



On Your MARC

The Newsletter of the McKinney Amateur Radio Club,
W5MRC



Volume 43 #08

Visit our Web page @ <http://www.mckinneyarc.org>

August, 2018

Next Meeting: August 14, 2018

Intro to Yaesu Fusion

Bob DeVance, K5CRX

With a Yaesu Fusion Repeater on MARC's near horizon, an introduction of Fusion features and advantages will help MARC members prepare for the new paradigm and a new learning adventure.

Bob will discuss the merits of the Fusion digital system, explain requirements for using it, and address future possibilities.

MEETING PLACE

MARC holds its regular business meetings on the second Tuesday of each month at 7pm. Meetings are located at:

Spring Creek Barbeque
1993 North Central Expressway
McKinney, TX

Exit US-75 at US-380 (University Drive), travel west making a right into the Target complex.

Once in the complex, Spring Creek can be found to your right directly across from the Target Building.

MARC Mentoring Program

Are you looking for someone to answer Amateur Radio related questions or assist you with getting to that next license class? Contact the MARC Mentor Program Coordinator to be matched up with a volunteer Mentor who will work with you. Send an Email to mentor@mckinneyarc.org for more information, to start getting answers, or if YOU would like to become a Mentor!



President's Message

July was a busy month with a lot of excitement regarding the MARC Fusion repeater. Ron WW2CBI, is currently in the process of the setup and testing the equipment with a planned trial launch date of August 13, 2018. Its operation will be initiated as a substitute for the existing Melissa repeater, which will remain in place so that it can easily be returned to operation if necessary. I am sure that Ron will have more to report at our August general meeting on August 14.

We are now within the dog days of summer and have already experienced more than our share of 100+ degree days. Note: Dog days of summer typically refers to the sultry time of the year when Sirius, the Dog star (i.e., largest star of Canes Major), rises at about the same time as the sun. At least field day and other outdoor MARC events are now behind us. Let's not forget the Outdoor Warning System Siren testing for this Saturday, August 4th! If you haven't already volunteered, we always need a few extras to fill in and/or serve as backups. Contact Andy W5KZJ (dirlarge@mckinneyarc.org) to sign up. Or, you may also volunteer for the event with Signup Genius at:

<https://www.signupgenius.com/go/10CoB44AAA62EA5FB6-mckinney>

More hot summer days are expected, so stay hydrated and limit your exposure to the heat. And get ready for September and the fall months when radio events will again flourish.

73,

Bill N5YZ
MARC President

MARC Officers and Supporting Roles

2018 MARC OFFICERS

- President:** Bill Vining, N5YZ
president@mckinneyc.org
- Vice President:** Robert DiGioia, N5SP
programs@mckinneyc.org
- Secretary:** Lisa Barnes, KG5OBK
secretary@mckinneyc.org
- Treasurer:** Dave Piekarski, N5EEN
treasurer@mckinneyc.org
- Newsletter Editor:** Bob DeVance, K5CRX
newsletter@mckinneyc.org
- Director-at-Large:** Andy Barnes, W5KZJ
dirlarge@mckinneyc.org
- Repeater Trustee:** Ron Carlson, WW2CBI
trustee@mckinneyc.org
- Communications Director:** Bob DeVance, K5CRX
commdirector@mckinneyc.org

Supporting Roles

- ARRL Awards Manager:** Mike Baker, W8CM
- Club FCC License Trustee:** Brian Belcher, WA5M
- Club Librarian:** Ron Carlson, WW2CBI
- Mentor Coordinator:** Claude Canterbury, KE6EJG
mentor@mckinneyc.org
- Net Manager:** Kyle Ackerman, KC5VEW
- Public Information Officer:** Lynda Tuma, KF5JUO
info@mckinneyc.org
- QSL Manager:** Claude Canterbury, KE6EJG
- Repeater Control Operators:** Brian Belcher, WA5M
Mike Baker, W8CM
Dave Piekarski, K5EEN
- VE Team Leader:** Stephen Reinen, N8BP
ve-testing@mckinneyc.org
- Webmaster:** Michael Griego, N5GNU
webmaster@mckinneyc.org
- Web Administrator:** Mike Jarvis, N5MAJ
- Youth Coordinator:** Dam McKinley, W5FRT
youth@mckinneyc.org

Meeting Presentations: If you or someone you know would like to present a topic at one of our meetings, or if you have questions about a past presentation, please contact our presentation coordinator at programs@mckinneyc.org

Join Us! The club is open to all, especially those who want to be or are involved in Amateur Radio. Please contact the club secretary at secretary@mckinneyc.org or by post at the above address for more information or access an application on our website <http://mckinneyc.org/>.

CREDITS & KUDOS

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ALL current members including those who are part of family memberships may receive the Emailed version. To switch versions send an Email newsletter@mckinneyc.org and include the following information: Member Name, Call Sign, Email address and version desired.

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newsletter@mckinneyc.org

or

Editor, *On Your MARC*
P.O. Box 267
McKinney, TX 75069

Submissions may be sent at any time. The Editor reserves the right to determine suitability for inclusion in the newsletter.

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Minutes of the General Meeting



Minutes of the General Meeting July 10, 2018

Bill – N5YZ called the meeting to order at 7 PM and led the membership in the Pledge of Allegiance. Introductions went around the room, there were 40 members and 7 visitors present.

NEW LICENSEES/CALL SIGNS: none

VE TESTING REPORT: 12 tested; 2 new Extras, 2 Generals, 2 Technicians

SECRETARY'S REPORT: Bill- N5YZ reported that the Minutes of the June General Meeting had been published in the June Newsletter, and requested a motion to approve the Minutes as published. Motion by Patty-KG5AEL, second by Robert- NS5P. The motion carried.

TREASURER'S REPORT: Bill- N5YZ presented the Club's Financial report as compiled by our treasurer, Dave- K5EEN.

Beginning Balance: \$ 15,356.98

+ Revenue: \$ 1,643.08

- Expenses: \$ 72.87

= Ending Balance: \$ 16,927.19

CLUB NETS: Bill N5YZ reviewed our Club nets:

General Information Net: Every Sunday at 8:00PM – W5MRC repeater, 146.740 MHz, offset -0.600 MHz, tone 110.9 Hz

Ladies Net: Every Monday at 8:00PM – W5MRC repeater, 146.740 MHz, offset -0.600 MHz, tone 110.9 Hz

Simplex Net: Every Monday at 8:30PM – 146.540 MHz. No offset or tone required.

BUSINESS:

Bill- N5YZ announced that the next Board Meeting will be July 21, 2018 at Creekwood United Methodist Church, 261 Country Club Road, Allen TX at 8 AM.

Bill- N5YZ announced that the Outdoor Weather Siren (OWS) testing will be August 4, 2018 starting at 11:40 AM. 16 volunteers have signed up so far. Contact Andy- W5KZJ if you are interested in helping out. We have 25 sirens to test.

Bob- K5CRX updated the club regarding progress made with the City of McKinney Repeater agreement. He advised that a city councilman is now involved and we can now submit a repair request form so that we can access the equipment to make emergency repairs.

Bill- N5YZ reported that the Heard Museum W5OWL is on the air.

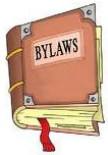
Field Day 2018 overview was presented by Sid-K5DKW and Michael N5MAJ- 1004 contacts this year, 608 CW, 389 phone, 7 digital. We earned 710 bonus points giving us a total submitted score of 3,954 points (subject to validation by the ARRL). Top 5 operators were: Ron - K1HZ 435 CW, Van- WC5D 158 CW, Dave- K5EEN 94 SSB, Kenneth- KF5TXL 76 SSB, Robert- N5SP 75 SSB. Jeff- W5JLT was recognized for allowing us to use his travel trailer as a CW station. Andy- W5KZJ was also recognized for serving as a mentor in planning of Field Day 2018.

The Fusion Repeater purchase is complete: Ron WW2CBI, repeater trustee/ assistant to communications director, gave a short presentation regarding the Repeater which was on display at the meeting.

Bill- N5YZ asked that the president's message regarding the purchase of the Fusion Repeater be placed in the minutes of this meeting.

(Continued on page 8)

Minutes of the Board Meeting



Minutes of the Board of Directors Meeting 7/21/18

ATTENDEES: Bill Vining - N5YZ, Robert DiGioia – N5SP, Dave Piekarski – K5EEN, Bob DeVance – K5CRX, Andy Barnes W5KZJ, Ron Carlson – WW2CBI, Lisa Barnes – KG5OBK

GUESTS: Sid – K5DKW, Dave- KS5SK, Mike - W8CM, Mike- N5MAJ

Bill– N5YZ called the meeting to order at 8:00AM and Andy-W5KZJ opened with prayer

SECRETARY'S REPORT: Lisa - KG5OBK reported that the minutes of the June Board Meeting had been published in the June Newsletter, and made a motion to approve the minutes as published. Second by Bob-K5CRX. Motion carried.

TREASURER'S REPORT: Dave – K5EEN, provided the Club's Financial Report.

Beginning Balance: \$16,927.00
+ Total Revenue : \$ 506.00
- Total Expenses : \$ 1238.00
= Ending Balance : \$ 16,195.00

OLD BUSINESS:

Heard Museum Update: Dave KS5SK reported that the radio is working well. He has been talking in general terms with Sy about a special event and that Stephen is talking about getting home schoolers at the Heard involved in radio operation/ usage.

Field Day 2018- Sid- K5DKW and Mike- N5MAJ talked about Field Day 2018 and things that were learned in planning for Field Day 2019 including use of a donation jar,

W1AW bulletin, a possible food committee to prepare a large meal for Saturday evening, adding fans to the CSU to help keep it cooler, better use of antennas to keep CW from interfering with SSB communications, recognizing top communicators. It was also discussed that there may need to be some education prior to Field Day to teach participants in use of the software. Andy- W5KZJ encouraged Sid and Mike to identify someone to mentor next year in how to organize and manage the event. Sid - K5DKW and Mike- N5MAJ have volunteered to coordinate the event again next year.

HamClubOnline.com: Dave- K5EEN advised that the new member application has been set up and once someone submits an application it will go to pending status. He has been unable to upload the new logo to the site. Bob-K5CRX will send him a more user friendly logo to upload.

Membership application: Robert -NS5P has updated the new membership application and a copy was passed around for all to review.

Repeaters update:

City of McKinney: Bob- K5CRX advised that Paul Sparkman can get us in to do the needed antenna repairs. We will need to put in a request but we now have access. The MOU is still in process. He is also working on the Custer location MOU.

(Continued on page 5)

NOTICE
The next MARC Board meeting will be held on August 18, 2018

at
Creekwood United Methodist Church
261 Country Club Road
Allen, TX 75002

Visitors are always welcome!

(Continued from page 4)

Melissa: Ron- WW2CBI gave a short presentation about the Yaesu Fusion DR-IX Digital Repeater that will be installed at the Melissa location. He discussed site work and equipment updates that need to be done as well as commissioning prior to the launch date of 8/13/2018.

Dave- K5EEN states that there is an issue with the Melissa repeater, that the exhaust fan may be generating some noise on audio frequencies, need to work on the cable.

Broadcastify- Bill- N5YZ has recommended tabling the issue. Dave- K5EEN states there is no reason for us to be involved with this as a club; that legality falls on the receiver of the signal. Ron- WW2CBI felt that we do have an interest if we have members who object to this program and feels that we should request members to only use for special events.

August General Meeting: Robert-NS5P was planning to do a presentation on traffic handling but can move it to September as Bob-K5CRX suggested a presentation about the fusion repeater and volunteered to make that presentation.

Lisa- KG5OBK made a recommendation to Ron- WW2CBI that he start thinking about identifying someone he can mentor in management/repairs of the repeaters.

NEW BUSINESS:

Lisa- KG5OBK reported that the Plano Library has reached out to the club to make a presentation at the library regarding HAM radio operation. Bob-K5CRX has been in communication with staff at the library and has submitted information regarding possible topics for that presentation.

OWS test status: Andy W5KZJ advised that we have enough volunteers to cover 25 sirens but still needs a few volunteers to be extras in the event that someone doesn't show for their assigned siren on 8/4/18.

Go Kits: Bob K5CRX will do a newsletter article and will write up guidelines for use of the Go Kits by members. Andy- W5KZJ recommended replacing the linear supply with switchers to lighten the weight of the kits.

Ron- WW2CBI discussed that he could coordinate with 4-5 volunteers at the OWS siren testing to help with assessing propagation from UHF repeater.

ADJOURNMENT- Robert- NS5P made a motion to adjourn and it was seconded by Lisa-KG5OBK. Motion carried and meeting adjourned at 9:15 AM.

Lisa Barnes KG5OBK, secretary

New Repeater Control Operator Appointed

MARC'S Repeater Trustee, Ron, WW2CBI, is pleased to announce the appointment of Dave Power, KS5SK, as a Repeater Control Operator, monitoring the repeater usage and equipment operation. With the addition of a UHF digital modulation mode and the VHF backup Repeater access agreement nearing completion, an additional Control Operator will be much appreciated.

Over the coming weeks you may notice some operational testing of the VHF and UHF repeaters as the control functions are reviewed and exercised. The most noticeable will be tests of turning the Repeater OFF and back ON, such as when there is a failure of equipment or usage decorum. Congratulations, Dave, and thanks for helping in verifying and maintaining our Repeaters' licensing compliance with FCC Part 97.

73,

Ron, WW2CBI

MARC Repeater Trustee.

**2nd Quarter Report
Revenue**

Donations	\$	272.72
Dues New	\$	184.00
Dues Renew	\$	228.00
Equip Sales	\$	331.50
Other	\$	16.24
Raffle	\$	74.00
Parking Lot	\$	769.00
Refund	\$	-
 Revenue Total:	\$	 1,875.46

Expenses

Bank Fees	\$	3.32
CSU Equip	\$	-
CSU Radio Proj	\$	-
Donation	\$	-
Equip Repair	\$	135.92
Field Day	\$	-
Hospitality	\$	-
Insurance	\$	-
Library Materials	\$	-
Misc Expense	\$	-
Newsletter Supplies	\$	-
Office Supplies	\$	-
PO Box	\$	-
Shirts	\$	-
Special Event Exp	\$	-
Stationary	\$	-
VE Team Exp	\$	-
Vehicle Reg	\$	70.38
Website Supplies	\$	-
Xmas Party	\$	-
 Expense Total:	\$	 209.62

Quarterly Net: \$ **1,665.84**

Beginning Ledger		
Balance:	\$	15,261.35
Ending Ledger Bal-		
ance:	\$	16,927.19
 Annual Net:	\$	 2,094.55

David Piekarski, K5EEN, Treasurer

Field Day Marshalls Sid, K5DKW, and Michael, N5MAJ, receive "Thank you" coffee mugs from Bill, N5YZ, MARC President at the July monthly meeting for their outstanding leadership of MARC's Field Day 2018.

Photo by Michael, K5MFP



What is System Fusion?

System Fusion is Yaesu's implementation of Digital Amateur Radio, utilizing C4FM 4-level FSK Technology to transmit digital voice and data over the Amateur radio bands. In the early 2000's GMSK emerged in the Amateur radio market as the dominant digital mode, however in 2013 Yaesu introduced "System Fusion" which quickly became the dominating digital format in Amateur radio because of quality, reliability and enhanced performance in a wide range of environments.

Digital Communication modes have gained popularity over the years in the market because of superior performance in environments with interference, noise and other contributing factors. Many other digital features make the Fusion System ideal for Amateur Operation in support of served agencies.

Work Party at the Melissa Repeater Site, July 14

Thanks to all who came out to the Melissa Repeater site and helped clear the entry path. At least eight members were able to make it and a couple more tried. Most of the crew arrived at 9 am to find that the major piles had largely been cleared by the "Earlies". I'm going to miss slipping and sliding in the clay on rainy nights when out to check up on equipment. Work was wrapped up by 10 am.

The Melissa Work Party:

Brian WA5M, Dave W5COP
Marshall K4UKB, Sid K5DKW
Dave K5EEN, Bill N5YZ
Dennis KG5VSP, Ron WW2CBI

Recognition goes to those who signed up but had other events intercede...

N5RKP Dick, KG5PTT Josh

Thanks & 73,
Ron, WW2CBI, Repeater Trustee

Photo credits—Ron, WW2CBI



Melissa Repeater Hut



Before



After

(Continued from page 3)

“President’s Message:

Well it has finally happened! After years of discussion, the McKinney Amateur Radio Club is now stepping into the digital age. This was confirmed with a quorum of the membership vote at the June 12 general meeting, ratifying a motion to purchase a Yaesu Fusion repeater and accessories that were made available to us by a member. Don’t go buy a radio just yet! We are looking at this purchase as an opportunity to better learn, understand and evaluate the Fusion system with the hope that we will soon have this repeater up and running. The membership authorized MARC to spend up to \$1,000 for this transaction. You may note in the minutes for the MARC Board of Directors (BOD) meeting that there was some discussion regarding a member’s concern that perhaps the vote was not conducted in accordance with our constitution and constitution bylaws. This discussion continued during, as well as after (via email), the BOD meeting. Ultimately, it was the unanimous conclusion of the MARC BOD that the motion, presentation and ratification was completely in conform-

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From the Editor



I hope you enjoy this issue of “On Your MARC”. As always, we need your articles and input to create a great newsletter.

We are especially pleased to receive your bio information for the “Meet the Members” articles. There’s always interest in knowing a little bit more about our members.

Thank you to Patrick and Michael for photos used in the July newsletter. I managed to clip off the photo credit acknowledgement of their work.

Bob, K5CRX, Editor

Help for “Meet the Members” Articles

To help you submit your “Meet the Members” article, just fill in the following questionnaire and send it to newsletter@mckinneyarc.org.

Name:

Call sign:

Operator Class:

Where did you grow up?

When were you first licensed as a HAM?

Where did you take your exam(s)?

What interested you most about HAM radio?

What is your favorite part of HAM radio (local communications, “rag-chewing”, DX chasing, emergency communications, special events, public service, etc.)?

What types of HAM operating do you like (local thru the repeater, digital operations, HF rag-chewing, HF contesting, award qualification, etc.)?

What are your goals for your future in HAM radio?

(Continued from page 8)

ance with the MARC constitution and constitution bylaws, and that no other action was required. The MARC treasurer, communications director and repeater trustee have been asked to proceed with coordination of payment and delivery. Field Day! What a great experience. A quick comment is not nearly enough. More of this to be discussed at our July general meeting. But I cannot be remiss: Thanks to Michael N5MAJ and Sid K5DKW for a great job in coordinating this event, and to all that helped and participated! I am already looking forward to next year's event! 73, Bill N5YZ MARC President Email: president@mckinneyarc.org"

Ron- WW2CBI also announced that there have been more QST magazines donated to the library.

Loney- WoGZV thanked our club for helping get the Heard radio station on the air, recognizing specifically Dave- KS5SK in getting the equipment working again. He advised that they are going to be working with the home schooling classes at the Heard in encouraging the students to learn about radio operation. He advised that the director at the Heard is going to be getting his radio license.

Program for the evening: Robert- NS5P introduced Greg Evans K5GTX. NTX ARES assistant section emergency coordinator and training coordinator for ARES Collin County. Greg gave a presentation about ARES training of volunteers who play a key role during disasters, as well as different types of nets including casual and formal nets used in radio communications.

New members: Andrew Damiano- Kg5SKI and Van Hodgden- WC5D applied for membership in MARC. Dave- K5EEN made a motion to accept them as members of MARC, seconded by Patty- KG5AEL. Motion carried.

50/50 drawing: \$76 was collected for the drawing. Sid- K5DKW won 1/2 - \$38 and donated his winnings back to the club treasury.

ADJOURNMENT: Jeff-W5JLT made a motion to adjourn, second by Robert-NS5P. The motion carried and the meeting adjourned at 8:47 PM.

Lisa Barnes KG5OBK, secretary

MARC – Digital / FM UHF Installation

Things to do, then test it on the air!

WW2CBI – Ron – Repeater Trustee

While setting up MARC's new Yaesu Fusion Digital Repeater there are, of course, many things to do. Our members have already helped with a Saturday morning work party to get the access path back in shape. Many thanks to all! As equipment is configured and setup, built or have-it-built, our members might like to participate in any way they can. It can speed up the project, and everyone involved can learn a bit more about repeaters – hands-on or from the bleachers. To kick things off, for those who would like to participate, or just listen in or watch, there will be an overview conference call to go over the system diagram and point out where the tasks yet to do fit in. Also, there will be some explanation why a couple of these items are important. For new members, you'll see how some of those license test items apply! We can discuss and pick a time for the overview call via Groups.IO or email.

Be sure you get on the list to dial in and listen or talk, or volunteer right now for an item in the table on the next page. Send an email indicating your interests to trustee@mckinneyarc.org or newsletter@mckinneyarc.org.

(Continued on page 10)

Fusion Repeater Installation and Setup Partial Tasks List

(Continued from page 9)

Overview conference call on how it works. Couple drawings via Groups IO or email.	Pick a time via Groups IO	ww2cbi
Propagation logging map for Tx / Rx balance field testing		Sid
DR-1X initial configuration	doing	ww2cbi
Environmental monitoring – APC SmartUPS with Smart Slot AP9619 & AP9512T. configuration and checkout		?
Configure WiFi router, connect to APC, and check-out		?
Tune duplexer, then test in hut - 443.200, 448.200 MHz	to do	?
DR-1X configuration check	to do	?
Patch cable lengths, types	to do	ww2cbi
LM-400 coaxial patch cables / N-connectors – build or have-built	to do	?
TX-RX isolation test, evaluate for additional cavities	to do	?
System test on the air – balance Tx / Rx range	to do	?
Test Control Operator RF functions	to do	Control Ops, Trustee

Send an e-mail to trustee@mckinneyarc.org or newsletter@mckinneyarc.org indicating your interest(s) in helping with the Fusion Repeater System installation and setup.

HAM RADIO CLASS—August 25-26, 2018

The Plano Amateur Radio Club will be presenting a **Technician** level amateur radio class on August 25th and 26th. The class will be held at the Allen Central Fire Station training center located at 310 Century Parkway, in Allen TX 75013. As always the class is free; the EXAM is \$14.00 cash. Class schedule is 8:00 am - 5:00 pm on Saturday and 8:00 am - 3:00 pm on Sunday, with the licensing EXAM starting at 3:00 pm on Sunday.

Please pick up a copy of the HamRadioSchool.com Technician License Course study guide, by Stu Turner, available locally.

To reserve your seat, and register for this class, or if you have additional questions, please send an email to Mike Pruden at (NN5ZZ@ARRL.NET). Please provide your NAME, EMAIL ADDRESS, and TELEPHONE NUMBER.

Buy, Sell, Trade, Give Away

Have items to buy, sell, trade, or give away in the radio/computer world? MARC members may post these items here by e-mailing a brief description of their items and contact information to news-letter@mckinneyarc.org.

MARC also hosts a monthly Sidewalk Sale where many more great deals can be found! The Sidewalk Sale is held on the last Weekend of each month in the Southwest parking lot of Collin College's McKinney Campus located at the corner of US 380 (University) and Community.

Fusion Automatic Mode Selection

This function instantly recognizes whether the received signal is C4FM digital or conventional FM. The communication mode automatically switches to match the received mode. Even if a digital signal is being used, you can switch to FM communication if radio signals are received from a FM station. This function enables stress-free operation by removing the need to manually switch the communication method each time.

AMS function breaks down into the following operating modes that are fully selectable by the radio user:

- AUTO:** Both RX/ TX mode is automatically selected from one of the four operating modes (DN, VW, DW and FM) to match the characteristics of the received signal. This is the current AMS operation.
- TX MANUAL:** The both RX/ TX mode is automatically selected from four operating modes to match the characteristics of the received signal. And if desired to change the TX mode, by

pressing the Microphone PTT switch momentarily, the TX mode switch between DN and FM modes.

- TX FM FIXED:** The RX mode is automatically selected from one of the four operating modes, but the TX mode is fixed to FM.

- TX DN FIXED:** The RX mode is automatically selected from one of the four operating modes, but the TX mode is fixed to the 'DN' (Digital Voice Narrow) mode.

- TX VW FIXED:** The RX mode is automatically selected from one of the four operating modes, but the TX mode is fixed to the 'VW' (Digital Voice Wide) mode.

DN = Digital Voice Narrow, VW = Digital Voice Wide, DW = Data Wide, FM = Standard FM

McKinney Amateur Radio Club (MARC)

Sunday Night Net Control Operator Schedule

Date	Name/Call sign	Info	Back up
Jun. 3, 18	Sid, K5DKW		Bill, N5YZ
Jun. 10, 18	Bill, N5YZ		Bob, K5CRX
Jun. 17, 18	Bob, K5CRX	MARC ARES	Chris, KF5JGN
Jun. 24, 18	Chris, KF5JGN		Clark, AE5WD
Jul. 1, 18	Clark, AE5WD		Danny, W5FRT
Jul. 8, 18	Danny, W5FRT		Dave, AK5SP
Jul. 15, 18	Dave, AK5SP	MARC ARES	Jim, KG5FVM
Jul. 22, 18	Jim, KG5FVM		Jay, W5GM
Jul. 29, 18	Jay, W5GM		Jeff, W5JLT
Aug. 5, 18	Jeff, W5JLT		Joshua, K5GHS
Aug. 12, 18	Joshua, K5GHS		Lisa, KG5OBK
Aug. 19, 18	Lisa, KG5OBK	MARC ARES	Patty, KG5AEL
Aug. 26, 18	Patty, KG5AEL		Andy, W5KZJ

If you are unable to make your scheduled date and time, please contact your backup operator and also Kyle (972-979-7095, kyle.ackermano2@gmail.com), as soon as possible. **Please be aware if your week falls on the week marked "MARC ARES". The MARC Repeater is scheduled for the ARES Net at 9:00 PM.**

REMEMBER THAT YOU CAN HELP OTHERS IN AN EMERGENCY.
TO PARTICIPATE IN THE COLLIN COUNTY AMATEUR RADIO EMERGENCY SERVICE
PLEASE VISIT THEIR WEB-SITE: [HTTP://WWW.COLLINARES.NET](http://www.collinares.net) (Note: site not currently functional.)

MARC operates open repeaters on 146.740 and 443.200 MHz

EchoLink is provided on 146.740 by connecting through W5MRC-R. Regular/frequent users of the repeater are encouraged to join the club and be an active part of the local Ham community, as well as helping to support the repeaters continued operation.

The MARC information net is held every Sunday at 8:00PM CT, on 146.740 MHz.

Collin County ARES holds a training net on the third Sunday of each month at 9:00 PM CT on 146.740 MHz.

The MARC Ladies net is held the first and third Monday at 8:00PM CT, on 146.740 MHz.

MARC E-Mail Reflector—groups.io

MARC maintains a chat group on groups.io to facilitate club communication between meetings and newsletters. Sign up for this service by visiting <https://groups.io/g/McKinneyARC>. Your application will be approved quickly.

The purposes of the MARC email reflector are: 1) Facilitate the timely distribution of MARC information and news to club members. 2) Allow for the sharing of amateur radio related topics among club members. 3) Provide a forum for the discussion of amateur related information among club members. 4) Act as a marketplace for the buying and selling of amateur radio and computer equipment and services. Club members should utilize good judgment with regard to topics or content that are posted on the MARC reflector. To that end it is recommended that political and religious topics or content be avoided unless directly related to amateur radio. In addition, personal attacks in any form will not be tolerated.

VE SESSIONS ARRL EXAMS \$15

McKinney testing is held at the Heard Natural Museum, 1 Nature Place, in McKinney, on the first Sunday of each month except holiday weekends. Starting time is 2:30pm and ends no later than 4:45pm (they close at 5:00pm). For more information check our website at www.mckinneyve.org or contact Stephen Reinen, N8BP at (214) 937-9982 or by email at info@mckinneyve.org.

Richardson testing is held on the third Thursday of each month at St. Barnabas Church, located at 1220 West Beltline Rd. Sessions start at 7 PM. Walk-Ins are ok. For more information, contact Bill Owens, AD5EW at (972) 380-2859 or wtowens3@sbcglobal.net.

Sherman testing is held on the first Thursday of each EVEN--numbered month (Feb, Apr, Jun, etc.) at the Grayson County College, Center for Workplace Learning Seminar Room C, 6101 Grayson Drive, Denison TX 75020 at 7:00pm. For more information contact: Ron Witherington, K5NKD, ron.witherington@coxautoinc.com or at (903) 564-7115 Call first!

Garland testing is held on the fourth Thursday of each month and begins at 7:00pm. Location is : Freeman Heights Baptist Church, 1120 Garland Ave., Garland, TX 75040. Janet Crenshaw, WB9ZPH, at (972) 302-9992 for details or wb9zph@gmail.com.

Plano testing is on the third Monday of each month at 6:00pm-. Testing sessions are located at 3160 East Spring Creek Parkway, Plano, TX. If you have questions send e-mail to ae5sg@arrl.net.

Carrollton testing sessions are sponsored by the Metrocrest Amateur Radio Society (MARS). Testing is held at the Carrollton Public Library, 4420 Josey Lane, 75010. Please contact Allan Batteiger at (972) 672-0278. (See www.kb5a.org for details.)

Sachse, Wylie, Murphy testing sessions are sponsored by the Sachse ARA. Testing is held at 9:00am the second Saturday of the month at the East Fork Masonic Lodge, 508 Parker Rd., Wylie, TX, 75098. For more information call (214) 500-3472.

St. Paul testing sessions are sponsored by the PARK. Testing is held at 9:00am the third Saturday of the month at the St. Paul City Hall, 2505 Butcher's Block, St. Paul, TX, 75098. Please contact Kerry A. Weeks at (972) 442-1125.

Other testing session scan be located online at: www.dfwlist.org.

Local Repeater—See <http://www.mckinneyarc.org> for additional repeaters.

Voice

Dallas ARC (W5FC) 146.880 PL 110.9
Denton (W5NGU) 146.920 PL 110.9
Denton (W5NGU) 444.050 PL 110.9
Fannin Cty (K5FRC) 145.470 PL 88.5
Fannin Cty (K5FRC) 443.750 PL 100.0
Garland (K5QHD) 146.660 PL 110.9
Garland (K5QHD) 442.700 PL 110.9
Grayson Cty (K5GCC) 147.000 PL 100.0
Grayson Cty (K5GCC) 147.280 PL 107.2
Grayson Cty (K5GCC) 444.750 PL 100.0
McKny ARC (W5MRC) 146.740 PL 110.9
Melissa (W5MRC) 443.200 PL 100.0
NTXRA 145.350 PL 100.0
NTXRA IRLP 442.575 PL 127.3
Plano (K5PRK) 147.180 PL 107.2
Plano (K5PRK) 444.250 PL 79.7

Richardson (K5RWK) 147.120 PL 110.9
Rockwell (W5ROK) 441.875 PL 131.8
Rockwall (KK5PP) 441.525 PL 141.3
Rosston (WD5U) 145.490 PL 85.4
Van Alstyne (W5VAL) 443.800 PL 103.5
Wylie (W5GM) 442.100 PL 110.9

Digital Modes

APRS

National Freq 144.39 Simplex
National Alt Freq 144.34 Simplex

Winlink

SW Collin Co 145.03 K5BAD-10
SW Collin Co 145.03 W5RAE-10
NE Collin Co 145.07 AE5IT-10
NW Collin Co 145.07 KD5CTQ-10
SE Collin Co 145.09 N5BYL-10
SE Collin Co 145.09 KI5FU-10

SE Collin Co 145.09 K5PRK-10
SE Collin Co 145.09 K5EEN-10

(Plano)* D-Star

Voice 441.575 (+5)
Voice 1295.00 (-20)
Data 1255.00

*D-Star access is available through the WWW.K5PRK.Net website.

W5NGU (Denton) D-Star

Voice 147.450 (-1)
Voice 442.925 (+5)
Voice 1293.400 (-20)
Data 1253.600

K5TIT (Dallas) D-Star

Voice 147.360 (+0.6)
Voice 442.000 (+5)
Voice 1293.000 (-20)