



# The Bullsheet

The Official News Bulletin of  
The Texas DX Society  
An ARRL Affiliated Club

The Texas DX Society, Houston TX K5DX@tdxs.net July 2018

## Upcoming TDXS Dinner Meeting:

**Wednesday, July 11**

**Hickory Hollow Restaurant**

**8038 Fallbrook Dr, Houston, TX**

**77064**

**(just east of the Sam Houston Racepark, inside Beltway 8 near SH 249.).**

**6:30 p.m.**



## Editor's Note by Allen Brier N5XZ

July is here and for the most part, it is for sure HOT! But I guess you don't need me to tell you that. At least this week it has been a bit cooler after the rains, but I am afraid to look at the forecast.

As I said on the Texas DX Society Facebook page, if you missed Field Day, you missed out! It was great fun and I think we made a pretty good score considering the lousy band conditions on Saturday and a few other technical difficulties that comes with a new site. The house was great and there was plenty of room for operators and visitors alike.

**My only real disap-**

**pointment was the lack of legacy TDXS contest operators.**

We really could have used more experienced SSB guys as that is where our score really suffered. (Of course, we will never turn down CW or digi operators, either.) So... what do you say guys? Maybe next year? It is possible you could block out Field Day weekend in advance and clear it with the family so we can KICK ASS next year? C'mon, no excuses next year, OK??

We should have the full results by next issue, and it will be posted on the FB page and the reflector.

Guys, I also need to

get more articles from you so spice up our newsletter. I want to take this opportunity to thank Kim Carr K5TU for his article on a Band Decoder for Automatic Antenna Selection. I can use more articles like that!

And while we're at it, I would still like to get some more biographies from TDXS members. ... unless there's something in your past that you want to keep a secret from the rest of us. ☺

73 Allen 'XZ

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**Please...if you read this and are a member of TDXS, we want to know more about you! PLEASE send me a biography of your ham life, equipment, accomplishments, regrets, wants, needs, etc.**

## The Prez Sez by Robie, AJ4F

The Prez Sez

July 2018

Field Day is over and the feedback I have received indicates it went well. Participation was good (11 stations by one report), an effective setup and propagation improved on Sunday. The result, over 3000 QSOs! Efforts like this demonstrate what can be accomplished by an organized and dedicated group. Great going guys!

We all hear about and many of us have experienced computer security issues. I want to make everyone aware that someone is sporadically tinkering with the TDXS reflector. I have been notified on several occasions to confirm my request to unsubscribe from the reflector. Of course, I did not make the request. I have also received reports that others have had similar experiences. If this, or any other strange thing happens please let us know. Hopefully, we will be able to determine what is happening and resolve the issue. On another occasion, I received a report that one individual received an e-mail from me (using my normal e-mail address) requesting that he send me money! I will not do this and any TDXS official business will be appropriately vetted and documented. I have not found any issues with my e-mail account and there are ways to “spoof” e-mail address and make it appear to be from a specific address when in fact, it is from another! If an e-mail looks “funny” it’s probably not legitimate!

The proposed **Amateur Radio Parity Act** (HR 555) has not gone away! Equivalent language to that of the original bill has been inserted into the National Defense Authorization Act (NDAA) for Fiscal Year 2018. This was accomplished by the Courtney-Hartzler-Rogers Amendment to the NDAA. This bill authorizes FY2018 appropriations and sets forth policies for Department of Defense (DOD) programs and activities, including military personnel strengths. However, it does not provide budget authority. This is accomplished with additional legislation. The Amateur Radio Parity Act language is “buried” in the much larger bill and will not receive appropriate consideration unless a representative or senator intervenes! As I have written many times, please contact our senators and representatives and make your position known to them so that intervention can take place. This is the only action that can derail this legislation.

The Tidelands Amateur Radio Society is gearing up once again and inviting you to attend the Annual Hamfest being hosted in Texas City, Texas at the Doyle Convention Center from 8am to 2pm on Saturday July 7, 2018. I understand that all the “tables” have sold out. This must mean there will be a lot of good stuff for sale! Please make plans to support this event. I’ll see you there!

We all have an interest in the future of Amateur Radio. One big question is where the next generation of hams come from. Some activities that generate new hams are radio clubs offering classes, and scouting. A new and possibly significant source is “The Maker Movement”. This movement is a grass roots phenomenon where individuals are developing an intense interest in “doing it yourself”. These individuals are much like hams in years gone by when commercially built equipment was not available to the average guy. You had to make what you used. The Maker Movement is broader and encompasses much more than radio equipment. It appears to have started in about 2005. The tech-influenced DIY individuals in the area are referred to as makers. The following is an excerpt from the web on the Maker Movement webzine – MAKE:



## The Prez Sez by Robie, AJ4F

“The movement has gathered increasing momentum, makers have created their own market ecosystem, developing new products and services. The combination of ingenious makers and innovative technologies such as the Arduino microcontroller and personal 3D printing are driving innovation in manufacturing, engineering, industrial design, hardware technology and education. Over the years, the MAKE division has become synonymous with the Maker Movement and is the recognized leader of this growing community of makers.

Many makers are hobbyists, enthusiasts or students (amateurs!)—but they are also a wellspring of innovation, creating new products and producing value in the community. Some makers do become entrepreneurs and start companies.

More information about Maker Media, Inc. can be found at [makermedia.com](http://makermedia.com). “

This appears to be an area in which Amateur Radio could flourish. A population of curious technically oriented individuals. Sound familiar! The ARRL has recognized this opportunity and is working to get involved. With a quick web-search I found there is a Houston Maker Faire scheduled on October 13-14 in the George R Brown Convention Center. Here is the link to the site:

<http://houston.makerfaire.com/>

Please look and see what you think. Should the TDXS or a just a group of us participate? I would really appreciate your feedback on this opportunity.

Robie – AJ4F



# TDXS Meeting Minutes by Doug Seyler WB5TKI

## Field Day!

**Date:** June 22-24, 2018

**Location:** Duhacsek Park Community Center, Sugar Land, TX

Our July meeting was, as usual, Field Day. As in the past few years, we joined forces with the Brazos Valley Amateur Radio Club (BVARC), in running this emergency preparedness exercise. Also joining us were the Houston ECHO Society and the Katy Amateur Radio Society (KARS).

TDXS members (many who are dual TDXS/BVARC members) who participated in setup, operation and take-down were:

FRIDAY:

WB5TKI, K9GEM, N5DTT, W5RH, K0NM, WB5TUF, K5HM.

SAT:

N5XZ, WB5TKI, K9GEM, K0NM, WG5H, N5DTT, W5RH, KE8G, K5VWW, WB5TUF.

SUN:

KJ5Y, N5XZ, K0NM, WB5TKI, N5DTT, WB5TUF, WG5H, KE8G, W2OZB, K5GZR, K9GEM.

Duhacsek Park was the best Field Day site yet! We had the use of an air conditioned, 3 bedroom house on the property. It is centered in over 50 acres of land, with plenty of parking and land on which to separate the antennas. Although the rains of the preceding week precluded driving the 22,000# man lift out in the field, we still achieved good separation between the CW, SSB, and digital towers.

Cw/Digital had one room, SSB another, and the third was reserved for sleeping. In addition there was a nice kitchen, as well as plenty of socializing area in the living room. Food was outstanding as always.

This year we operated as 10A, plus 6 m. and GOTA stations. The raw score was 3002 Q's, for 5,559 points x 2 (power mult) = 11,118 claimed score. By comparison, last year the total was 3,487 Q's, for 5,934 pts x 2 = 11,868 claimed score. These do not include any bonus points.

There were a total of 37 operators over the course of the contest. Here are the top Q scores in each mode:

<u>CW</u>	<u>DIGITAL</u>	<u>SSB</u>
K0NM 644	KG5LRP 153	N5DTT 60
KE8G 564	N5EKW 47	KD5KBA 59
N5XZ 375	AG5T 16	K5LDL 55
WB5TKI 296	KG5OFB 15	K5HM 46
WG5H 197		
K5IZO 93		

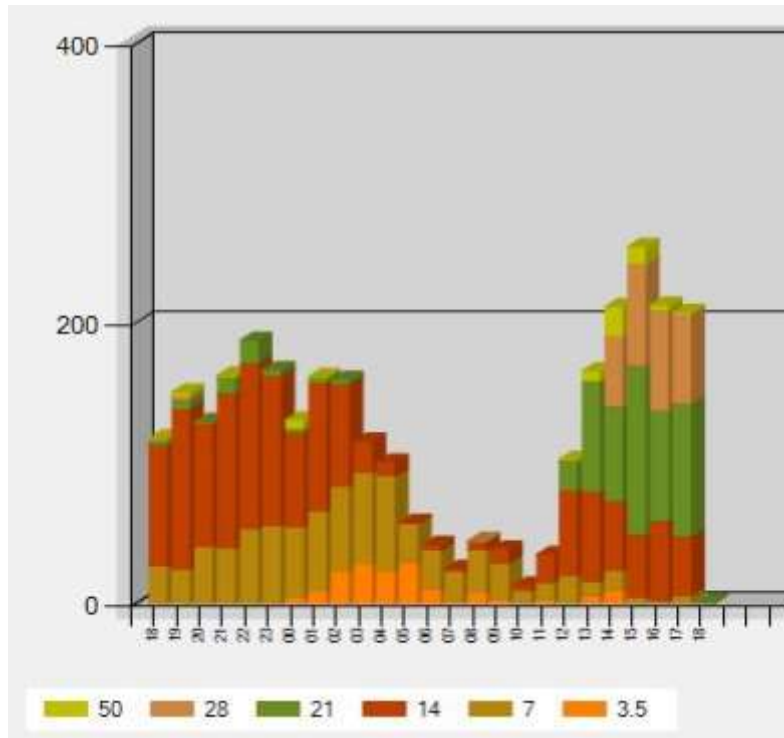
If you missed out on Field Day this year, you missed a good one!

73, Submitted July 7, 2018 Doug Seyler WB5TKI  
 TDXS Secretary & TDXS Field Day Coordinator

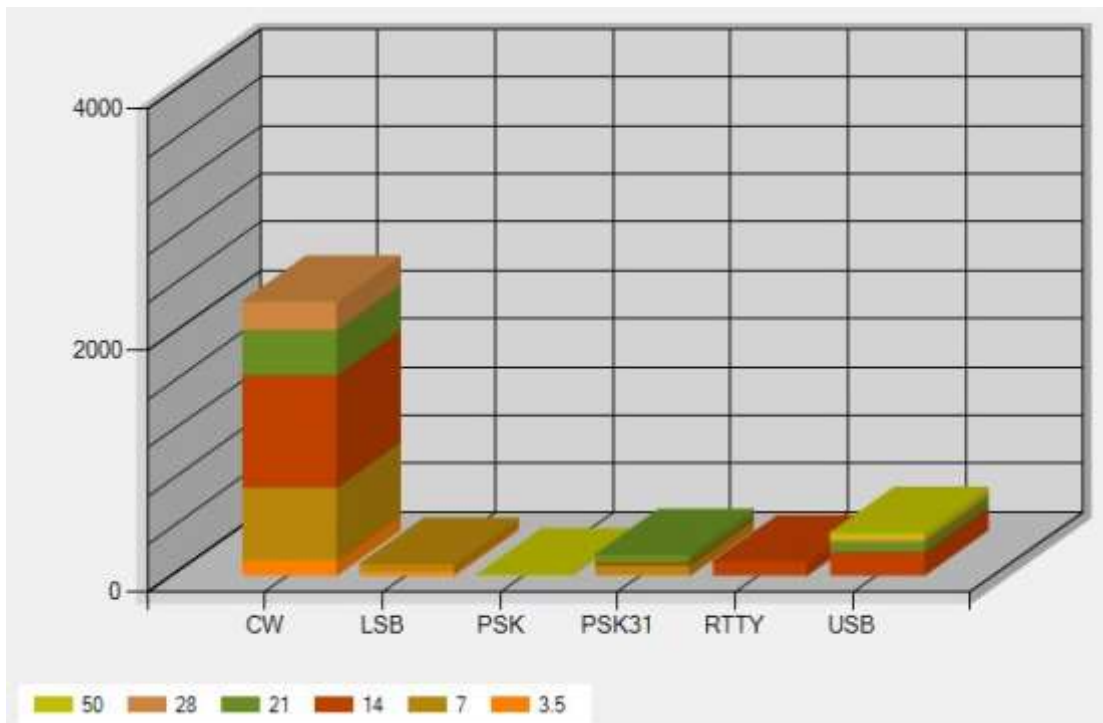


# TDXS Meeting Minutes by Doug Seyler WB5TKI

Below are some interesting graphics from the log:



This is Q's per hour by band. Clearly 10m & 15m were dead on Saturday but woke up on Sunday.



This is Q's by band and mode, showing that CW did the heavy lifting, particularly since these Q's were worth 2 points each.

.....

## **DX Report by Orville Burg K5VWW**

Nothing received from Orville this month.



# Contest Chairman Report—by Jim Burrough N5DTT

Hello again. Well, the big news this month was Field Day. A lot of effort went into the one-day event. Fifty acres to spread antennas around. It seems to have worked out well, at least from my experience on the SSB stations. There has been a lot of discussion on the various club reflectors so I will not delve into the details. Suffice it to say I enjoyed myself. I hope you did, too. If you were unable to participate, you missed a great time.

The next contest is the IARU World Championships on July 14. It is just a 24-hour contest that runs from 7 A.M. Saturday until 7 A. M. Sunday. Included within the IARU contest is the “Olympics of Ham Radio”, the World Radiosport Team Championship. This is an every fourth year event, this time being held around Wittenberg, Germany.

I hope propagation is good that day as I plan to operate from my place in Fayette County. It would be nice to help the teams in Germany with some contacts. The good news is that there will be a lot of U. S. stations on. They are not worth as many points as DX stations but they are still out there and available.

There was some TDXS participation in contests this month.

### ARRL June VHF Contest

#### Single Op LP

Call	SO2R	Remote	QSOs	Mults	Op Time	Score	Club
WB5TUF			228	124		28,272	TDXS
W5PR			201	98		19,296	TDXS
AJ4F			131	72		9,432	TDXS
N5DTT			6	5	6	30	TDXS

#### SO 3Band LP

Call	SO2R	Remote	QSOs	Mults	Op Time	Score	Club
K5GN			54	38	6	2,052	TDXS

Good luck with your contest efforts. We'll see you next month.

Jim, N5DTT



# Where in the World Is...by Ron Litt K5HM

## Rwanda (9X)

CQ Zone 36 ITU Zone 52

Rwanda; a strange name for a country. It is surrounded by a few other countries with strange names; Rwanda is south of Uganda, north of Burundi and east of The Democratic Republic of the Congo Well, at Least I can pronounce that one). Notice the liberal use of the letter "u" in other names but not in Rwanda. Why isn't it spelt Ruwanda? Ok, I get it, they don't like u's. Fine, how about Roowanda or Rooanda, or even Rouxanda. Guess no Cajuns rule in Rwanda.



From 1894 to 1918, Rwanda, along with Burundi, was part of German East Africa. After Belgium became the administering authority under the mandates system of the League of Nations, Rwanda and Burundi formed a single administrative entity; they continued to be jointly administered as the Territory of Ruanda-Burundi until the end of the Belgian trusteeship in 1962. Officially, the country is the Republic of Rwanda. It is in East Africa, part of what 19th Century Europeans called, "The Dark Continent."



Rwanda is in the Lakes region of Africa; its geography is dominated by mountains in the west and plains to the east, with numerous lakes throughout the country. The climate is temperate to subtropical, with two rainy seasons and two dry seasons each year. Its renowned Volcanoes National Park is home to mountain gorillas and golden monkeys. The park encompasses 14,786 ft tall Mt. Karisimbi and 4 other forested volcanoes. In the southwest is Nyungwe National Park, with ancient montane rainforest that's a habitat for chimpanzees and other primates.

The population of the nation is young and predominantly rural, with a density among the highest in Africa.

Rwandans are drawn from three groups: the Hutu, Tutsi and Twa. The Twa are a forest-dwelling pygmy peoples descended from Rwanda's earliest inhabitants. Some believe the differences of the other two groups are because they come from different social castes or perhaps migrated from different places.

Rwanda has a presidential form of government. Rwanda today has low corruption compared with neighboring countries, Rwanda is one of only two countries with a female majority in the national parliament.





## Where in the World Is...by Ron Litt K5HM

The economy is based mostly on subsistence agriculture. Coffee and tea are the major cash crops for export. Tourism is a fast-growing sector and is now the country's leading foreign exchange earner. Rwanda is one of only two countries in which mountain gorillas can be visited safely, and visitors pay high prices for gorilla tracking permits. Music and dance are an integral part of Rwandan culture, particularly drums and highly choreographed dance. Traditional arts and crafts are produced throughout the country, including imigongo, a unique cow dung art. Phew!!! Don't step in the imigongo.



In late September of this year, the Italian Dxpedition Team plans to launch a serious effort to Rwanda. Check DX News for more details.

Rwanda stands 104<sup>th</sup> on the ClubLog most wanted DX list



### FLASH . . . Baker Island – KH1/KH7Z

For those of you who may not know, an American DXpedition has landed on Baker Island in the Pacific. If you don't know where Baker island is, see photo at left. Baker stands No. 5 on the ClubLog most wanted list.

Keep your eye on the DX Clusters, they plan to be QRV by June 27<sup>th</sup>. Check out their web site at [http://](http://baker2018.net/)

[baker2018.net/](http://baker2018.net/).

Reporting from the Dark Side,

Ron, K5HM



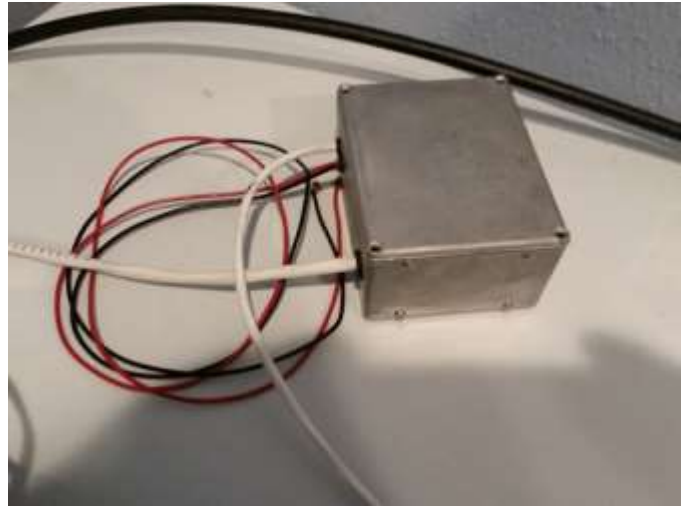
## Band Decoder for Automatic Antenna Selection by Kim Carr K5TU

Do you have to manually switch antennas when you change bands? Ever accidentally transmitted on the wrong antenna? Most modern transceivers have band output data available on an accessory connector that can be used to automatically select your antennas. As a contester (and casual DXer), I'm up for automating everything I can, including band changes. This article describes what I have using the Elecraft K3S, but can easily be adapted to other rigs and other remote antenna switches, usually with a cable change.

This article isn't a homebrew construction article, but if you need some help, just email or catch me on 442.0. If you're looking for a plug and play appliance, this isn't it...you have to build it which is half the fun.

### ANTENNA SWITCHING DESIGN

My station has individual feedlines for each band so I have to switch coax to change bands. NM5M put me onto a 6 band, 2 port antenna switch designed by KK1L. [http://kk1l.com/kk1l\\_2x6switch/](http://kk1l.com/kk1l_2x6switch/) The switch has high port isolation (>61.2db) and uses readily available parts. With 2 control ports, the KK1L makes a perfect switch for the shack with two HF transceivers or for use with SO2R. The switch is designed so that it is impossible for both rigs to select the same antenna. KK1L has the bare board for sale and you buy the rest from Mouser. ([www.mouser.com](http://www.mouser.com))



I like playing around with the Arduino MCUs because I learn from them. The programming language is very much like C+ and the development software is free, which makes them easy to change and upgrade. It also makes it really easy to get into project creep...adding additional functionality and complexity to an otherwise simple project. In this case, I chose NOT to implement an Arduino and use the assembled Unified Microsystems BCD 14 band decoder. For \$23.95, it's hard to beat. <http://www.unifiedmicro.com/decoder.html>

To marry the band decoder to the 6 band KK1L band switch requires a high side driver interface. The output of the BCD 14 is an open collector that pulls to ground when on and can sink 500ma. The KK1L switch requires you SOURCE 12V to the relays to activate them, hence the need for the high side driver (HSD) interface. Unified Microsystems has the assembled board for a very economic \$14.95. <http://www.unifiedmicro.com/hsd9.html>

The interface between the rig and the decoder board uses optocouplers to provide isolation, protecting the rig from any transients and, presumably, lightning induced voltages.

### PUTTING IT TOGETHER

Everything is happy running at the 13.8VDC that powers most rigs that require an external power supply (like the K3/K3S). The K3/K3S has a convenient power output that will supply up to 1A for other shack devices. This system only draws a maximum of 0.17A with two rigs active on different bands, so I use the 1A output. You could even power it from a 12VDC wall wart if needed.

I chose a BUD type CU-234 cast aluminum box in natural finish to hold the decoder and HSD module. The cast box provides RFI protection as well. <https://www.mouser.com/ProductDetail/Bud-Industries/CU-234?qs=0ap2TpMIS5H7acIB0xFRMw%3D%3D>. There's plenty of room, and it's < \$11 at Mouser..

## Band Decoder for Automatic Antenna Selection by Kim Carr K5TU

There are 3 cables required:  
 12VDC power (2 x 18AWG)  
 Band inputs from rig (5 x 20AWG) Connector matches your rig  
 Outputs to KK1L coax switch (7 x 20AWG)

Of course, you can use whatever cable you might have in your junk box. I elected to use some surplus Honeywell instrumentation cable I found on eBay that had a foil shield and drain wire. Even old 8 wire rotor cable could be used. Wire sizes above are only suggestions. You could go as small as 24AWG on the band inputs and output cables.

While you can hard wire the output cable to the KK1L switch, I elected to use a multi-pin, twist lock connector. Your choice.

If you build the KK1L switch, it requires drilling a chassis enclosure for 8 SO-239 coax connectors, so take your time and get it right. The recommended enclosure is an LMB 7112C-PLN ALUM. <https://www.mouser.com/ProductDetail/537-7112C>  
 SO HOW DOES IT WORK?

I'm really pleased with the results. Other than one cold solder joint on a coax connector center pin in the KK1L switch, I had no problems.

The accessory connector on the K3/K3S is a DB-15 so my band input cable plugs in there. The band output cable is soldered to the HSD-9 in the controller, and the other end has a 9 pin TE plastic connector that mates with the KK1L switch.

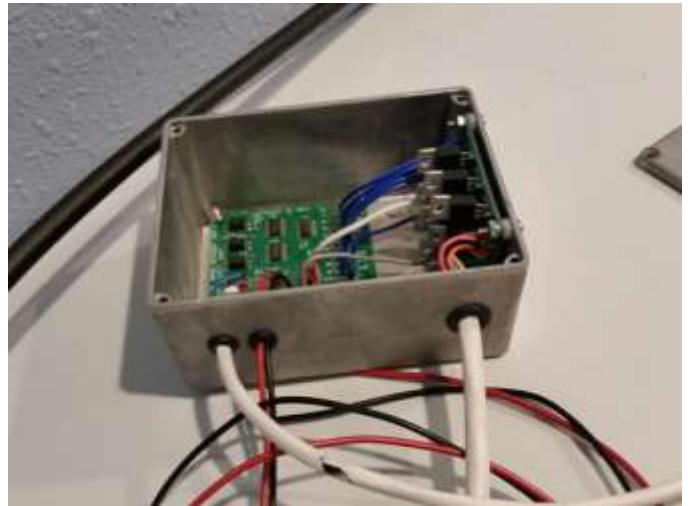
The unit powers up with the K3S through the accessory power connector (an RCA phono jack).

When I change bands on the K3S, it immediately connects the rig to the correct antenna through the KK1L remote antenna switch. There's nothing to setup or adjust.

The decoder has outputs for all ham bands 160M through 2M, 440MHz plus two AUX outputs. The HSD-9 has only 9 outputs. When used with the KK1L switch, it supports six discrete antennas with two transceivers.

While I still have to tune the amp for a band change, having an automatic coax switch controlled by the radio is really nice.

By Kim Carr, K5TU k5tu@att.net



## Texas DX Society Board members

<b>President</b>	<b>Robie Elms, AJ4F</b>	<b>ruler55 at gmail.com</b>
<b>VP Membership</b>	<b>Keith Dutson, NM5G</b>	<b>kdutson at sbcglobal.net</b>
<b>VP Programs</b>	<b>Open</b>	
<b>Secretary</b>	<b>Doug Seyler, WB5TKI</b>	<b>djseyler at comcast.net</b>
<b>Treasurer</b>	<b>Orville Burg, K5VWW</b>	<b>Orville at rubyglass.com</b>
<b>Contest Chairman</b>	<b>Jim Burrough, N5DTT</b>	<b>jandpburrough at sbcglobal.net</b>
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<b>DX Chairman</b>	<b>Orville Burg, K5VWW</b>	<b>Orville at rubyglass.com</b>
<b>Outgoing QSL Manager</b>	<b>Scott Patout, K5DD</b>	<b>k5dd at arrl.net</b>
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<b>CQ WAZ Card Checker</b>	<b>Bob Walworth, N5ET</b>	<b>rwalworth at charter.net</b>

### How to reach US

On the World Wide Web <http://www.tdxx.net> email address: [k5dx@tdxx.net](mailto:k5dx@tdxx.net)

On 2 Meters: 147.96/36 MHz (100 Hz)      On 70cm: 447.00/442.00 MHz (103.5 Hz)

DX Cluster—On Packet: Connect to **K5DX** on 145.71 MHz or telnet via IP address 75.148.198.113

**Facebook:** <https://www.facebook.com/groups/TexasDXSociety/> (new)

**TDXS says "HAPPY BIRTHDAY"** to these members with birthdays in July:

**Please notify the Editor if I have missed anyone**

Dennis Alexander - W5KU  
 Mike Davidson - N5MT  
 Bill Price - KZ5DP  
 Tom Jakubec - N5ZR  
 Walter Schroeder - K5WS  
 Richard Neal - WB5LVL  
 Ron Marosko, Jr. - NN5DX  
 Wayne Rogers - W5KDJ  
 Stan Polak K5STZ  
 John Firey W5ZG

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