

Aug 2020



# K5PRK Newsletter

## Social Media

[K5PRK.Net](http://K5PRK.Net) [Facebook](#) [IO Group](#)



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Vice President:

**Tim Johnson, K5TCJ**

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**Daryl Morgeson, AF5QJ**

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Activities Director:

**Tony Campbell, W5ADC**

Communications Director:

**Kipton Moravec, AE5IB**

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**John Hatch, KF5BSS**

Public Relations:

**Brian Trant, KF5VFM**

Newsletter Editor:

**Neil Gould, NE5IL**

## Special Zoom Meeting Notice

**Monday Aug 17th, 2020 - 7:00 pm**

**Introduction to DMR – Jason Johnston KC5HWB**

Join Zoom Meeting

<https://us02web.zoom.us/j/84288513276?pwd=K1ZyeWR0REpWV0ZPRE9ZTTdLdUVsZz09>

Meeting ID: 842 8851 3276

Passcode: 699570

One tap mobile

+13462487799,,84288513276#,,,,,0#,,699570# US (Houston)

+12532158782,,84288513276#,,,,,0#,,699570# US (Tacoma)

Dial by your location

+1 346 248 7799 US (Houston)

+1 253 215 8782 US (Tacoma)

+1 669 900 9128 US (San Jose)

+1 301 715 8592 US (Germantown)

+1 312 626 6799 US (Chicago)

+1 646 558 8656 US (New York)

Meeting ID: 842 8851 3276

Passcode: 699570

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## **In this Issue**

[REPEATER STATUS BY KIP](#)

[FROM YOUR BOARD](#)

[SHORT TAKES](#) – SEVERAL ITEMS YOU MAY HAVE MISSED

[ARRL NEWS AND INFO](#)

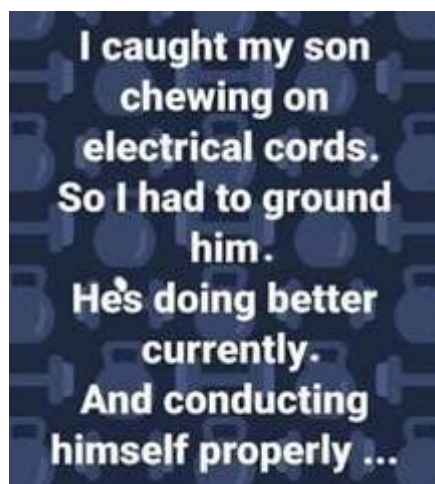
[MENTOR FEST](#)

[AREA NETS](#)

[HAM RADIO REFERENCES](#)

## **Future Club Meeting Programs:**

Aug 17	Intro to DMR	Jason Johnston KC5HWL
Sept 21	Fox Hunting	Billy Parkinson KG5RQZ
Oct 19	North Texas Section Update	Steve Smith – KG5VK



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## Monday Informal Club Get Together

In addition to the regular monthly meetings we have had informal Zoom meeting on most other Monday evenings. An email is sent out each Monday with the Zoom info. These meeting have been well attended and provide another way for us to keep in touch.

Tony sends out the Zoom info each Monday that there is a meeting.

Anyone work [him](#)?



19:41 76%

**W6XRL4**

**Herman Munster**  
 1313 Mockingbird Lane  
 Mockingbird Heights CA,

**W6XRL4** [View on QRZ](#)  
 DXCC Country: United States (291)

Location: Lat: 37.683820 Lon: -120.366211

Bearing: 280° Grid: CM97tq  
 Distance: 1816 miles / 2923 km.

Zones: ITU: CQ:  
 Sunrise: 13:14 UTC Sunset: 02:59 UTC



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# REPEATER STATUS AUGUST 2020

Submitted by Kipton Moravec, AE5IB, PARK Communication's Director

I have been working on programming the routers. There are 4 routers, one for each site:

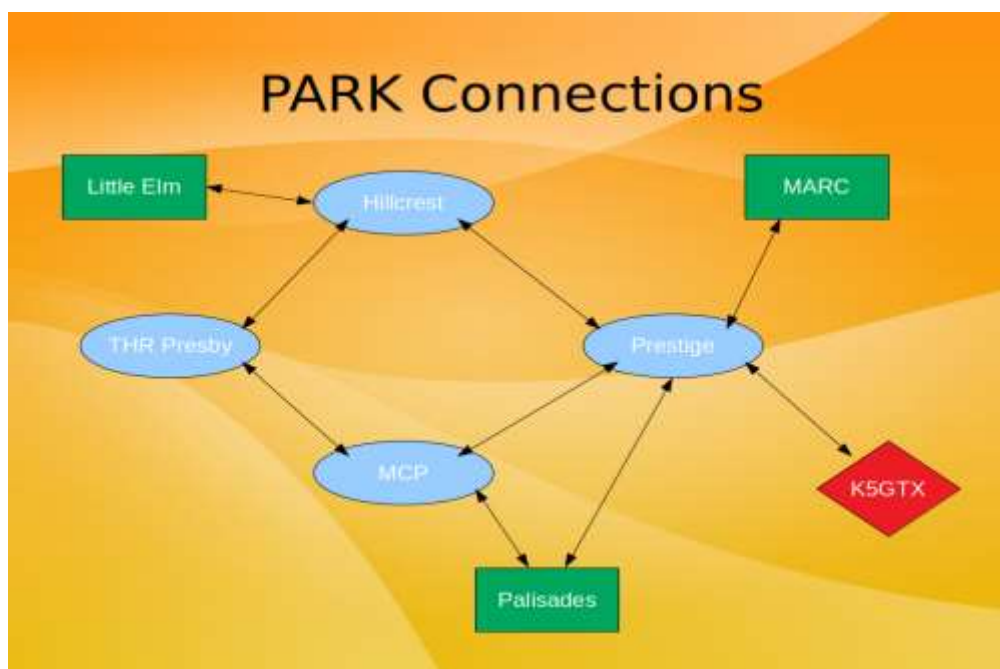
- Prestige (Allen), Edgerouter 10x (10 port router)
- Hillcrest (Frisco) Edgerouter 10x
- MCP (Medical City of Plano) Edgerouter 10x
- Presby (Plano Presbyterian Hospital) Edgerouter x SPF (5 ports + SPF router)

The funding for the routers and links between our repeaters is from the Irving Amateur Radio Club Micro Grant. The expenses for the rest of the project are from PARK funds, including the links to K5GTX, Little Elm, McKinney and the Link between Palisades and MCP. The link between Prestige and Palisades was given to us by Andrew Koenig KE5GDB.

There is an agreement between clubs that want to network together to use a part of the 172.20.x.x network. Each site can get a Class D (255 addresses) subnet. Our four sites have 172.20.25.x (Prestige), 172.20.73.x (Hillcrest), 172.20.18.x (MCP), and 172.20.35.x (Presby). You can see the list at [http://vps.dcara.net/wiki/doku.php?id=project:ip\\_scheme](http://vps.dcara.net/wiki/doku.php?id=project:ip_scheme).

Our initial idea was to have a ring network with a link between Prestige and MCP, a link between MCP and Presby, a link between Presby and Hillcrest, and a link between Hillcrest and Prestige. If one link went down there was always a second way to make a connection. It would be more hops, but more hops is better than no connection.

Please see the attached figure for reference for the network. The Blue circles are our four sites and the arrows are the Ubiquiti RF links between them.



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The original plan was to have a port on each router be dedicated to each link. So at Prestige one router port would go to the Ubiquiti Link to Hillcrest, One Port would be the Ubiquiti Link to MCP, One port would be for link to MARC, etc.

Looking at the PARK Connections we could have 5 Ethernet runs to the top of the water tower. We have not discussed the two cameras yet. We currently have only 3 Ethernet runs to the top of Prestige.

Ubiquiti makes a 4 port switch with POE in a weatherproof housing that we can mount at the top of Prestige water tower.

A link needs its own address space. But since we are designing the addresses we can do whatever we want with our 255 addresses. I do not have control over the link to Palisades, because they have a sector antenna and a point-to-multipoint arrangement. So I have to match their address scheme.

We could dedicate one of the Ethernet runs for the links to Hillcrest, MCP, and MARC (McKinney Amateur Radio Club). We could dedicate the second Ethernet for the 2 cameras. And the third to K5GTX.

Looking at that scenario what are the pluses and minuses. These routers can be programmed with static routes, or with dynamic routes. Static routes are manually set up and if anything changes, they fail. Dynamic routes are better for larger networks and as things change they automatically change.

The dynamic routes is a protocol called OSPF (Open Shortest Path First). Dynamic means it will automatically trade information with other router on the current state of links that binds everything together. .

The router sends out a broadcast on each the OSPF letting other routers know it has OSPF. Other routers respond and share their link information until all the routers are up to date. If anything changes like routers or subnets get added or removed, the router updates all the routers it knows of, and they will update the routers they know of until every router in the network is current.

In this case with MCP, Prestige, Hillcrest, and MARC all on the same subnet they will share linking information with each other directly.

The interesting thing about this method, with the switch at the top, is that Hillcrest can talk to MARC or MCP without the Prestige router getting involved. Most of the links will be about 74 Mbps, and the cabling is setup for 1000 Mbps (1 Gigabit) so we will not be close to maxing out our routers or cabling. The RF is our limit. There is an advantage to sharing in this case. We had to get a bigger POE injector, to handle 3 devices plus the switch but it was only \$17, which is way cheaper than pulling more Ethernet cable 270 feet through a water tower.

For the second Ethernet we are putting 2 Ubiquiti cameras to look at weather. And we have space for one more camera. They are set up at my house and connected to a image server. When we are live on the water tower links to the cameras will be on the PARK website on the Repeaters page.

The third Ethernet was going to be dedicated to the link to K5GTX for fast Internet and a backup to the slow (7 Mbps down and 0.7 Mbps up) ATT DSL. K5GTX has 500 Mbps Internet service. Even if we have a 74 Mbps link that is 10 times faster down and 100 times faster up than we have at Prestige. (Currently we have 3 D-STAR repeaters, APRS, WINLINK, and two Allstar repeaters that can link using the slow ATT DSL Internet and have not noticed a problem yet...)

It seemed a waste to have one of our three Ethernets dedicated to only Internet. But I did not see a way around it. A link to Palisades is in a completely different address space. Then I learned about VLANs. A VLAN is a virtual LAN and it allows messages in different subnets to share an Ethernet cable as long as the VLAN number is different. So we can tell the router that there are multiple networks on one port with different VLANs. Since we control the addresses to K5GTX we can put this connection on its own private VLAN. And the Ubiquiti RF nodes at K5GTX, has the ability to setup a VLAN.



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Most home routers do not have the capability for VLAN. We could put the connection to Palisades on the same Ethernet as K5GTX link. Originally we had not planned to connect to Palisades from Prestige, so we did not budget the equipment for it, but it was given to us as earlier stated. Why connect to Palisades? That is the Richardson Wireless Klub (RWK) repeater site. They will have the video server for all the cameras from RWK, PARK, and DCARA (Denton County Amateur Radio Association), and Palisades has 1000 Mbps internet service thanks to the City of Richardson. Their equipment to connect to us is not installed yet because of the COVID-19 precautions.

At Palisades we have three Ethernet cables and with putting the switches on each one, we will have one open port on the Camera network and one open port of the network with K5GTX and Palisades Network. If this site expands much more



we will need to add more Ethernet cables. There is only so much power you can send up a 270 foot Ethernet cable.

In the meantime routers are being programmed. This is a picture of my test setup.

I have Ethernet links to simulate the wireless links. The bottom Router is the Prestige router. The one on the left is MCP, The one on the right is Hillcrest, and the little one at the top is for Presby. To simulate the switch at the top of Prestige I used a switch I had laying around. The 5 port switch in the foreground was for helping setting up and debugging the cameras. It made it easy for me to be on the same subnet as the cameras. What you do not see is the 4 laptops that I can use to ping from one place to another to make sure the routing is correct. Most devices have static addresses, but each

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subnet has some DHCP address so I can plug in a laptop and automatically get an address for that subnet. It makes debugging go much faster.

The following table shows how the Prestige Router is currently configured, it is evolving and may change a number of times before installation.

- The Port column is the name of the port on the outside of the router.
- Network ID is the name I gave the network.
- The Address is the router port address. It is considered the gateway, DHCP server, and the DNS forwarder for the subnet.
- The mask identifies the type of subnet.
- Addr is the number of available addresses in the subnet.
- And I gave each subnet some addresses for DHCP. This is so if we wanted to debug it, we could plug in our laptop and get an address. So there is a start and end address for the DHCP range.

Port	Network ID	Address	Net	Mask	Addr	DHCP	DHCP
						Start	End
Eth0	Initial Config	192.168.1.1	192.168.1.0	/24	254	200	254
Eth1	WAN	DHCP	DHCP				
Eth2	LAN	172.20.25.1	172.20.25.0	/25	126	120	126
Eth3	Camera	172.20.25.193	172.20.25.192	/27	30	220	222
Eth4	Prestige Link	172.20.25.129	172.20.25.128	/26	62	185	190
Eth5	K5GTX Link	172.20.25.225	172.20.25.224	/28	14	235	238
Eth6	Palisades Link	TBD					
Eth7	unused						
Eth8	unused						
Eth9	unused						

The Prestige Edgerouter 10x has 10 Ethernet ports labeled Eth0-Eth9

When it comes out of the box Eth0 is setup as a 192.168.1.1 LAN for you to start configuration. For now I am leaving it, for emergency access to the router. Later as the configuration changes settle down it can be used for something else.

The Wizard in the Edgerouter sets up a WAN on Eth1 which has connection to the ATT DSL Router.

The LAN is where most of the devices in the rack go. It includes the Raspberry Pi computers for Allstar controller, a file server, and APRS, the Uninterrupted Power Supply (UPS), the Power Distribution Unit (PDU), the Winlink Windows

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Laptop, and other devices. I reserved up to 7 ports for DHCP so I can get on the LAN and configure devices. This network is all on the ground, and in the equipment cabinet.

For the Camera Network, we reserved 30 spaces. That is very optimistic. we will probably reduce the camera space. Also we found out the cameras work with a DHCP address, so they “phone home” to the server when setting them up. This makes it easy to add a camera to the network. Just plug it in, it gets an address. So we need to make the whole camera space, except the router port, part of the DHCP space.

The Prestige Link was set large in case I wanted to break it into four 14 address spaces if we added more Ethernet cables to the top of the water tower.

The link to K5GTX is also large at 14 but the next option down was 6. So it is 14. This is currently setup as a Prestige address, but it may end up being an address from K5GTX. When we see what we have at K5GTX we will adapt. And it is not set up that way yet, but it will be its own VLAN, so that cable to the top can be shared.

Before I knew about VLAN, I have the future link to Palisades on Eth6. It will share Eth5.

The rest of the ports are unused and ready for expansion.

I thought I would end with a brief status of each site.

### STATUS OF MCP SITE.

We have tried to reach our contact at Medical City Plano to see if the access restrictions have been lifted. We have not received a response. MARS (Metrocrest Amateur Radio Society) is anxious to get their equipment installed. I would also like to get our network working to there. All the hardware has been purchased.

### STATUS OF THE PRESBY SITE.

The Plano Presbyterian hospital has not given permission to install there yet. We need to contact them to see when we will be allowed access and what precautions are necessary.

### STATUS OF THE HILLCREST SITE.

The next step is to make a statement of work for the climber. We need a price quote for the work we need done on top. This is the only site we cannot get access to ourselves. They have to replace two 800 MHz antennas with our tri-band antennas, place 3 Ubiquiti units, an AREDN node, and 3 Ethernet cables down to the base. I am concerned it will be expensive.

### STATUS OF THE PRESTIGE SITE.

The climb on July 25 did not happen. Some of the parts approved at the club meeting did not arrive in time. The next time the climbers could all get together was August 29.

Here is what we have to do up top:

- Take down the VHF DB style antenna and replace with a VHF/UHF dual band antenna. We are worried the harness which is over 20 years old may be cracking which could explain the static when it rains. We will inspect after the climb.
- Install and test the Ubiquiti switches and put surge protectors in the lines at the roof and ground them to the ground point. Install the Ubiquiti units pointing towards Hillcrest, MCP, and K5GTX.
- Install the two cameras facing west and north.



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- When we raised the masts on the two tri-band antennas more than a year ago, the mast mounts we got were too small for the pipes on the railing for the water tower. We finally found some the right size and will install them to make sure those antennas are mounted more sturdy and well grounded..
- Run some PIM tests to see if we can find where the passive intermod is coming from.

On the ground:

- Install the new router
- Change the static addresses of everything to the 172.20.25.x subnet.
- Verify connections to all devices on the top of the water tower.
- Add surge protectors for the Ethernet at the bottom of the tower also.
- Scan all antennas.

There is a lot to accomplish on Saturday August 29. I need 4 or more additional ground people. I would like to keep it under 10 people on the ground. We need to send a lot of material up by rope. I also need someone with Windows/Pi experience to help change static IP addresses on all the devices.

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I wanted send you a bit from the Secretary's desk.

### **DUES:**

Hello Club members. I hope this note finds you all safe and healthy. As we go forth in this new situation I wanted to express how we as a Club can continue our involvement in activities and projects. I miss the handshakes and warm greetings we get when in person, but we can still carry on with our Zoom meetings and Emails to members. Both are a great way to keep in touch. Contact emails might just be what a member needs from you. We can also encourage each other to be patient and realize this virus thing won't last forever. In the mean time we need to remember how our Club exists and how we provide for our hobby and our community. One major way we all can help is to pay dues. This is especially important now as our income from 50/50 and HamCom has stopped. Our guys are still working on the repeater projects while maintaining our existing repeaters and the bills still come in.

Paying dues is very easy. You can mail them to K5PRK Treasurer at our Clubs address or PayPal from the [web site](#). We are a strong Club and this is the result of members that we have helping physically and financially. I would like to encourage everyone to keep their membership up to date and when possible send in dues early. This not only helps financially but also helps with bookkeeping.

### **ELECTIONS:**

I want to remind everyone that Club elections are coming in October. The Secretary position will be vacant as my two terms will be over. Please consider helping by taking a board position. We have four offices that have term limits. President, Vice President, Secretary and Treasurer. The other offices do not have term limits so anyone can step up and ask to be on the ballot. The four offices mentioned above expire two in an even number year and two on odd number year. This keeps two board members active while adding two new people,

Thanks to all for making this a Club to join and enjoy.

Daryl  
AF5QJ  
Secretary K5PRK

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**PARK Repeaters**

The Plano Amateur Radio Klub operates five repeaters, which are located in Allen, Texas about 180 feet above ground level. All licensed amateur operators are welcome to join us on the air. All repeaters are open.

**147.180 MHz +  
(PL 107.2)**

K5PRK VHF  
Voice Repeater

**444.250 MHz +  
(PL 79.7)**

K5PRK UHF  
Voice Repeater

**441.575 MHz +**  
DStar UHF  
Digital Voice Port B

**1295.000 MHz – 20.000**  
DStar 23cm  
Digital Voice Port B

**1255.000 MHz**  
DStar 23cm Digital Data

**Broadcastify**  
[K5PRK 444.250](#)  
[K5PRK 147.18](#)

**Short Takes****QSO Today Virtual Ham Expo** <https://www.qsotodayhamexpo.com/>

Participate in this ground breaking, virtual international amateur radio expo. Packed with world renowned speakers, exhibitors, and special conference rooms built on a virtual reality platform.

**All speaker webinars and exhibit booth content is now available** for anybody to view until September 9, 2020. So if you missed a particular speaker or want to visit another booth, just go to back to the Expo by [clicking here](#). Use only your email address to log in. For more information or to register, visit the [QSO Today Virtual Ham Expo](#) website.



I attended a few of the sessions. I thought it was a great first attempt at a ham com type event under Covid-19. Once you log in you can select from conference sessions. I watched 'Intro to FT8 and FT4'. The presentation slides are downloadable. The 2<sup>nd</sup> Expo will be next March. – NE5IL

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The **Garland Amateur Radio club** has acquired a large amount of equipment and is now offering it for sale to other area clubs.

We feel the prices are fair, but we can be negotiable in some cases if you have a good argument. First email usually gets it so don't delay.

Contact Lowell Allen KD5RFD at <[lowell\\_allen@hotmail.com](mailto:lowell_allen@hotmail.com)> with any questions or to make arrangements to buy any of the items left available. Please pay attention to the legend at the top of the list for some coding details.

A complete list of equipment (radios, amplifiers, books, misc) is available at <https://garc-k5qhd.wixsite.com/main/equipment>

If you find this list difficult to read, a PDF version is available on the Collins ARC web site ([www.n5cxx.us](http://www.n5cxx.us)). Look for the link (in Red) below the monthly meeting announcement. We plan to update the list weekly.

73, Frank KR1ZAN  
Plano, TX  
Collins ARC-Richardson, TX

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## ARRL News

### ARRL magazines

QST - ARRL's Monthly Membership Journal - [www.arrl.org/qst](http://www.arrl.org/qst)

On the Air - NEW! Beginner to intermediate level help and advice - [www.arrl.org/On-the-Air-Magazine](http://www.arrl.org/On-the-Air-Magazine)

QEX - The Forum for Communications Experimenters - [www.arrl.org/QEX](http://www.arrl.org/QEX)

NCJ - National Contest Journal - [www.arrl.org/NCJ](http://www.arrl.org/NCJ)



## ARRL Podcasts Schedule



The latest episode of the *On the Air* podcast (Episode 7) features tips for soldering a PL-259 connector onto the end of a coaxial cable, and information on beginner courses for hams who want to serve their communities during disasters and other incidents. The *On the Air* podcast is a monthly companion to *On the Air* magazine, ARRL's magazine for beginner-to-intermediate ham radio operators.

The latest episode of the *Eclectic Tech* podcast (Episode 13) features discussions about Hellschreiber, wireless charging on the fly, and an interview with Paul Denisowski, KO4LZ, about the state of amateur Automatic Link Establishment (ALE).

The *On the Air* and *Eclectic Tech* podcasts are sponsored by Icom. Both podcasts are available on iTunes (iOS) and Stitcher (Android), as well as on Blubrry --

[On the Air](#) | [Eclectic Tech](#).



**ARRL NTX Ham of The Year Nominations** are now being accepted for 2020

I am accepting nomination packages for the ARRL North Texas

Amateur of the Year award

Please title the email with the Nomination "ARRLNTX 2020 HOY"

The Nominee must be an ARRL member and Reside in North Texas

Deadline for nominations is 1 October 2020

ARRL North Texas Section

Section Manager: Steven Lott Smith, KG5VK

[kg5vk@arrl.org](mailto:kg5vk@arrl.org)

**ARRL 2020 Simulated Emergency Test (SET) Scheduled for October 3 -**

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## 4 Weekend

The 2020 ARRL Simulated Emergency Test (SET) will take place October 3 - 4. The annual, nationwide exercise provides Amateur Radio Emergency Service (ARES) volunteers the chance to test personal emergency-operating skills and communication readiness in a simulated emergency deployment. ARRL is asking participants to adhere to Center for Disease Control (CDC) and local health department COVID-19 [guidelines](#) by staying home, maintaining safe distances when around people, and following recommended cleaning and disinfecting practices.

### **ARRL Learning Network's new speaker forum/seminars**

<http://www.arrl.org/arrl-learning-network>

These are 30 minutes presentation with 15 minutes allotted for Question and Answer session following the presentation These presentations are online using GoToWebinar which is safe Industry standard software

Recently the New Forums kicked off with our Very own Section Traffic Manager Aaron Hulett, K8AMH presented "Relay Stations and the Art of Traffic Handling" Aaron's presentation was on July 28, 2020

His presentation has received rave reviews from the many folks that watched his presentation. Presentations are archived here.....

<https://attendee.gotowebinar.com/recording/4275483259008807176>

The next Five presentations are.....

### [HF Wire Antennas](#)

George Cooley, NG7A, ARRL Life Member

Thursday, August 6, 2020, 12:30 PM PDT / 3:30 PM EDT (1930 UTC)

### Introduction to Digital FM Modes

Korey Chandler Sr., WA5RR

Tuesday, August 11, 2020, 5 PM PDT / 8 PM EDT (0000 UTC on Wednesday, August 12)

### [Introduction to Computer Logging](#)

Steven Lott Smith KG5VK

Thursday, August 13, 2020, 12:30 PM PDT / 3:30 PM EDT (1930 UTC)

### Capture the Magic of 6 Meters

Jim Wilson, K5ND

Tuesday, August 18, 2020, 10 AM PDT / 1 PM EDT (1700 UTC)

### The Sport of Finding Hidden Transmitters On Foot

Robert Frey, WA6EZV, ARRL Amateur Radio Direction Finding Committee

Thursday, August 20, 2020, 12:30 PM PDT / 3:30 PM EDT (1930 UTC)

## [2020-2021 ARRL Contest Dates PDF](#)

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## Oct 17 Mentor Fest rescheduled

**Time: 9:00am - 4:00pm**

**Location: Hella Shrine Center, 2121 Rowlett Rd., Garland, TX 75043**

The Garland Hella Hams and the ARRL North Texas Section would like to invite all current and prospective Hams to attend Mentorfest! This event is a great way for Hams, especially those recently licensed, to meet and learn about a variety of subjects. Amateur radio operators have a great tradition of helping each other learn about and gain experience in the many facets of the hobby. Mentorfest is designed to build on this tradition by providing a place for Hams of all ages and experience levels to come together, exchange knowledge and make new friends while having fun and enjoying the great hobby of Amateur Radio.

- Here are some of the things you can expect at Mentorfest...
  - Formal presentations on a number of topics.
  - Local clubs providing information on their activities.
  - “Elmers” (ham-speak for mentors) available for informal discussions on just about any topic.
  - Tours of emergency communications vehicles.
  - Representatives from the ARRL, ARES/RACES, REACT, National Weather Service and others showing how you can get involved.
- Amateur License Testing - 1:00p - 4:00p

If you wish to test for a new license, or upgrade your existing license, bring \$14 and a photo ID.

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## Local and Some HF Area Nets

### MARC Nets

**Sunday 8:00 PM – General Information Net** – we ask participants about their week in ham radio and their thoughts on a question of interest to the ham community.

W5MRC Repeater, (146,740 MHz, offset -0.600 MHz, tone 110.9)

**Monday 8:30 PM – Simplex net** – see how far your VHF radio can go without a repeater  
Along with general discussion. 146.520 MHz Since this is simplex, no offset or tone are required.

**1st and 3rd Mondays 8:00 PM - The MARC Ladies Net** – All radio amateurs are welcome.

W5MRC repeater (146.740 MHz, offset -0.600 MHz, tone 110.9)

### Collin County ARES Nets

Collin County Amateur Radio Emergency Service conducts two training nets each month. You do not need to be an ARES member to participate, all radio amateurs are welcome.

**1<sup>st</sup> Sunday 9:00 PM - Collin County ARES -**

K5PRK repeater, 1(47.180 MHz, offset +0.600 MHz, tone 107.2 Hz)

**3<sup>rd</sup> Sunday 9:00 PM – Collin County ARES -**

W5MRC repeater, (146.740 MHz, offset -0.600 MHz, tone 110.9 Hz)

### SARA (Sachse Amateur Radio Association) Nets

**Wednesdays 8:00 PM – Ham Radio in Sachse –**

Weekly “On-The-Air” Information Net called “Ham Radio in Sachse”.

N5LOC Repeater (145.25MHz, PL Tone 141.3Hz, Offset -0.600 MHz)

**2<sup>nd</sup> and 4<sup>th</sup> Sundays 9:00 PM - Sachse Public Service Net –**

ARES, RACES & Other Public Service Emergency Responders (like local CERT groups) Training.

N5LOC Repeater (145.250 PL Tone 141.3 Offset -0.60MHz)

**3<sup>rd</sup> Tuesday at 7:30 pm**

Simplex Net 146.40 – Temporarily suspended

### GARC Nets

**Thursday 8:00 PM – Info net** – The Garland Amateur Radio Club holds an informal net open to all amateur radio operators. The net begins with check in and general announcements, followed by general discussion.

K5QHD Repeater (146.66 MHz, PL Tone 110.9 Hz, Offset -0.600 MHz)

### North Texas Hospital Net

North Texas Hospital radio club weekly nets check in with area hospitals. Friday mornings (time TBD 8:30 am or 9 am). Jimmy Dominguez is NCS. 442.400/146.700. Regular splits PL tones 110.9/110.9. All are welcome to check in from your QTH as individual.

Attention; The North Central Texas Healthcare ARC net begins at 0830 Friday and moves to 146.700, the past Fridays the 146.700 repeater has been down, with uncertainty when the 146.700 repeater will be back online, the North Texas Central Healthcare ARC will only have the 442.400 portion of the net.

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### HF Nets

**Daily Net 11:00 AM – 9:00 PM** – The Maritime Mobile Service Network – Any licensed ham (General Class or higher) can check in. This net is focused on assisting those who are maritime mobile and over the years, several distress calls have been handled by this net.14.300

**Sunday 2:00 PM – Amateur Radio Satellite Net** - Open net for licensed amateur satellite discussion and updates 14.282

**Daily Net – OMISS** – Focused on awards, particularly Worked All State (1:30 PM frequency 14.290) (8:00 PM frequency 7.185)

Many more nets are listed here <http://ac6v.com.htm>

### Overland Bound

Weekly Net Every Friday night at 7:30 PM Central Time – A net for people who like to explore and take part in overland camping – hosted on the USA Grits-N-Gravy Conference Server (USA-GNG) Echolink Node: 591550 <http://www.usagritsngravy.net>

If you want to list your favorite net. Please send as much information you can to [newsletter@k5prk.net](mailto:newsletter@k5prk.net)

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## **What is Amateur Radio (Ham Radio?) from ARRL**

(Thanks Johnnie Young)

Amateur radio is a multifaceted hobby that includes people around the world. There are about 740,000 ham radio operators in the US. The FCC has allocated [30 different frequency bands](#) from 135 KHz to greater than 275 GHz to amateur radio operators. These frequency bands are used for many different aspects of the hobby.

Some videos describing Amateur Radio:

<https://youtu.be/ysOq6ywTSzU>

<https://youtu.be/rs0i0h4OyMo>

[https://youtu.be/5Z9136\\_Nhh4](https://youtu.be/5Z9136_Nhh4) - Classic Walter Cronkite video

## **Licensing:**

There are [3 levels of ham radio licensing](#) in the US, Technician, General and Extra. Each level requires passing a multiple choice exam. The questions used for these exams are all [published on the web](#).

## **Study Aids:**

Students can study for their license exam(s) in several different ways.

- Take a class
- Study training books. These are two of the most popular
  - [ARRL Technician Study Guide](#)
  - [Gordon West 2018 to 2022 Technician Class](#)
- View video classes
  - [https://youtu.be/RGluTpM7\\_K8](https://youtu.be/RGluTpM7_K8)
  - [https://www.youtube.com/watch?v=N6aFXH\\_SQUo&list=PL07A7D1C9D7BF7F48](https://www.youtube.com/watch?v=N6aFXH_SQUo&list=PL07A7D1C9D7BF7F48)
- Take practice Exams
  - <https://www.eham.net/exams>

## **Taking the Exam:**

Exams are offered by many clubs [around the metroplex](#). The Sachse club gives exams 9:00 [each 2<sup>nd</sup> Saturday at the Wylie Masonic Lodge](#).

## **Other Ham Radio Related Links:**

Sachse Radio Club: <http://www.sachseradio.org/>

Largest/Oldest Ham Radio Org: <http://www.arrl.org/home>

Local Ham Radio Outlet Store <https://www.hamradio.com/locations.cfm?storeid=20>

Finding a nearby Club: <http://www.arrl.org/find-a-club>

Ham Radio Mesh Network: <https://www.arednmesh.org/aredn-advantage>

Amateur Radio Satellites: <https://www.amsat.org/>

Ham Radio Repeaters: <https://www.repeaterbook.com/>

## **Other videos:**

HAM Radios: Quick and Easy Way to Get Into HAM Radio Hobby: <https://youtu.be/t0sMDRLGB3Q>

HAM Radio Basics- HAM 101: <https://youtu.be/Ow1hxClR5J8>

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Numerous Dave Casler Videos: <https://www.youtube.com/channel/UCaBtYooQdmNzq63eID8RaLQ>  
 SPACE STATION CREW USES HAM RADIO TO CALL EARTH <HTTPS://YOUTU.BE/H73EYCYSZF8>

Listen to episodes of ARRL Audio News on your iOS or Android podcast app, or online at <https://blubrry.com/arrlaudionews/>

### Various Ham Radio Activities:

- Local/Regional communications
- World wide communications using Digital network linked repeaters
- World wide radio to radio communications
- [Contests](#) – Making as many contacts as possible
- Fox hunts – Finding a hidden transmitter
- Amateur Radio Satellite
- Supporting local events
  - Races (marathons, bike races, etc.)
  - Plano balloon festival
  - Parades
  - 4<sup>th</sup> of July events
- Extending RC aircraft video and telemetry
- Amateur Radio Emergency Data network (Network when the grid goes down.)
- Winlink – Email via ham radio
- Skywarn – Storm spotters (Most storm spotters report via ham radio.)
- Amateur Radio Emergency Services (ARES)
- Radio Amateur Civil Emergency Services (RACES)
- Antenna design/building
- CW (Morse code) communications
- DXpeditions – Location in an remote area (usually islands) for a short period of time and making as many contacts as possible.
- Summit On the Air – Transmitting from mountain summits
- JOTA - Jamboree-on-the-Air – Boy Scouts
- RF experimentation. Many [Maker groups](#)
- [High altitude balloon experiment](#).