



# IN THE DARC



<http://www.w5fc.org>

Don Murray, W9VE, Editor

February 2012

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Have an article or a bit of Club news you would like to submit? Maybe just an idea for an article? Let me know. If it looks promising We will work together to get it published in the DARC Newsletter. [w9ve@arrl.net](mailto:w9ve@arrl.net)



In Partnership with the DARC

## February Program

The DARC February 7<sup>th</sup> club program will be "Software Defined Radios in Kit Form" presented by George Hoxie, N0JRJ. George will be demonstrating his kit-built radio and describing the process of getting it on the air.

Like many of us, George has been interested in radio since just a youngster when he spent many a late night listening to the far away and mysterious signals emanating from his shortwave receiver.

An Army Veteran from the Military Intelligence Corp, George received his Novice ticket in 1982 while stationed at Ft. Carson, CO. Now a General class Ham, George enjoys many facets of the Ham Radio Hobby, to include, HF, SSB, AM, digital modes of all kinds, kit building, and Software Defined Radios. He also restores vintage radio receivers, posting his results on his very active YouTube channel.

George is a Telecommunications Engineer, and has worked in the telecom industry for over 25 years. He is currently employed at Tektronix Communications in Plano, TX. He lives outside of Celina, TX, where he and his wife raise dairy goats, chickens, and the occasional Grand Child.

This will be an informative and fun program. Don't miss it! See you February 7.

The Dallas Amateur Radio Club, Inc.  
PO Box 744266 Dallas, TX 75374

2012 DARC Officers and Directors:

President	Randy Patterson - KE5JIT
Vice-President	Kevin Grantham - N5KRG
Treasurer	Tony Mendina - KE5TGM
Secretary	Larry Melby - KA5TXL
Director (12/2014)	Jeff Quebe - KC5JQ
Director (12/2014)	Tom General - KE5ICX
Director (12/2013)	Roger Elkington - KE5YTA
Director (12/2013)	Bill Cahill - AD8BC
Director (12/2012)	Scott Drummond - KE5DKV
Director (12/2012)	Bob DeVance - K5CRX

The Dallas Amateur Radio Club, Inc., founded in 1914, is an ARRL-affiliated Special Service Club, and is a non-profit, tax-exempt 501(c)3 organization. Your donations to the DARC qualify for tax exemption.

Club meetings are always open to anyone interested in amateur radio. To contact us email: [info@w5fc.org](mailto:info@w5fc.org).

Our repeater Trustee is Johnny Davis K5JD. Our repeaters are located in the city of Dallas and are available for the use of all licensed amateur radio operators, subject to the repeater guidelines set forth in the official DARC website, [w5fc.org](http://w5fc.org).

DARC REPEATERS:

2m	146.880 out	146.280 in	110.0/110.9
1.25m	224.880 out	223.280 in	110.9/110.9
70cm	442.425 out	447.425 in	110.9/110.9

ECHOLINK

W5FC-R Node - 523731

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## President's Corner

*By Randy Patterson, KE5JIT*

I would like to start out by thanking the members who voted for me and giving me the opportunity to lead the Dallas Amateur Radio Club as your President in 2012. We have great membership and as we continue to grow, I would encourage our inactive members to become involved. Who knows, we would probably surprise you by actually doing something you either enjoy or might just have an interest in.

A special "Thank You" goes to KE5ICX Tom General, who has just completed two terms as President. I want to thank him for his great leadership, direction, and willingness to reach beyond our thinking ("thinking outside of the box" – in the business world) and became our leader in showing what "Stuff My Club Does \*#####?" Truly, his imagination has moved the DARC forward and made us think about not only moving forward but in going Back to the Future.

We have become well known in the Dallas area with NTS – daily - and our Nets on the 146.880 repeater Saturday evenings, followed by MOTA – Meeting On The Air twice monthly and had several joint ventures with MARS in recommending our members join in their play days and joining in with Hams & Eggs weekly gatherings on Saturday mornings.

We want to continue to build off the successes we have had over the past several years and “Move Back to the Future” with continuing with Morse Code, doing antenna builds, hopefully some pre-meeting workshops (working on that for possibly even our February meeting) and move to the future with D-Star. We will expand on this as we move into 2012.

#### CORRECTION

The newsletter as published Feb 1<sup>st</sup> incorrectly stated that Mrs. Joan Griffith had passed away. We learned today that it was not she, but Mrs. Nancy Griffith Mercer, age 61. Mrs. Mercer was the daughter of Whit Griffith, who left us in September. Please keep the Griffith family in your prayers. We deeply apologize to the family for this misunderstanding.

I would like to welcome K5CRX Bob DeVance to the Board of Directors. Bob was elected by the membership to serve out the unexpired term vacated by myself. I want to also welcome those who have agreed to take on a more active role in the club this year and loaned their name to appointed officer positions.

Last year we added the position of Special Projects Officer. This position was needed to authorize someone to work on behalf of the DARC on projects that took more time than just one meeting or conversation, but needed planning that required more time than a club meeting had to give. We needed someone to take control and work on projects not actively in motion but makes sense to try and make happen. Our Special Projects Officer for 2012 is KE5ICX Tom General.

N5KRG Kevin, N5BKL James and KE5ICX Tom will also serve as liaisons for me on events where I am unable to attend since my work days off are normally Monday and Tuesday and not weekends.

Our other appointed officers include: Educational Officer - KE5ZCM Katherine Hall, Program Officer - K5CRX Bob DeVance, Technical Officer - K5BP Bernie Parker, Emergency Officer – N5NPL Pat Hykkonen,

Property Officers - N5BKL James Shugart, KE5ICX Tom General and KE5KOF Andy Parcel, PIO/Newsletter Editor – W9VE Don Murray, Field Day Marshalls - KE5YTA Roger Elkington & W5MWT Mike Thames, Trustee - K5JD Johnny Davis, Webmasters - KM5Z Mike Yancy, KF5FPP Dhiren Parbhoo, KE5TUZ Jimmy Hartnett, DeGoyler Education Officer - N5BKL – James Shugart, D-Star Officer Advisors - WB5NZV Gerald Merchant and KD5WYU Brent Wilcox, D-Star Administrative Officer - TBA, D-Star Technical Officer – (our goal is to get Bernie some help) – TBA, Door Prize Officer - KE5DKV Scott Drummond, Grants- AD8BC Bill Cahill and KE5ZCM Katherine Hall, DARC 100 Years Celebration Officer (we need a better name) – TBA, and Public Service Officer – this position is still OPEN and we need volunteers to step up for this position.



We are very happy to announce that we were awarded the ARRL Special Service Award on December 27, 2011.

The last time the DARC held this award was in 2006.

This certificate indicates the club’s commitment for the next two years to improve the visibility of Amateur Radio as a positive force in the community, assist in emergencies, provide and encourage training and to further club activities for the betterment of the membership of the Amateur Radio Service.

Work started on this mission in 2007 when W9VE Don was our club president. Don set into motion the renewed interest of the majority

of our membership to embrace our mission statement and we have continued this mission for the past several years.

## DARC Upcoming Events

DARC Board Meeting - Tuesday Feb 7  
Brookhaven Church Business 6:00 P.M.  
DARC board meetings are open to anyone who wishes to attend, visit, and observe.

DARC Club Meeting - Tuesday Feb 7  
Burger House (Informal Meet Up) Dinner 6:00P.M.  
Brookhaven Church Business 7:00 P.M.

DARC Tech Net On the Air – 146.880, PL 110.9  
Back up frequency 442.425 PL 110.9  
Every Saturday 1900 – 2000 hours

DARC SkyNet On the Air – 146.880, PL 110.9  
Back up frequency 442.425 PL 110.9  
Every Saturday 2100 – 2200 hours

DARC Meeting on the Air - Sunday Feb 5 & 19  
146.88 MHz 7:00 P.M.  
All hams are welcome to join this get-together.

Dallas RACES Training Net - 3<sup>rd</sup> Sunday  
146.88 MHz Sun, Feb 5 & 19  
Everyone is invited to listen, but only RACES appointed stations are permitted to participate.

DARC EmComm Net – Non-denominational  
Emergency Preparedness Discussion. Saturday evening at 8:30 P.M. after DARC 1<sup>st</sup> Tuesday meeting on 146.880, PL 110.9 – Currently looking for Net Control Operators to expand this to a weekly event.

NTS DFW Early Traffic Net - Every Day  
146.88 MHz 6:30 P.M. - every evening  
All hams are invited to this traffic and training net.

We face several immediate challenges for 2012; some including insurance, site lease agreements, DeGoyler, BSA, D-Star, continuing joint ventures with area ARC's, expand our relationship with Dallas – both City and County, gearing up for Field Day 2012, preparing for our 100 year anniversary and several more topics.

We have some decisions to make with our insurance during our next DARC Board Meeting. Do we renew with our current company or change over to the new company that the ARRL has contracted with in 2011? If you have any input or suggestions, feel free to drop us a note.

We are trying to secure contracts on our existing location repeater and our potential location for D-Star. Hopefully, we will have more information to share at our meeting.

N5BKL and I recently visited DeGoyler Elementary School as a follow-up to the principle sending out a note in their newsletter. She had not received any responses, at the time of our visit, but did bring up the idea of contacting their Boy Scout leader for the group there at the school as an alternative to getting the amateur radio project started again. Stay tuned as James and KE5ICX Tom continues to work on getting it jump started.

2012 started off with a bang! We have a new Morse Code Class which started on Monday, January 9. This runs Monday through Friday evenings at 07:15 p.m. for 45 minutes through April. Our first class had 11 participants with our furthest participant coming to us via Echolink from Montana and has since gone international.

Special thanks goes to W5AAN Ginger and her instructors, KE5ZCM Katherine, KE5TGM Tony, W9VE Don and KE5ICX Tom for making this a class where anyone who wants to learn morse code has the instructors with the patience to work with them. These instructors truly give the time and commitment to help each participant work through the challenge of each character and encourage each person to work hard and also practice on their own.

KE5ICX Tom started a new net on January 9<sup>th</sup>, with the approval of the Board - Skynet Astronomy Net will be held on Saturday nights at 9p.m.. This time was selected because the sky will be dark by 9p.m. in summer and it will be late enough to not interfere with any other nets. This net will be on the 146.880 repeater.

Content will be "Objects in the sky" the night of the net and where to spot them. Tom is working on astronomer types to help. There are a number of software applications which make anyone an "expert on constellations and content". On cloudy nights a general discussion on space and sky subjects, culled from NASA websites.

The net will last about 30 to 45 minutes. Observations can be reported or discussed. On nights where there's meteorite activity we may want make reports on it.

The first net has twenty-two participants and lasted for over two hours. Anyone interested in being an NTS for Skynet, please contact Tom at [ke5icx@yahoo.com](mailto:ke5icx@yahoo.com).

I was very excited and interested in hearing from a young lady with an eyeglass company in Flower Mound this past week. I had stopped in to get some repairs made on my eyeglasses and she saw the antennas on my truck and off we went into chit-chat. She relayed to me there were a couple men who had came into her business within the past couple weeks and was talking about an amateur radio club that met over on Marsh Lane in Dallas and they were real excited about what the club is doing.

Guess what? That would be us, the DARC. She continued to state that in listening to them, it brought back her interest in wanting to get involved in amateur radio, specifically so she could learn to be a storm chaser (Pat, a potential new candidate for EmComm and RACES). She was concerned about how expensive it was for learning, obtaining a license and getting the equipment to become active. Surprising in 2011, doors opened to make it relatively inexpensive for someone to study and pass and exam, get a license and purchase a HT. Keep up the word of mouth about the hobby you enjoy and the ARC you enjoy being a part of.

We will celebrate our second successful year of Tech Net Saturday Night. This net is a weekly net that KE5ZCM Katherine, our Education Officer helped start for the DARC a couple

years ago. Her and her team of NCS's has done a tremendous job each week in making this a very exciting net and one that folks look forward to participating in. Our Tech Net on the Hill will be Saturday, March 31<sup>st</sup>, so mark your calendars and plan to attend.

Our 2012 Field Day will be something I don't believe any club or group has experience in, at least a few years, at least I have not heard of it.

We will start at The Flag location on Flag Pole Hill and then move to The Pavilion at 1800 hours. This will be a great and challenging experience, since it will require us to run at one location while getting set up at another location and not skipping a beat in our contacts to our friends in amateur radio. We will explain this in more detail at the meeting.

Now to D-Star – the project I have been involved with and we have discussed for four years. We are much closer to this becoming a reality with our partners. I have received information within the past couple of days advising that the majority of equipment/supplies needed have been ordered and we even have received some of the equipment. If the vendors deliver in a timely manner, we should be able to schedule a work day as early as the second Saturday in February. There are many challenges to this venture. We will need to install at an offsite location for testing and test for about 45-60 days. Once everything is working smoothly, we will dismantle and reassemble at the repeater site location and start testing again for a week or so before we say we are live.

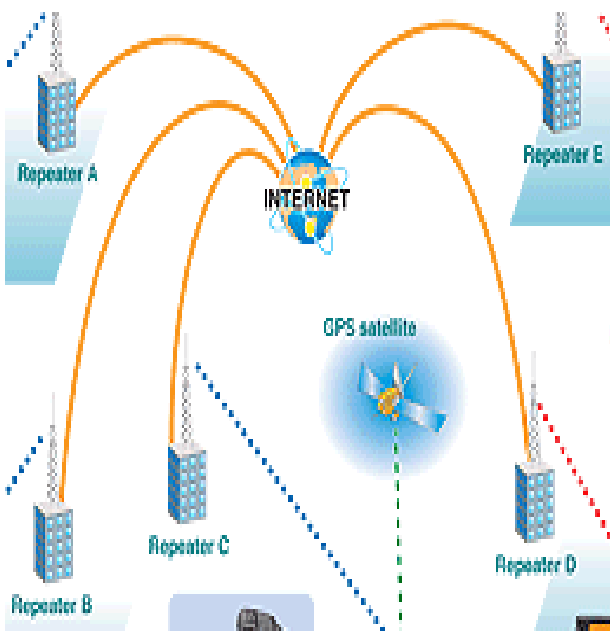
We have training responsibilities to our partners and responsibilities to our new site location to make this a success. We will discuss D-Star in more detail during our regular meeting, Tuesday, February 7<sup>th</sup>.

Have you ever thought about if you could access the Internet from ham radios? Or have you ever thought if you could communicate with a friend in another city or country using a simple handy radio? Or want to send a simple text message, or know the call sign of who is

on the air right now? The D-STAR system is such a magical system; you can easily realize these functions without using a tricky gadget or complicated facilities. The Internet gateway allows linking of D-STAR repeater sites over the Internet. You can uplink to your local repeater and downlink from a remote repeater, even from a foreign country!

### Fun With D-STAR

Here is a sketch of the D-STAR/Internet connection, followed by five examples of things you can do to have fun with a D-STAR radio.



WORLDWIDE LINKUP OF REPEATERS/USERS



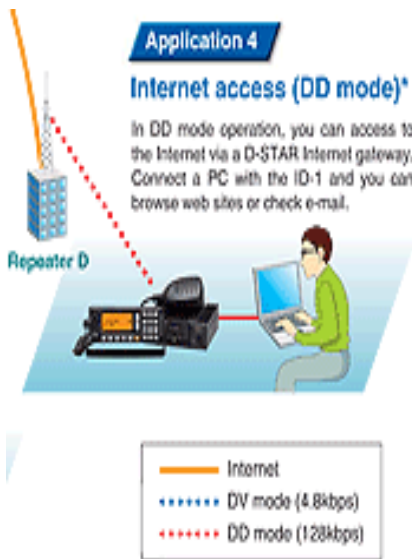
DIGITAL VOICE



SHORT DATA MESSAGE



GPS TRACKING



INTERNET ACCESS



TRANSMIT LIVE IMAGES

Look forward to a great meeting February 7<sup>th</sup>, hope to see you there!

'73's

Randy, KE5JIT

**Neighbor Program Benefits DARC**

Get a Tom Thumb Reward card and designate 4056 as the code for the donation program you want Tom Thumb to donate to. The DARC will receive 1% of your purchase price as a donation from Safeway/Tom Thumb. The club receives a check quarterly from Safeway for this. Please take the time to sign up for it.



## From the Desk of the Special Projects Officer & Chief Bottle Washer

By K5ICX Tom General



Greetings! This is your new “special projects” officer of the DARC. What do I do? Well the guy who held this office last year didn’t really tell me and when I was president I didn’t know this position existed, just one day a certain person walked up to me, handed me a business card with that title on it and said, “How do you like it?”. I said, “Well, that’s nice, what do you do?” He walked away. Sort of like the Lone Ranger leaving a silver bullet in the hands of the “saved homesteader” at the conclusion of every story. The bad news: some people in the stories had no clue what the bullet meant, the good news, you could always use it to ward off werewolves.

Be that as it may, I guess this is one of those “fill in the blanks” positions I seem to fall into in my own professional career. So I will do just that.

Here’s my job description as I’ve typed it out this morning:

“The *Special Projects Officer* is tasked with providing fun and interesting projects for the membership as a whole and something to which he finds personally interesting. His job is to coerce and force people to have fun, even if it kills them. He will carry fun objects that can be soldered into a ham project, producing the needed item from his oversize pockets in his jacket festooned with a white carnation.”

“The *Special Projects Officer* will provide procedural and technical expertise to the club via sourcing talent and resources within and

outside the ranks of the DARC to accomplish a particular or arbitrary goal of the DARC. He serves at the pleasure of the president.”

“The *Special Projects Officer* will not commandeer a presidential aircraft for his own nefarious purposes, and the president will not push him through an open landing ramp while flying at 12,000 feet, shouting ‘GET OFF MY AIRPLANE!’”

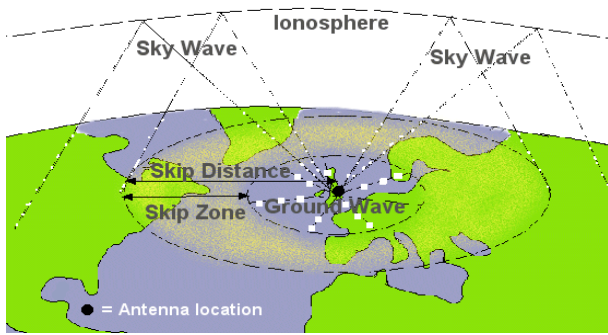
Now that we have the formalities out of the way, let’s dig into what’s planned for 2012.

### Play Day Project #1: NVIS

Play Day Project #1. In association with the *Metrocrest Amateur Radio Society (MARS)*, we are building an NVIS antenna system. This system will be resonate on 40 meters, allowing you a portable and easy setup in attaching to your HF rig. You can also, if you can get the thing high enough into the air, for more traditional HF operation. You can get the complete details at <http://www.w5fc.org>. Just look for the “NVIS” description. You can see the complete build requirements at <http://www.openrecords.org/nvis>.

What is NVIS? *The Near Vertical Incident Skywave (NVIS) antenna is one that provides the majority of its radiation at an extremely high angle. That is to say the major lobe is between 75 and 90 degrees to the earth's surface. This will provide excellent omnidirectional communication for a distance of 300 to 400 Kilometers. The maximum frequencies involved will be as low as 1.8 Mhz under very poor conditions to as high as 14 Mhz under excellent conditions (which we have not seen in several years), with the average being between 3.5 Mhz (80M) and 7.3 Mhz (40M).*

What? I’ll translate: On 40 meters you’ll only talk “close distances”. The antenna is intended for use in an emergency and allows you to talk with other emergency responders. Now don’t be fooled, you can still use it for long distance HF type contacts, just find a way of getting the antenna higher in the air.



But, don't despair, we'll also continue or NVIS Nets so you can try out your new creation. Just keep listening in on our "Meeting on the Air" and general announcements on our numerous nets for additional details.

So what else is going on? Can't sleep at night? TV stinks on Saturday night? Didn't pay your electric bill and you can't see anything in the house? No problem! We have the net for you. On Saturday January 14, the DARC launched a new on the air net, "SkyNet". "SkyNet" is the DARC's very first astronomy net. The purpose is to expose hams and those who are listening, to astronomy.

Amazingly this net was started by me with the intent to find others interested in the hobby. I'd figured we'd have maybe 3 or 4 people check into the first net. We'd not done much advertising for it simply because it's on later at night. As it turns out, it's been very popular. The first two nets had 25 and 26 check-ins respectively.



Our topics for the first two nets were: "What got you interested in astronomy?", "What type

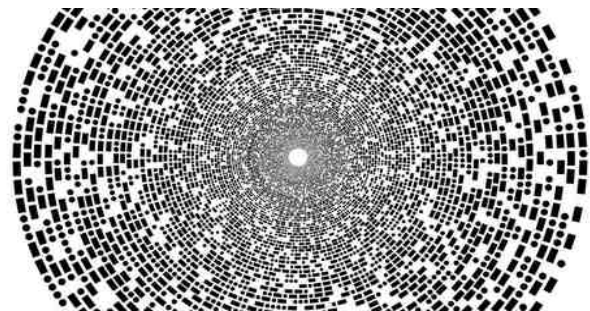
of observing equipment do you use?", "What's the difference between different telescopes and binoculars?" and "Did you see the dual pass of the ISS and Chinese space station?"

So you can see, we have plenty for you to talk about. Each net includes open discussion and comments.

You can keep up with this net and contribute to its content by contacting me directly at: [ke5icx@arrl.net](mailto:ke5icx@arrl.net) and you can sign up on Facebook: [www.facebook.com](http://www.facebook.com) - search for "Sky Net" (one word). Or, try "DARC Astronomy Net" should "SkyNet" not work on your first search (no, I don't know why either).

### Morse Code on the Air

For you folks interested in learning a new skill in your favorite hobby, sign up for the Morse Code on the Air Class. This net will give you an opportunity to learn (or brush up) on your CW skills. Each class is planned by Morse Code Instructor Ginger W5AAN. Be entertained while learning a fun skill. We are averaging between 5 and 7 students, along with most of the instructors hanging around assessing student needs and offering some sage advice when appropriate



As of Friday, January 20th, we've completed 10 classes. All the classes are recorded for future reference at [www.archive.org](http://www.archive.org). Just enter the following "Morse Code" and "2012" for a list of currently posted classes. If you would like to "catch up", listen in on these classes and practice on your own. We have a Yahoo! Group you can sign up at for all the resources and on line link which can help you go from Zero to 5 WPM by April!

<http://groups.yahoo.com/group/cwdallas>

## DStar Update

The official word is we now have equipment at a City of Dallas storage facility. We will be using a staging area in Dallas, and are negotiating a convenient location for assembly. As I write this the equipment is stacking up in boxes. I do not know if we have enough stuff to begin the project but your president is in contact weekly with the City to coordinate our next move. We will need folks to sign up and get involved on Saturdays from around 10AM to 2/3 PM. Like the trailer build from a few years ago, we know your Saturdays are important to you, but we could use your help for whatever time you can put in. On this project you'll learn about radio operation, setting up commercial grade antenna systems, VOIP networking, soldering, proper coax installation, and many, many other opportunities. If you are a tech oriented person (and who isn't), these skills can go on your resume, or if you would like to just learn some new skills, this is the place to be over the coming months.

DStar is the future of VHF/UHF/VOIP radio. Not just for ham but for commercial public use. We will help you "get comfortable" with this new technology while we all learn more about it ourselves.

Join us for this most exciting project. You can contact me on this - though I'd like to see someone take this over as a regular project for the DARC! [ke5icx@arrl.net](mailto:ke5icx@arrl.net).

## MSMM-MESH

While at Cowtown Hamfest yesterday, Doug KD5OUG, donated a WRT-54Gx router for use in the DARC trailer. His only stipulation was we use it with the HSMM-MESH standards. That's fine with us! This routing software will allow you to turn a popular router into a radio like network used at many ham events around the country. This is a natural extension of what we are doing now with radio and continues our evolving interest in connecting radio, computers, and networks together.

We will probably find a weekend or set this up as a short, on-going project for use in the trailer. The presentation from yesterday will make this a fun project, with immediate application for DARC events.

## Conclusion

We've got a lot going on and we'd love to have you help us out. Pick a project or two or three and dive in! There's no shortage of things to do, new things to learn, fun things to build! Catch you next month with another update!  
Tom KE5ICX

## Minutes of the DARC Board Meeting of 03 January 2011

The meeting was called to order at 6:05 p.m. by President Randy Patterson KE5JIT

President	KE5JIT – Randy Patterson
Vice – President	N5KRG – Kevin Grantham
Secretary	KA5TXL – Larry Melby
Treasurer	KE5TGM – Tony Medina
Director	KC5JQ – Jeff Quebe
Director	KE5ICX – Tom General
Director	AD8BC – Bill Cahill
Director	KE5DKV – Scott Drummond
Director	Open – Randy Patterson's seat
Absent:	
Director	KE5YTA – Roger Elkington

The meeting was called to order at 6:05 p.m. by President Randy Patterson KE5JIT

1. Tom KE5ICX opened the meeting and turned it over to incoming Randy KE5JIT
2. Randy KE5JIT has everyone introduce themselves
3. Randy KE5JIT resigns his seat on the board of directors, an election will be held during the general meeting to fill the remaining term (1yr)
4. Randy KE5JIT went thru a listing of officer positions and individuals that had agreed to fill them in 2012
  - a) Education Officer Katherine KE5ZCM
  - b) Program Officer Bob K5CRX
  - c) Technical Officer Bernie N5BP
  - d) Webmaster (old website) Mike KM5Z

- e) Webmaster (new website) Dihren KF5FPP and Jimmy KE5TUZ
  - f) Property Officer(s) James N5BKL, Tom KE5ICX, and Andy KE5KOF
  - g) Public Service Open
  - h) PIO Open
  - i) Field Day Marshalls Roger KE5YTA and Mike W5MWT
  - j) Trustee Johnny K5JD
  - k) D-Star Special Advisors Gerald Marchant WB5NZV and Brent Willcox KD5WYU (both are not DARC members but are very experienced in the operation of D-Star repeater systems)
  - l) Door Prizes Scott KE5DKV
  - m) Grants/Fundraising Bill AD8DC and Katherine KE5ZCM
  - n) Lastly a special position to begin planning for the 100<sup>th</sup> anniversary of the founding of the DARC.
  - o) The board approved these appointments
5. Board accepted the minutes of the December board meeting
  6. the club financial records will be audited by Jan 13<sup>th</sup>
  7. DeGoyler Elementary – nothing new for the board
  8. Discussed using a yagi antenna at the voter site
  9. There will be a special meeting soon to discuss insurance needs on the clubs equipment
  10. Tom KC5IXC discussed having a net once or twice a month to the subject of astronomy it would be held around the 9p.m. time frame, more details to follow
  11. Kevin N5KRG will call non-renewing members to see if they will re-join

The Board adjourned at 6:42 p.m.

## February Area Events

We have scanned WebPages from our sister Ham Clubs to compile this list. Should you wish to add to this month, send an email to [ke5jit@yahoo.com](mailto:ke5jit@yahoo.com)

- **02/07 – Tuesday – DARC Monthly Club Meeting** – Brookhaven Church – 13000 Marsh Lane – Dallas – Board Mtg. 1800 hours; General Mtg. 1900 hours
- **02/11 – Saturday – DARC/MCARC Radio Playday** – Josey Branch Library – Project will be to build 40 meter NVIS portable antennas. See W5FC website for list of material you should bring.
- **02/18 – Saturday – Garland Skywarn Classes** – Granville Arts Center – 300 N. 5<sup>th</sup> St. in Garland – Basic Training 9 a.m. – 12 p.m., Advanced Training 1:30 p.m. – 4:00 p.m.
- **02/21 – Tuesday – Dallas CERT Classes** – Oaklawn United Methodist Church – 3014 Oaklawn Ave – 6:30 p.m. Classes meet Tue/Thur until March 7<sup>th</sup>. Classes are free.
- **Daily – Mon-Fri – DARC CW Training Net** – 7:15 p.m. – 146.880, PL 110.9
- **Weekly – Saturday – TECH NET – DARC** – 146.880, PL 110.9 – 1900 – 2000 hours. Back-up repeater 442.425, PL 110.9
- **Weekly – Saturday – SkyNet – DARC** – 146.800, PL 110.9 – 2100 – 2200 hours. Back-up repeater 442.425, PL 110.9
- **Weekly – Monday – 2000 – DCARA** – Except 4<sup>th</sup> Monday. Information/Training Net – Freq. 146.920 PL 110.9
- **Weekly – Wednesday – 0830 a.m. – IARC The Breakfast Club** – McDonald's, 2410 N Story Rd, Irving (Between 183 & Rochelle)
- **Weekly – Thursday – 11:00 a.m. - Crony Lunch** – Garland ARC – Furr's Cafeteria – 350 S Plano Rd. – Richardson
- **Weekly – Saturday – 0700 – 1000 hours – MARS – Hams & Eggs** – What-A Burger – NE Corner of Old Denton & The Bush

## Minutes of the DARC Regular Club Meeting 03 January 2012

The meeting was called to order at 7p.m. by President Randy Patterson KE5JIT

Present were:

President Randy Patterson KE5JIT  
Vice President Kevin Grantham N5KRG  
Treasurer Tony Medina KE5TGM  
Secretary Larry Melby KA5TXL  
Director Jeff Quebe KC5JQ  
Director Tom General KE5ICX  
Director Bill Cahill AD8DC  
Director Scott Drummond KE5DKV  
Director Roger Elkington KE5YTA  
Director TBD (Randy Patterson's seat)

- 1) The Pledge of Allegiance was recited
- 2) Visitor's were introduced they included Sean KF5JGP, James KE5TUZ, Wayne KF5NXX, Gene KZ5V, Brad K5CMO
- 3) The program was "D-Star for All of Us" by Fred Varian WD5ERD and Jim McClellan N5MIJ
- 4) The minutes of the December club meeting were approved
- 5) The board position that Randy held was vacated during the board meeting, with 1 year left in the term Bob K5CRX was nominated. There were no nominations from the floor and Bob was elected.
- 6) The Treasure's report was accepted.
- 7) It was announced that the building that is home to the club's repeater's has been sold
- 8) Nominations are now being sought for the "Whit and Anne Griffith Community Service Award"
- 9) Randy gave an update on the new D-Star system
- 10) The club's designation as an ARRL Special Service Club has been renewed.
- 11) CW training nets will start on Jan 9<sup>th</sup> and run Mon thru Fri between 7:15p.m. and 8 p.m. for about 3 months. Additional help will be available on Saturday evenings
- 12) The next play day will Saturday Feb 11<sup>th</sup>. It will be held at the Josey Branch Library and

will be the building of 40 meter NVIS antennas

- 13) There will be a Meet and Greet with the Texas Baptist Men this Saturday
- 14) The following appointed positions are open PIO/ Newsletter editor and a special position currently call Anniversary Officer to help plan the 100<sup>th</sup> anniversary of the DARC
- 15) Discussed what members liked/didn't like about the club
- 16) The club meeting location may change soon due to the multi year construction on 635
- 17) New members were elected Wayne KF5NXX, Jim W5QM, and James KE5TUZ
- 18) Bill AD8DC is planning another trip to the Dayton Hamvention in 2012
- 19) Kathrine KE5ZCM is developing a program to reach out to recruit veterans
- 20) The meeting adjourned @ 9:21 p.m.

### QRT

We are all pretty familiar with the FCC Amateur Radio Exam questions, so let's this month take a look at questions from the RAE, the UK Radio Amateurs Examination:

1. The tolerance of a 4.7 k-ohm resistor is given as 10%. The actual value of the resistor is between:

- A. 4230 and 5170 ohms
- B. 4653 and 4747 ohms
- C. 4230 and 4747 ohms
- D. 4653 and 5170 ohms

Answer: A

110% of 4700 ohms = 5170 ohms.

90% of 4700 ohms = 4230 ohms

2. The action of a grid-dip meter depends on:

- A. The extraction of energy from the tuned circuit under test.
- B. The extraction of energy from the dip oscillator by the circuit under test.

- C. Radiation from a nearby transmitter.
- D. The tuned circuit under test changing the frequency of the dip oscillator.

Answer: B

The grid-dip meter is an oscillator that includes a meter or other indicating device that shows how much voltage the oscillator is creating across the meter's coil. If a nearby tuned circuit resonates at the oscillator frequency it loads the oscillator, causing a dip in the voltage across the test coil.

### **What is D-Star?**

By K5CRX Bob DeVance

First, a big “thank you” to James, WB8NUT, of Cincinnati, Ohio, for an excellent website ([www.wb8nut.com](http://www.wb8nut.com)) and some good D-Star information. Some of this content is excerpted from his web site and articles.

D-Star stands for “Digital Smart Technology for Amateur Radio”. It’s distinctive is using digital transmission for voice instead of analog as used in conventional transceivers. D-Star also offers both slow and high-speed data communications (take high speed with a grain of salt – in today’s fast internet world, D-Star is still slow). Slow-speed digital voice and data are transported at 4800 bps (bits per second), of which 3600 bps is used for voice transmission and the remaining 1200 bps is used for synchronization and general use. Of that 1200 bps, around 900 bps is available for the transmission of data along with the voice information. These speeds are used on 2 M and 70 cm communications.

High-Speed digital data communication is transported at 128kpbs and is capable of supporting Ethernet packets and also is fast enough to use for Internet applications such as displaying web pages. This requires a 1.2 GHz transceiver.

D-Star is capable of connecting D-Star transceivers to D-Star repeaters, and connecting D-Star repeater sites to other D-Star repeater sites using the Internet forming a world-wide radio network. This state-of-the-art system has a tremendous amount of functionality not available with less sophisticated linking system like IRLP and EchoLink.

D-Star refers to voice communication as "DV Mode" for Digital Voice Mode. On the first transmission, your call sign is registered and shared through the D-Star system. Voice is converted to a digital format using a special microchip which encodes and decodes the audio signals into and out of the AMBE (Advanced Multi-Band Excitation) format. The CODEC that D-Star uses is a proprietary portion of the D-Star design and belongs to the JARL (Japanese Amateur Radio League). The D-Star Gateway hardware and software belongs to Icom and is proprietary. All other parts of D-Star are open which has allowed U.S. hams to create many new developments with D-Star that will be discussed later.

The quality of the D-Star voice signal is very similar to that of FM voice. Some say it sounds slightly inferior, but in fact it definitely has less noise - in fact no noise like you will find with FM at times. The signal either makes it to the repeater or receiver perfectly, or not at all. There is no in-between signal quality that is found with traditional analog voice modes and no squelch tail at the end of every transmission and the repeaters usually do not have a courtesy beep. However, Icom has an ability to provide that courtesy beep from within the radio to let you know when the other party has turned the conversation over to you.

Unlike analog voice modes such as FM, DV mode has the ability to transmit 1200 bps data simultaneously with the voice signal since they are both digital signals and the "voice" and "data" portions of the signals do not interfere with each other. While the data portion of this signal is referred to as "slow-speed" data, it still

is much faster than other digital modes like PSK31. It is plenty fast for keyboard to keyboard conversations, but not suitable to sending large files.

For the sending and receiving of greater volumes of data and large files, D-Star has the "DD Mode" or Digital Data Mode. The DD mode is only supported on the 1.2 GHz amateur band and is capable of sending a receiving data at a 128kbps rate.

To send slow-speed data on D-Star requires connecting a home-made serial cable or low cost commercially made serial cable from your PC to the data port on the back of the radio. No special or additional data modem is required. To send and receive high-speed data on D-Star on a 1.2 GHz D-Star radio all that is required is a standard Ethernet cable connection.

### **Focus on Our Own**

By KE5JIT Randy Patterson

I wrote an article on Richard Lenoir KI5DX and his wife Christy N5RDJ last year and wanted to give you a follow up to the progress of one of our own amateur radio operators, who has been very supportive of the DARC.

You might remember the DARC has a connection with Richard. Richard was very instrumental in helping the DARC get a great deal on our current trailer. Shortly afterwards, the economy went bad and the company he worked for went out of business.

Richard then decided to venture out on his own. He started as a small e-bay business on his patio, moved to a storefront location, and has just moved, after a couple other locations, into a 5,000 square foot location on Bonham Street in Paris, Texas – my home town. He also continues to make area Hamfest on the weekends as time permits.

They sell surplus close-out merchandise, most of which are electronics, along with items relating to amateur radio. Items are sold

through their store, and if it hasn't sold within three to four weeks, it is offered through the Internet. This enables them to keep their stock rotation fresh. Some of the products they now offer are MFJ, Maxx Strike, Channel Master, Kenwood, Alinco, Antenna Craft, Jetstream, BugCatcher, Comet and Rohn.

If you get time, drive up and visit them, let them know you are from the DARC and appreciate their support.

Main Trading Company, 2246 Bonham St. Paris, TX 75460 (903) 737-0773, tell 'em the DARC sent you.

### **Treasurer's Report for 11/2011**

**Dallas Amateur Radio Club, Inc.,**

**Treasurer's Report for December 2011**

(12/1/2011 through 12/31/2011)

Date Presented: 1/3/2012

#### **Accounts**

Checking	\$11,457.63
Vanguard (Ann and Whit Griffith Fund)	\$8,775.42
PayPal	0

#### **Expenses for December 2012**

Repeater site	\$50.00
AT&T	\$32.55
Triode for radio repair	\$18.59
License manuals, drinks for Dec mtg	\$79.23
Total Expenses	\$180.37

Note: I have had no trouble reports regarding PayPal this dues payment season, and the club is continuing to receive payments via the form on our site.

Tony Mendina, Treasurer, DARC