

# NARS NEWS



The Northwest Amateur Radio Society

Houston, Texas

September 2009



## September Meeting

### Storm Spotting

Before I get started on future programs let me thank Jeff Hoke and Center Point Energy for a great program on power line noise. It was obvious to me that Jeff enjoys his job and is truly concerned about keeping all of Center Point's customers happy, including Hams.

Our September program will be presented by none other than KU5B Colin Jenkins. Even at Colin's relative young age he is a veteran storm spotter and tornado chaser. Colin's interest in weather goes back to his elementary school days and in the 8 years I've known him he's maintained a home weather station. Now that he's reached a more mature level in his life he's able to put all those years of study to good use. Armed with a good knowledge of how storms work and a healthy respect for severe weather Colin has tracked a few ominous clouds waiting for a chance to photograph the big one. Colin will treat us to a few stories and photographs from previous adventures. I'm sure Colin will also be available to answer any questions you may have as well as providing information on how to get started.



Photographing tornados is nothing new in fact the attached photograph was taken in August of 1884. Tornado chasers have been photographing storms for years and managed to remain a relatively obscure group until the movie Twister. After that dozens of organizations and web sites appeared on the internet and hundreds of newly appointed storm chasers hit the road. I'm sure Colin will back me up when I say

safety is a number one concern. Arm yourself with knowledge and equipment before striking out on a new adventure like storm chasing.

Most of you are aware that the National Oceanic and Atmospheric Administration also known as NOAA is always happy to hear from storm spotters and storm chasers. A visual conformation of sever storms and tornados allows NOAA to fine tune their forecasting capabilities. It also allows them to give advanced warning to neighboring towns and in some cases can save lives.

Join us September 18 and don't forget to give Jerry a head count for the per dinner meeting at Hasta la Pasta.

# TQP 2009

## Important Dates

### Friday, September 18th, 7:30 PM

General Membership meeting,  
Cypress Creek Christian Community Cntr,  
6823 Cypresswood Drive

### Saturday, September 26th, 8:30 AM

VE License Exam Session  
Tomball Community Center  
S. Cherry & Market streets  
(just South of Main)

### Tuesday, September 29th, 7:30 PM

Board of Directors meeting  
Ponderosa Fire Station  
17061 Rolling Creek drive.

### Wednesday Lunch Bunch - North

Pei Wei Asian Diner Sep 16th  
Luby's Cafeteria Sep 23rd  
Jason's Deli Sept 30th  
Baker St. Oct 7th  
Sweet Tomatoes Oct 14th  
BJ's Oct 21st

### Wednesday Lunch Bunch - West

Fajita Willies W. Little York Sep 16th  
Fajita Willies W. Little York Sep 23rd  
Los Arcos (West at Beltway) Sept 30th  
Los Arcos (West at Beltway) Oct 7th  
Los Arcos (West at Beltway) Oct 14th  
Los Arcos (West at Beltway) Oct 21st

### Wednesday Lunch Bunch - Medical Center

Silver Palace Chinese Buffet Sep 16th  
Pappas Barbecue Sep 23rd  
Morningside Thai Sept 30th  
Prima Pasta Oct 7th  
Jason's Deli Oct 14th  
Buffalo Grille Oct 21st

### Draggers Lunch Bunch

11:00 am, Aviator's Grill, Hooks Airport

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

**Deadline for articles to appear in the newsletter is the last day of this month.**

## **BREAKFAST**

*at Denny's*

*7720 Louetta Road*

*Saturdays*

*7:30 AM*

## President's Corner

September - 2009

The Texas QSO Party is the 26 and 27 this month. You can see some of the routes the mobile operators will take are posted on the [txtqp.org](http://txtqp.org) web site. I encourage everyone to consider jumping in for some great fun with this easy to operate contest. The club really could use the extra logs to compete with the bunch from Central Texas DX Contesting Club. Well maybe the club could come in second this year with no hurricane wind and rain interfering with our operating time or antennas. I have operated from the home station, set up a portable station in Austin County and drove the KK5LO pickup truck around the hill country. Each one has been very exciting for me to participate in the contest.

At the last board meeting we had some discussion about having a CW class. The club has sponsored some classes in the past with good results. Please let Tom, KD5EIJ, know if you would like to participate as a student or help out. I also would like to mention that Larry, K5END, has wanted to start some on air CW practice sessions on the NARS 2 Meter repeater. Watch for the time and day to be announced on the NARS reflector and the 2 Meter Wednesday net.

It is getting to that time of year were we will be asking for some members to fill club office positions. We will be calling for nomination at the October Meeting and have elections at the November meeting.

The meeting in December will be our show and tell night. We are very fortunate to have some very active experimenters that build kits or build something from scratch. Last December meeting we had quite a few projects and I looking forward to seeing many more this year.

Do you have a topic to pass on to a director at the next meeting, lunch or breakfast? Would you like to volunteer to do a program? Please let us know what you would like to see at the monthly meetings.

## VE Session Notice

*Eddy Reynolds - K5WQG*  
NARS VE Session Manager

Saturday, August 22nd VE Test Session Results at Tomball Community Center:

We had 2 candidates.

Congratulations to:

- Stephan Manning - KF5CLG who passed element 3 for General, and
- Raimund Polman - KC5DAT who passed both element 3 and 4 for Extra

Special thanks to the VEs in attendance for their time and hard work:

- Sarah Connell - W0HXO
- Keith Dutton - NM5G
- Jerry Seay - KE5PUT

The next session will be held on Saturday, September 26th at 8:30 a.m. at the Tomball Community Center, located at the corner of Market St. & S. Cherry St.

Parking is in the rear (south side) of the building. The entrance is on the S. Cherry St. (west) side of the building.

**Remember, the fee for 2009 will increase from \$14 to \$15.**

## Part 2 of *Fun With the PicoKeyer-Plus* in this month's edition!

*... read on ...*

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George DiLetto, KD5ORW  
President

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**E-Mail:** [houstonamateurradio@prodigy.net](mailto:houstonamateurradio@prodigy.net)

# Fun With the PicoKeyer-Plus

## Part 2: MCW Configuration

Larry Kendall - K5END

In Part 1 we discussed assembly of the PicoKeyer-Plus kit from HamGadgets.com. In this article we will make some minor hardware additions and describe the menu settings needed for MCW and the key or paddle type.

Morse code is as popular as ever, but it requires long-term dedication to learn to copy and send. To the student this means, “practice, practice, practice.” So what is the best way for a new, motivated “know-code” to practice? The Elmers are seldom unanimous when it comes to opinions, but on this point they seem to agree that the best place is on the air, doing a real QSO with a live operator on the other end of the radio wave. No arguments there. So this means the Newbie needs to get set up for all the HF bands, and 160 meters? Not necessarily. Or suppose the Amateur has an FM VHF HT only and lives in an apartment?

There is an alternative. The method known as “MCW” provides a way to send Morse code audio on a modulated carrier. Typically the mode is FM. No one plans to work DX or a QSO Party with MCW. Still and all, it can provide an opportunity for early-level coders to practice code—on Amateur bands. The terms behind the acronym appear to be contradictory, as “MCW” is said to represent “modulated continuous wave.” Nonetheless, MCW theory is this simple: the radio is keyed, and a tone is sent to the mic input. The tone is turned on and off by the operator with the keyer to send Morse code. Figure 1 illustrates the concept. Fortunately, the implementation is almost as simple as the theory.

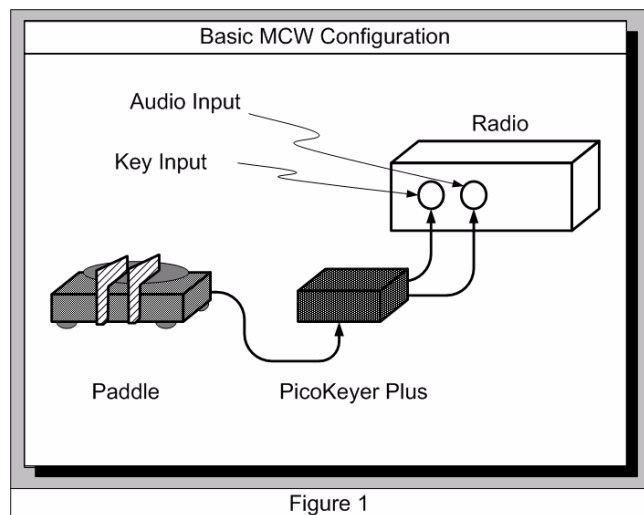


Figure 1

The PicoKeyer-Plus Morse code keyer provides an easy way to get set up for MCW. This project can be done with basic electronics skills and knowledge. We will use the keyer's audio output for the Morse code tone elements. Because of the delay required to key up an FM radio and the delay to break squelch of a receiver, the keyer maintains its key-up status for a least two “dahs” after the last element is sent. This means that an external delay-on-break timer and keying relay are not needed. Like most keyers this one is smart enough to know whether it is in “menu” mode or “transmit” mode; therefore, it will not key the radio while the user is in the menus.

Now, before you get your soldering iron out, remove the battery from the PicoKeyer-Plus. How to wire this kit up for MCW will vary slightly according to the radio. We will use the Icom IC-V8, although the method will be similar for many radios. In all cases, the keyer's speaker output needs to be coupled appropriately with the radio input to isolate any bias voltage or similar issues. There are several ways to perform this isolation, but the simplest and least costly is to use a capacitor of appropriate size, CN, to couple the speaker output to the radio's audio input. In some cases, a second, much smaller, capacitor, Cs—the size of which is chosen carefully—may be used in parallel with the speaker output to “smooth” out the keyer's square wave tone. A choke in series, or an entirely separate approach using a small audio transformer may be used. Consult your local Elmer for this step as needed. Typical parts are shown in Figure 2, such as a 2.5 mm jack with a couple of plugs, cords and capacitors.

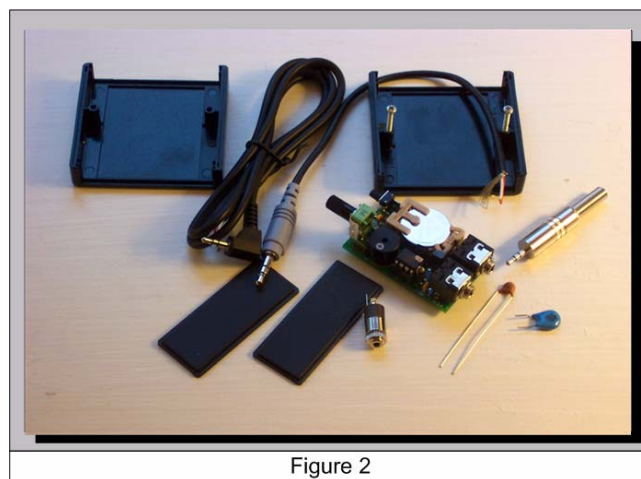


Figure 2

(see next page)

# Fun With the PicoKeyer-Plus

## Part 2: MCW Configuration

The schematic in Figure 3 shows the setup used and tested with an Icom IC-V8. Many radios have separate key and audio input jacks instead of one, or they may have a jack of another size. Instead of installing a third 3.5 mm jack, a 2.5 mm jack was used on the keyer for the tone output to prevent confusion later on when using the keyer in the conventional CW configuration. Table 1 shows a partial list of components used in this project.

throughput and the resulting FM deviation. The capacitor  $C_n$  turned out to be 0.4 mF for the IC-V8.

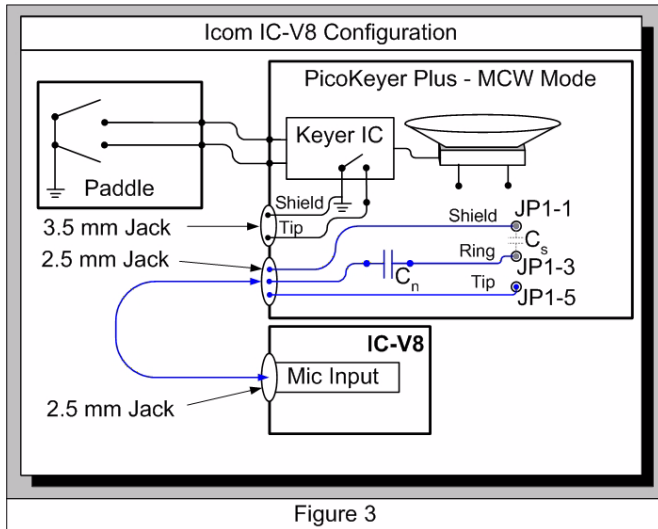


Figure 3

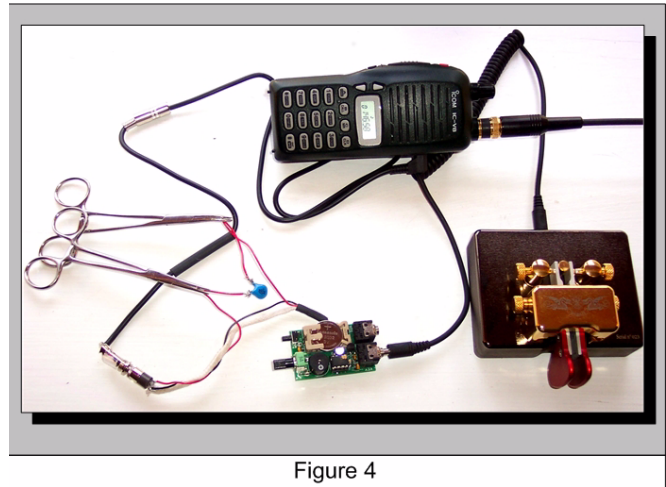


Figure 4

The tone output could reside on the unused terminal of the 3.5 mm key jack, as shown in Figure 5, but this may present incompatibility with some radio inputs. In this author's opinion the separate, 2.5 mm jack is preferable—for now. The inside scoop is that HamGadgets may be working on a PCB revision to make this even easier.

PicoKeyer-Plus & MCW Parts List			
Vendor	Item	Part Number	Pricing
Hamgadgets.com	PicoKeyer-Plus	PK-PLUS-KIT	\$17.99
	Project box	JM-22	\$4.50
	Spare box ends (optional)	JM-22 End Panel, single	\$2.00
	3.5 mm plug, S	3.5 mm stereo plug	\$1.50
	2.5 mm plug, S	2.5 mm stereo plug	\$2.00
mouser.com	2.5 mm jack, S (stereo)	161-7000-EX	\$1.34
	2.5 mm plug w/ cable, S	172-2310	\$3.71
	Coupling capacitor		

Table 1

Figure 4 shows the PicoKeyer-Plus with an Icom IC-V8 wired up for a simplex test with an IC-7000 as the receiver. The coupling capacitors were inserted temporarily to test the audio

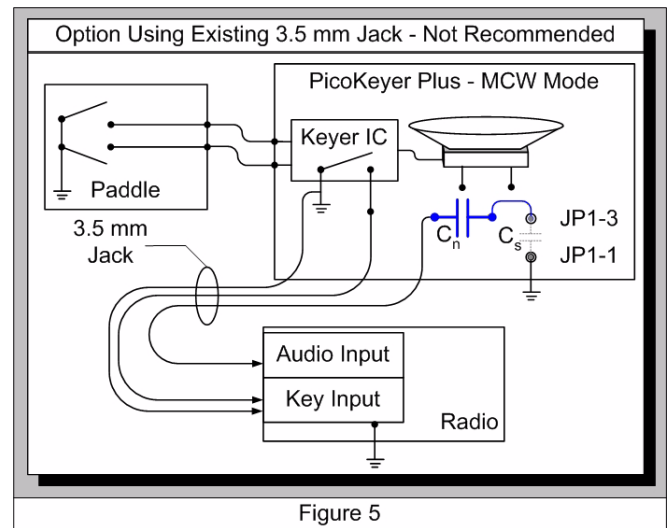
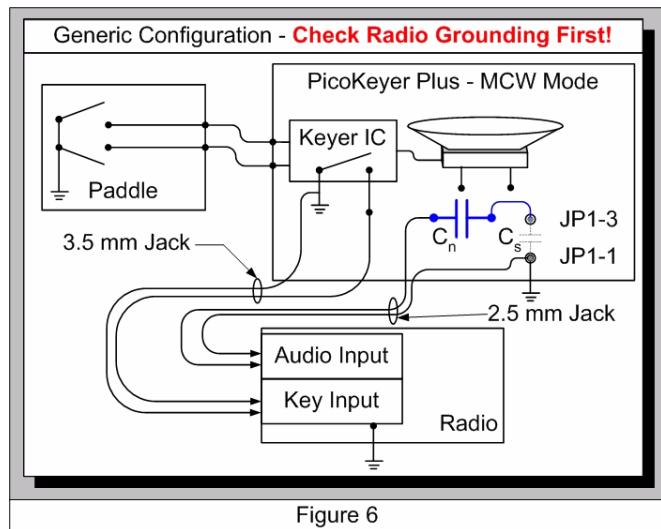


Figure 5

Depending on the radio, a dedicated tone ground lead may be needed as indicated in Figure 6. In such a case the user should be diligent in understanding the ground circumstances. It may be necessary to install another isolation capacitor, an audio transformer, outboard op amp, or deal with it another way. As it is not possible to know and address the situation for every radio, the configuration in Figure 6 is for informational purposes only and does not specify the wiring or hook up for any particular radio.

# Fun With the PicoKeyer-Plus

## Part 2: MCW Configuration



This author uses two cable segments to connect the keyer to the radio. The first segment begins with the 2.5 mm plug and ends with a 4-pin “Molex” connector. As each radio may be different, the second segment begins with the mate of the first “Molex” connector and whatever hardware is needed specific to the radio. This way, each radio used for MCW will have its own flavor of cable segment.

Once the kit is assembled for MCW, insert the battery into the PicoKeyer-Plus. If all is well it will send, “73” in Morse code. Depress the menu button, “scroll” through the setup choices (listed in the manual, in order, beginning on page 7) and

release the button when you hear “K,” for “key.” The keyer will then send you a single character, such as “A,” “B,” “U,” (see page 6 of the manual for an explanation of modes A, B and U) “G” for bug or “S” for straight key. Use the key or paddle to switch between modes until you hear the appropriate letter, then press the menu button briefly. The keyer will respond with “SK” to indicate you have entered the selection successfully and exited the menu.

Now depress the menu button again and scroll through the choices until you hear the “T,” for “tone.” The keyer will then send you a single character, such as “N,” “Y” or “M.” If the character is “M,” depress the menu button briefly. For any other characters it sends you, enter “M” with your key. It will then respond with “SK” to let you know the command was accepted and it has exited the menu option. Connect to the radio and test on low power into a dummy load. A receiver on the same frequency using the same mode within a few feet of the dummy load is likely to detect the signal and tests may be performed this way. Test for loudness in the receiver. If the tone is strong enough in the receiver to suit your ear without the squelch tail being too loud, the isolation is configured appropriately.

One tip worth remembering is the delay to key up an FM transceiver or a lapse in squelch break can be long enough to cut off at least the first element of the first character sent. For this reason MCW code is perhaps best sent with a “V” or an appropriate prosign at the beginning of each transmission.

The last item of instruction is the most important: have fun!

## Texas QSO Party 2009

### Chuck Sander NO5W TQP Coordinator

Recently there have been some small hints of Fall in the early morning air, the Astros are out of the hunt, and the Texans and other local football teams are yet to prove what they’re made of. So it must be time for the annual Texas QSO party sponsored each year by the Club to encourage contacts between Texas amateur radio operators and amateur radio operators throughout the world. This event is also an excellent opportunity for county hunters to add to their list of Texas counties worked.

One of the planning goals each year is to have QSOs made from each of the 254 counties in Texas. This is the best—and may be the only—opportunity to make contact with certain Texas counties. A few remote or sparsely-populated Texas

counties are activated rarely, a condition which presents a unique opportunity for any operator with a good station, mobile or otherwise, to become a coveted contact! In TQP 2008, 246 of the 254 Texas counties (97%) were activated. The inactive counties in TQP 2008 were Hudspeth, Jim Hogg, Maverick, Presidio, Starr, Val Verde, Webb and Zapata. Mobile operators can increase their own score indirectly by activating as many of the counties in the Lone Star State as possible during the contest. Part of the excitement and fun of mobile HF contesting is in meeting the technical and logistical challenges to build an effective mobile station and use it to log contacts along a route of counties. Portable computers, logging software, interactive hardware, route planning, GPS navigation and logging, mobile HF antenna optimization, power distribution issues, vehicle ergonomics (including PC operation in bright sunlight and after-dark operation,) meals and hotel reservations are all considerations in the planning. But it is worth the effort!

## Texas QSO Party 2009

So far the following NARS members have announced their plans for TQP 2009.

- Keith Dutson NM5G - Multi-op from his home QTH, with K5GQ, and W5MF
- Ken Harlan KA5AKG - Mobile with driver Paul Owen N5NXS, East Texas (pending.)
- Walter Hock KK5LO - Mobile with driver Deral Kent K5WNO, 30+ counties in South & Central Texas.
- Danny Richards and Matt Stouffer N5BE/KE5MS - Mobile Multi (plus fishing tournament) - Coastal South Texas
- Chuck Sanders NO5W - Mobile Multi with Larry Hamel K5OT and Gary Schmidt W5ZL.
- Robert and Larry Kendall K5RLK/K5END - Mobile, Central Texas and Panhandle.

There may be others who have not yet announced but the above are the ones who have made their intentions known. All operators, mobile or fixed, are encouraged to send their plans or routes to [no5w@consolidated.net](mailto:no5w@consolidated.net) so that they can be posted on the website.

TQP 2009 publicity activity to date has included a table at several hamfests including BVARC, HamCom, and Austin Summerfest and presentations at a number of clubs including BVARC, NARS, CTDXCC, Highland Lakes ARC, and TDXS. This effort has resulted in sponsors for 33 of the 36 award plaques, so there'll be plenty of wall lumber to go around to the deserving.

See [www.txqp.net](http://www.txqp.net) for the Contest Rules, helpful tools, other resources and previous results.

See [www.w5nc.net](http://www.w5nc.net) for information on NARS, the Texas QSO Party Contest Sponsor.

All forms of logs are accepted but an electronic log is the preferred method of submitting your results. Producing such a log for all of your TQP contacts is the proverbial

“piece-o-cake” as TQP is supported by a large number of logging programs, including:

- 1 CQ/X <http://www.no5w.com>
- 2 N3FJP <http://www.n3fjp.com/>
- 3 KWIKLOG PLUS <http://kwiklog.com/txqso.htm>
- 4 WriteLog <http://www.writelog.com/>
- 5 TR LOG <http://www.trlog.com/>
- 6 CT by K1EA <http://www.k1ea.com/>
- 7 Log-EQF <http://www.eqf-software.com/>
- 8 N1MM Contest Logger <http://www.n1mm.com/>

CQ/X logging software was designed specifically for the TQP and mobile operation in State QSO parties and includes a GPS receiver interface with a USGS county-line data set to determine and then log the county abbreviations automatically with each exchange, as well as enter the county abbreviation for CW operators to send the exchange—automatically or manually, as determined by the user's preference.

Here are some related sites of interest to anyone planning to operate in the Texas QSO Party

- Texas DOT Road Conditions, provides several ways to search for road conditions, plus a toll-free information telephone number; [http://www.dot.state.tx.us/travel/road\\_conditions.htm](http://www.dot.state.tx.us/travel/road_conditions.htm)
- Where are all the Hams; <http://hams.mapmash.com/hammap.php>
- County Hunter Site; <http://www.countyhunter.com> [forum for posting trip plans]
- 3830 web site; <http://lists.contesting.com/mailman/listinfo/3830> [post results/score rumors]

Thanks to Larry Kendall, K5END, for assistance in preparing this article.

Texas Mobiles, Drive Safely and everyone have fun and good luck in the contest!

## NARS Bell Ringers

**Jerry Whiting KB5VGD**  
[g\\_whiting@sbcglobal.net](mailto:g_whiting@sbcglobal.net)

It is not too far ahead, the NARS bell ringers for the Salvation Army are due to be called to duty. The date is Saturday,

December 5th, Duty hours are from 10AM to 5 PM in 1 hours shifts, 2 bell ringers per shift. The location is the same as last year Wal Mart at 249 and Spring Cypress.

This is for a very good cause and a payback for the help the Salvation Army has done in supporting our annual Field day event. We will need 14 bell ringers plus 2 alternates. To sign up for this event please e-mail me. C U There

# Welcome, Congratulations, and Condolences

## NARS Resource List

### General Help:

Bill Stietenroth K5ZTY  
281-893-3901, [k5zty@juno.com](mailto:k5zty@juno.com)  
Allen Majeski WA5REJ  
281-353-8652, [wa5rej.tx@netzero.net](mailto:wa5rej.tx@netzero.net)  
Bill Denton W5SB  
281-469-8331, [w5sb@arrl.net](mailto:w5sb@arrl.net)  
Deral Kent K5WNO  
281-548-7476, [k5wno@juno.com](mailto:k5wno@juno.com)

### Digital Modes:

Marty Fitzgerald W5MF  
281-251-4301, [fitz6@swbell.net](mailto:fitz6@swbell.net)

### VHF/UHF:

Brian Derx N5BA  
281-894-5942

### PC Programming and Operations:

Keith Dutson NM5G 281-351-7683,  
[keith@dutson.net](mailto:keith@dutson.net)

### Building Electronics & Kits:

Mark Tyler K5GQ  
281-587-0256, [k5gq@juno.com](mailto:k5gq@juno.com)

### Interference (Basic Advice):

Terry Myers KQ5U  
281-443-6042,  
[tmyers1031@sbcglobal.net](mailto:tmyers1031@sbcglobal.net)

### Card Checking for Awards:

Bob Walworth N5ET - DXCC  
281-292-2221, [rwalworth@charter.net](mailto:rwalworth@charter.net)

Brian Derx N5BA - WAS, VUCC  
281-894-5942

H O Townsend K5CX - WAZ  
281-376-7416, [k5cx@arrl.net](mailto:k5cx@arrl.net)

### NARS Public Information Officer:

Joe Sokolowski, KD5KR  
281-353-2196, [kd5kr@arrl.net](mailto:kd5kr@arrl.net)

## NARS Information

### PRESIDENT & BOARD CHAIRMAN

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Chet Farley KG5YF

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### ADMINISTRATIVE AND GENERAL INFORMATION

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Send address, phone, email and other  
changes to:

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P. O. Box 90387  
Houston, TX 77090-0387

### NETS

10-Meter Ragchew: Mon 8:00 PM,  
28.444 MHz

2-Mtr Wed. Night: 8:00 PM, 146.06/66  
Coordinator; Jerry Whiting KB5VGD  
[g\\_whiting@sbcglobal.net](mailto:g_whiting@sbcglobal.net)

### WEB SITE

URL: <http://www.w5nc.net>  
Web master: Bill Buoy N5BIA  
281-370-3510, [n5bia@arrl.net](mailto:n5bia@arrl.net)

### NARS REFLECTOR

[NARS@mailman.gth.net](mailto:NARS@mailman.gth.net)  
Coordinator: Keith Dutson NM5G  
281-351-7683, [keith@dutson.net](mailto:keith@dutson.net)

### TEXAS QSO PARTY

Coordinator: Chuck Sanders NO5W  
936-273-6930, [no5w@consolidated.net](mailto:no5w@consolidated.net)

### VE SESSION (ARRL) Manager:

Eddy Reynolds K5WQG  
[reynolds\\_eddy@yahoo.com](mailto:reynolds_eddy@yahoo.com)

### REPEATERS (KA5AKG)

2-m: 146.06/146.66 MHz Tone: 141.3  
70 cm: 444.375/449.375 MHz Tone: 103.5

### MEETINGS

#### Monthly General Membership

Third Friday each month at 7:30 PM  
Cypress Creek Christian Community  
Center, 6823 Cypresswood Drive

#### 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*  
section)

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American Radio Relay League  
ARRL Club No. 2120