Chairman Keith Dutson NM5G 281 516-1466 keith1@dutson1.net

Vice President Richard Nelson KF5WRD 281 257-1279 Richard-nelson@hotmail.com

Treasurer Sheree Horton KF5LMJ 281 890-4038 sher5456@gmail.com

Secretary Martin Rogoff N5GPS 281 890-4538 N5gps.tx@gmail.com

Directors Lester Mignerey KB0MEF 281 257-6580 kb0mef@arrl.net

Ron Horton KF5LFL 281 890-4038 ron.horton88gmail.com Deral Kent K5WNO 281 548-7476 k5wno@juno.com

Mike Bowen N8ILU mike5664g@yahoo.com

Administrative & General Info.

Joe Sokolowski KD5KR 281 353-2196 kd5kr@arrl.net

Send changes in address, phone, or email to: NARS P.O. Box 90387 Houston, TX 77290-0387

Nets 2 meter Wed. 8 pm. 146.760, tone 103.5 Coordinator: Jerry Whiting KB5VGD g_whiting@sbcglobal.net

Web site URL: http://www.w5nc.net Web Master: Bill Buoy N5BIA 281 370-3510 n5bia@arrl.net Card checking for awards: Bob Walworth N5ET—DXCC 281 292-2221 rwalworth@charter.net

Brian Derx N5BA—WAS, VUCC 281 894-5942

Bob Walworth N5ET—WAZ 281 292-2221 rwalworth@charter.net

NARS Public Info. Officer Joe Sokolowski KD5KR 281 353-2196 kd5kr@arrl.net

NARS Reflector

NARS@mailman.qth.net Coordinator: Keith Dutson NM5G 281 516-1466 keith1@dutson.net

Texas QSO Party Co-coordinator: Chuck Sanders NO5W 832 657-4832 no5w.chuck@gmail.com

Co-coordinator: Keith Dutson NM5G 281 516-1466 keith1@dutson.net

VE Session (ARRL) Manager Keith Dutson NM5G

281 516-1466 keith1@dutson.net

Meetings

Monthly General Membership 3rd. Friday each month (except January) at 7:30 pm. Cypress Creek Christian Community Ctr. 6823 Cypresswood Drive

Saturday Breakfast Denny's 6504 FM 2920, Spring (Just a few blocks west of Kuykendahl)

Wednesday Lunch-11 am. Various places. Info on front page.

NARS News is published monthly by the Northwest Amateur Radio Society. Send all articles and materials for the newsletter to: Editor, Joe Sokolowski KD5KR, 281 353-2196 kd5kr@arrl.net Deadline for articles to appear in the next newsletter is the last day of each month.

Northwest Amateur Radio Society is a Special Services Club affiliated with the American Radio Relay League, ARRL Club No. 2120.