The Texan

Newsletter of the Texas NTS CW Net (TEX)

** See "TSN Corner" on the Last Pages **

Net Manager: Steve Phillips, K6JT, Plano TX (k6it@arrl.net, 214-208-8900 Cell)

TEX Web Site: http://web.me.com/sr_phillips/Site/K6JT_TEX/

Assistant Manager: Rodney Baker, W5DY, Goliad TX (w5dy@arrl.net)

September 2011



Vacation Time is Over

Thanks to all who filled in for me while I went to see my daughters in Pittsburgh and far eastern Connecticut. As always, special thanks to Rodney for diligently picking up the net reports and forwarding them to me each evening. It kept me feeling still "at home" and abreast of net goings-on.

We had a very good visit in Pittsburgh, but our visit to Connecticut (flew into Providence, R.I.) had to be cut short due to hurricane Irene. Our return flight went through Dulles airport near Washington D.C., and we were scheduled to return late Saturday evening. After watching the progression of the storm, I changed our return to early Saturday instead. That was fortunate, because the edge of the heavy rain reached Dulles airport as our connecting flight to Pittsburgh was about to leave. It was the last flight between there and Pittsburgh that was allowed to fly that day.

Weather in Pittsburgh was excellent with temps in the upper 70's and low 80's. A nice respite from the 100 degree plus temps here. There was no effect there at all from the hurricane. I had helped my daughter in CT put away things that might get blown around by the expected strong winds before we left. As it happened, the main thrust of Irene went far west of her location on Sunday, so they did not get the full brunt of the storm. Nevertheless, they lost power for 5 days afterward. Fortunately, they are only about 5 miles from the Rhode Island border, and power was on in RI for purchase of gasoline and ice (and food).

A Blast from the Past

Since I've not received many articles for inclusion in the *Texan*, I decided to share an article I wrote recently. It deals with traffic handling, but mostly with the growth of personal computer usage in the 1970's. I wrote it for another purpose, so please excuse the overly-defined terms (such as CW) that you are all familiar with. I hope you enjoy it, and I also hope this may inspire others of you to write a little about your own experiences with ham radio and computers in decades gone by.

Computers and Ham Radio in the 1970's

by Steve Phillips K6JT

Some of you will remember the 70's, but the majority are likely too young or started in ham radio later. Since I was first licensed in 1961, I'd had quite a bit of experience by the mid-70's. In those days, the majority of young hams built their transmitters and receivers (yes, separate units were the norm, although transceivers had started to become more popular) from kits. The 60's and 70's were the heydays of Heathkit, Eico, Knight-Kit, etc. You could do the wiring and assembly yourself and save hundreds of dollars off ready-made gear. Single Sideband had also become the norm, largely replacing AM phone, which went through death-throes in the late 60's and early 70's. Of course, the AM gang were always denigrating the "donald duck sidebanders" (the "quacking" that SSB somewhat sounds like without a BFO). Some semblance of that prejudice remains even today, with a resurgence of interest in AM.

How about computers? Today we take for granted the multi-gigahertz clocked personal computers that can do just about anything we need them to do regarding ham radio. There are very good programs to run RTTY, CW, PSK-31, and other digital modes solely with a computer (with sound card) and just about any (SSB) transceiver. Not so in the 70's. Those were the days before Apple, before the IBM PC, and before any type of ready-made computer was available that cost less than hundreds of thousands of dollars, took up dozens of square yards of floor space and required a dedicated air conditioned cooling system.

Intel had come out with the 4004 and 8008 processor chips by the early 70's, but those were very limited in capability and used primarily as embedded controllers for other equipment such as traffic lights. It was not until the Intel 8080 appeared that true "personal computing" became practical. Motorola soon followed with the 6800 (yes, only 2 zeros - the 68000 did not come out until the 80's), and there was also a 6502 chip, eventually produced by Rockwell International (for whom I worked - having started with Collins Radio Company in the late 60's, which was bought by Rockwell in the early 70's). These were all good CPU chips, but that's all they were - processing units. You had to add all sorts of control circuitry, clocking, and memory as well as input/output devices to make a computer.

The first commercial personal computer that came out, in my recollection, was the Altair 8800. I bought one of them, or I should say I bought the parts to make one of them, in the mid-70's. Yes, it was still kit-building then. But any ham who had put together Heathkits or any other kit could likely build the computer. I still have that old Altair machine, albeit upgraded several times at great expense with new processors, memory, floppy disks, etc. I haven't turned it on (and the power supply capacitors are probably useless now) in 20 years but it rests in my garage attic, waiting for the day when I can create my own "museum".

It was expensive, to say the least. I don't recall the basic unit cost, consisting of case, very underpowered power supply (built within the case), front panel, CPU card, and 1 kilobyte static memory card (yes, that is 1024 bytes). I think it was probably close to \$600, and I later spent over \$1000.00 for more memory and another thousand for a dual 5 1/4 inch floppy disk unit. It was initially programmed by means of toggle switches on the front panel, from which you had to manually enter the digital codes (in octal, although I preferred hexadecimal) for all the instructions you wanted to execute. It had LEDs and switches for all 16 bits of the

address and 8 bits of data. The 8080 used a 2 MHz clock, and each instruction took at least 4 memory cycles. So it effectively took 500 milliseconds to execute the simplest instruction and even longer for more complex ones. Not fast, but in those days, it was fast enough and about the best you could get for a microprocessor.

I was lucky that my employer started to use 8080's (and 8085's) in embedded equipment, so a commercial assembler was available to me (from Intel, as I recall). I was even assigned to projects that used them! Thus, I became very good at cranking out 8080 assembly language - hundreds of instructions per day in fact. I used those skills to write my own ROM operating system (similar to a PC BIOS) as well as other programs. I created a mathematical package that included transcendental functions (all in assembly language) and entered it in a contest run by the company making the Altair (MITS). I won a prize, which was a 1 kilobyte PROM card, to add to my system. I was able to burn UV Erasable PROMs at work in off hours from the assembly code I had written. It was a monitor program, simple debugging program, and code to do Input and Output (I/O). All I had to do was enter a "jump" address on the toggle switches into the ROM starting address space to get the computer going. Later, after upgrading to a Zilog Z-80 processor and adding floppy disks, I wrote my own assembler.

Speaking of I/O, the only device I had was a KSR-28 teletype that I'd bought surplus when Rockwell International took over Collins Radio Company. It used the 5-level Baudot code, so part of my ROM program was converting to and from ASCII and Baudot to do all my input and printing. I also created a "boot loader" that used paper tape (5 level, of which I used 4 bit nibbles to make the 8 bit bytes) so I could make use of my model 14 teletype typing reperforator and model 14 transmitter distributor (TD) paper tape reader, both of which I bought used.

I had been quite active on RTTY on the air before that time. In those days, there were no computer programs to do the modulation and demodulation of the 2 tones used. You needed an external device called an RTTY Terminal Unit. It used analog circuitry and filtering. The best of the reasonably priced units was made by Hal Communications Corporation and was the ST-6. I built one of them in the early 70's from their "kit". As with many kits, as previously mentioned, what you actually got was a chassis and a set of parts. If you were lucky, you got pictorial layouts of the chassis parts and good schematics. The Heathkit-style step by step procedures were often not included. The ST-6, after construction and calibration, worked very well for the 170 Hz shift (2125 / 2295) used on HF and the 850 Hz (2125 / 2975) shift used on VHF. I was living in southern California at the time, and we had an excellent RTTY-only repeater using the 146.10/70 pair. I also operated on HF, working some DX (Australia comes to mind) and domestic stations.

Interfacing the RTTY gear to the computer was no easy task since the mechanical equipment used a high-current loop while the computer needed low voltage digital signals. Fortunately, the MITS engineers had thought ahead and the Altair 8800 was designed using a backplane that accommodated additional circuit cards. It was called the S-100 bus, having 100 lines with large connectors into which the CPU card, memory card(s), and any additional cards could be plugged. The stock machine came with a 4 slot bus, but that could be expanded with additional 4 or 8 slot modules (imagine wiring together those things!). My 4 slots were taken up with the CPU, the 1K static memory, and the 1K PROM card along with an I/O card I purchased from a company called Processor Technology that sprang up to service the

growing S-100 market. The PT card I purchased (and assembled) was called a 3P+S. As the name implies, it had 3 parallel ports (I believe they were 8 bits each) and a programmable serial port using a UART device.

I designed an interface using high-current switching transistors and opto-isolator couplers to drive the RTTY current loop of the ST-6 with the computer (and decode the bits on the bus as well). The UART provided for 1.5 stop bits (slightly more than the standard 1.42 used by the Baudot teletypes), but that worked just fine. I eventually got 100 speed gears for the KSR-28 (instead of the standard 45.45 baud, 60 WPM speed used for ham RTTY) so I could do "higher speed" printing from the computer. The model 14 units were fixed at 60 speed and were not changeable. So I recall buying a cassette tape unit to do my program input and output, interfacing it with the 3P+S unit. I also eventually bought a printer and wrote a driver for it using two of the 3P+S parallel ports. My PROM card capacity was nearly exhausted after all those software (or firmware) device drivers.

It soon became apparent that more memory was needed to do useful work with the computer. MITS came out with a very poorly-designed "dynamic" memory card. It had 4 kilobytes and cost around \$400.00. I learned a lot from building a couple of those cards and trying to make them work. They were, at best, flaky, and would lose the memory content (dynamic memories need constant refresh to preserve their content, unlike static memory, but it was a lot less expensive and had higher capacities per chip than static). I recall doing some re-engineering of the timing of the refresh on that card and finally got them to work more-or-less reliably. So I had a whopping 9 KB of memory to work with. Does not sound like much, but with efficient assembly language programming (that was my favorite anyway), it went a long way. The BASIC language became available for the MITS system, but I never used it much at that time.

Moving forward a few years, and upgrading the system to a Zilog Z-80 based processor card that ran at a blazing 5 MHz instead of 2, I decided I needed to use the computer to help with my traffic handling. I had been active on CW (Morse code) networks since the mid-60's as part of the National Traffic System (NTS). Those days, a lot of messages were handled on behalf of 3rd parties due to telephone toll charges being very high (no cell phones and no Internet, of course). Nothing commercial, just things like birthday greetings, state fair ham radio booth messages, and, of course, true emergencies like earthquakes, fires, tornados, hurricanes, and floods, to get word to relatives outside (or inside) the affected areas.

I had purchased a small house from another ham who was in the Marines but got transferred to the east coast. He was also a very active traffic handler, and wanted to move CA traffic across the country quickly, once he got established (and I had set up my own station again). So I turned to the computer once more. It was already interfaced with the radio via the ST-6, so it was a matter of developing a program that would send and receive formal radiogram messages, either printing them or storing them for later relay.

My buddy on the east coast liked to get up very early to do his hamming, around 6 AM eastern time. Naturally, since I was 3 hours earlier, that was 3 AM California time and I preferred to be sound asleep. So I wrote a program that would start calling him on a pre-defined frequency (I believe it was on 40 meters) at 3 AM, synchronize with his reply, and accept traffic from him, storing it in the computer's memory for me to process later. At that time of day, there was little

chance of creating any interference to other stations. Optionally, it could print a full log of everything as it occurred.

I had it rigged up so that if there were any problem, such as drop-outs or other anomalies resulting in no contact after a certain time, it would send "bells" to the teletype, waking me up so I could go see what was wrong (the ham gear was in a different room, so I did not hear the normal RTTY clacking). It only had to do that a few times in the months that we had the sked (schedule) going. The program could also send him eastern area traffic, and the call-up to him indicated how many messages I had. It also acknowledged each received message. If the message number were not correct, he would send the whole message again. We worked out a specific set of codes that would allow the program to work as intended. Essentially, he remotely controlled my ham station via 45 baud RTTY.

I'm not sure if that was completely legal at the time (per FCC rules), but it was pretty much the same thing as the automated Winlink stations today, which are legal. We never publicized our operations, which continued until he was once again transferred, this time overseas.

It was a really great time to be involved with the emerging personal computer era, and it provided a wonderful way to join my 2 favorite hobbies, both of which I still greatly enjoy. It was, of course, quite time-consuming to do all that development, but I was single at the time, so I had the opportunity.

I have lots more to say about computers and ham radio during that era, but the purpose of this article is to give a glimpse into the early days before personal computers, the Internet, and digital signal processing were developed and refined. Yes, that was more than 35 years ago, pre-dating even packet radio.

73, Steve K6JT (Formerly KN7OOR and WA6TVA)

TEX Mailbox:

I was very happy to learn that **Gary, K5QOW**, is now out of the hospital and recovering at home. We hope to hear you on TEX again soon, Gary.

Pat, KD5TXD, writes to tell us about the fires burning in Bastrop county and other areas of Texas. She writes: Life has been pretty wild down here in the Wild Horse Desert. We had company for Labor Day Sunday. Charles is back to teaching at the University but had Monday off. We did not work on the antenna tower. However, we put in a button that allows me to open the barn door from the house. That is a super addition to the homestead. We did the work Monday morning. I kept smelling smoke. Pretty strong smoke smell and the sky was hazy. Now it was just a couple years back that we had a grass fire across the road that had me ready to pack the dogs and my go bag and go. This was almost as strong a smoke smell and haze as back then. I fussed at Charles until he agreed we needed to drive around the neighborhood to see what was burning.

The factor that convinced Charles to investigate was a skunk that crossed the yard running away from the smoky wind followed closely by a bobcat who was also running away from the wind. That made us both feel like there was something really close that was really on fire. We drove all around the neighborhood and saw no fire at all, but the sky was filled with smoke. We decided it must be something really big burning up north of Kingsville. Little did we realize that half of Texas was on fire up near Austin. Charles found an interesting weather page on the internet at http://www.wunderground.com/wundermap It is pretty interesting. It has a button to click that shows where all of the wild fires are located as well as the smoke plume. The smoke plume from Bastrop's fires was blowing directly over Kingsville.

Then, yesterday as we were driving into the University we saw a fire burning to the west of Kingsville. The smoke looked like it was right in our local area. When we got home we looked on the internet and saw where that fire was about twenty miles west of town.

Kingsville has had a lot of fire action this last few weeks. There was a huge grass fire at the local uranium plant. The fire melted the PVC well stems from their drilling area. Then an oil tanker fell off the freeway and burned to a crisp forcing the evacuation of parts of the south side of Kingsville. Just a few days after that, the lumber yard south of the Train Depot Museum burned to the ground while I was on duty at the Depot. The black smoke billowed across the railroad track and thankfully the wind didn't bring it toward me. There were fire trucks and ambulances dashing past the little Depot as I stood with the visitors wondering just what was going on.

Well, none of that has anything to do with CW, but it is pretty exciting for this quiet area. I feel really bad for the folks in the fire areas and hope all of the TEX and TSN folks are safely far away from the fire action. Thanks and 73!! Pat KD5TXD

Ken, K5RG, is the happy owner of a new rig. Ken writes: Sold my Yaesu FT-736R and purchased an ICOM IC-9100 which integrates nicely with my station. I will have triple redundancy on the HF bands once I finish making the two hundred cables I'll need for the NCS Multi-Switcher (which has been collecting dust over this issue for the last three years!!). Initial impressions? As Jimmy Fallon says, Pro? The IC-9100 does it all and in a small package (all bands, all modes including satellites, dual receive and D-Star for starters). Con? The small transceiver means a smaller front panel which translates into a complicated user interface. The manual is the biggest I've seen for any rig (it is 212 pages in a 42 Meg pdf file). So guess what I have been reading for the last week? The goal is to have a VHF/UHF capability although I notice the bands are all pretty dead around Houston except for APRS or when a VHF contest is being conducted.

I have yet to plug a key into it but I will be asking you for a keying report in the near future (once I get passed the CW software parameters that I'll need to set in order to pass muster with you on 80 meters). I do have it integrated with the ICOM linear (two cables that took a couple of hours the way I do things – but they are pretty).

One thing life has taught me is to never go without accessories – they cost too much when you want them later. So the small rig is fully loaded. Bad news is that you have to install all of them but here is where our modern times came to my assistance. On You-tube, an amateur in GB has filmed some extensive videos including installing all of the options for the 9100. It

did provide a few hints that were helpful. For example, the D-Star module is so small that it actually uses double sided tape to hold it in place. Here was the only problem I experienced – the double sided tape was not in the little box with the D-Star board. As I was about to call ICOM, I did think about looking in the connector bag that came with the basic rig. Sure enough, there was the called for tape (also shown to be there in the manual). Odd why ICOM didn't put all of the accessory parts in with the accessory. I've registered in the D-Star system but have heard no activity in the Houston area. It all must be up there in your neck of the woods. In fact, all of the VHF/UHF frequencies are pretty much dead, which seems odd after all of the activity that used to be on the 2-meter repeaters a few years back.

After going thru typical retired engineer's over board response by installing 7/8" heliax on the tower, one thing I wanted to do was make my very first 6 meter contact. However, the band was completely dead except during the summer VHF contest when 6 meters came to full life!! I hope to make a few more contacts this weekend in the ARRL VHF contest. Optimum goal – EME. I thought it would be interesting to put my voice where I helped put a man 42 years ago but initial investigations pointed out that an analog EME station is no small effort (kw, big multi-boom antennas which need two decent sized rotators, etc.) So we'll start out with WSJT, which puts an EME contact in the realm of neophyte capabilities.

73, Ken K5RG

TEX Net Topics

Our luck seems to be holding up with 7053 KHz continuing to work acceptably for early TEX. NCS stations are again reminded that they can move the net to 3541 if for some reason 40 meters is not working well.

We still need help with **11** open NCS/liaison slots, including **2** open *primary* NCS slots and **4** open *primary* RN5 slots on Thursday and Saturday (all shown in **red**). Please consider taking one of these, or even just an open backup position. Thursday and Saturday RN5 liaisons are sorely needed.

We did miss 3 RN5 liaison spots in the past month, largely due to the lack of scheduled coverage as shown in the table below. Thanks to those who did fill these in otherwise.

I received only one comment about designating Saturday night as an "off" night for TEX. I have decided to make early TEX on Saturday (and thus early RN5 liaison) an "option", meaning if someone is home to run the net and/or go to RN5, then we'll continue to meet. Late RN5 and TEX on Saturday are retained as scheduled.

TEX CW Net Weekly Schedule

Local	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday	Sunday
NCS #1	W5GKH	N5PWG	KD5TXD	Open	N5PWG	Open	W5GKH
Backup	Open	W5ESE	W5DY	W5DY	W5DY	W5DY	W5CU
NCS #2	W5GKH	K6JT	W5TMO	W5TMO	N5PWG	W5DY	W5GKH
Backup	K6JT	N5PWG	K6JT	K6JT	K6JT	Open	W5CU

Local	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday	Sunday
RN5 #1	W5GKH	N5PWG	W5CU	Open	N5PWG	Open	W5CU
Backup	W5DY	Open	W5DY	Open	W5ESE	W5ESE	W5GKH
RN5 #2	W5GKH	N5PWG	W5CU	Open	K6JT	Open	W5CU
Backup	W5DY	Open	K6JT	W5DY	N5PWG	K6JT	W5GKH

TEX/1: **7053**/3541 at 19:00 local; TEX/2 **3541**/7108 at 22:00 local RN5/1: **7108**/3567 at 19:30; RN5/2: **3567** at 21:30 local

TSN: 3552 - 19:45 local; CAN: 7052/3552/7108 - 20:30 local; PAN: 7052/3552- 22:30 local

RN5 Backup: W5CU, W5DY, W5ESE, W5GKH, K5GM, K6JT, N5PWG, K5RG NCS Backup: W5CU, W5DY, W5ESE, K6JT, N5PWG, K5RG, W5TMO, KD5TXD

Statistics:

Traffic was way down compared to last month, but check-ins were up a little in spite of my being gone for a third of the month. Rodney, W5DY, with 40 (65%) took first honors, edging out Randy, N5RL, with 38 (61%). Floyd, N5EL, came in 3rd with 25 (40%). Thanks to all who checked in for your support.

We missed one session, early TEX on a Saturday evening. This helped me make up my mind about making Saturday early TEX an option (as described above).

We had visitors including Teo, XE2MVM in Guadalupe, Mexico, Tom, K4VIZ in Arkansas, and K8UV, Rich in Michigan.

The complete list of stations and traffic / liaison totals are shown in the following table. Traffic averaged 2.0 per net session (2.5 last month). Net time averaged 12.6 minutes per session (compared to 13.5 last month). Check-ins averaged 5.2 per session (4.9 last month).

TEX Net Statistics (August 2011)

					,			
Call		QNI	Total	NCS	RN5	TTN	DFW	TSN
K5CZ	Ed	12	12					
	Temple	0						
W5CU	Sam	9	16		6			
*		7			7			
W5DY	Rodney	20	40	5	4	1		
		20		4	6			
N5EL	Floyd	25	25					
*		0						
W5ESE	Scott	22	23	1	2			
*		1		1	1			
W5GKH	Charlie	10	20	10	6			
*		10		10	5			
K5GM	Pete	4	8					
*		4						
W9GVW	Eric	14	14					
*		0						
K5JRN	Si	1	1					

Call *		QNI	Total	NCS	RN5	TTN	DFW	TSN
*		0						
K6JT	Steve	17	36	2			17	
*		19		3	6		19	
WA5MS	Marty	13	13					
*		0						
XE2MVM	Teo	1	1					
	Guadalupe MX	0						
N5NVP	Jim	0	8					
		8						
N5PWG	Jay	11	21	8	8			
*		10		6	5			
K5RG	Ken	5 7	12		2			
*		7			1			
N5RL	Randy	24	38					
*	-	14						
W5TMO	Mike	0	24					
*		24		7				
KD5TXD	Pat	5	5	4				3
*		0						
K8UV	Rich	1	1					
*	MI	0						
K4VIZ	Tom	1	1					
	AR	0						
Totals		319		61	59	1	36	3
				98%	95%	2%	58%	5%
QTC 1		60	121					
QTC 2		61			Sessions:	62		
Time 1		423	771					
Time 2		348						

The roster has been updated to add Geoff, W5OMR, in Houston. Geoff was active on TEX in the 90's. Please join me in welcoming him back again. His home QTH is San Antonio, but he is working in Houston and will operate from there. Geoff does not have a landline and his cell phones are San Antonio based, so he cannot take Houston traffic.

TEX Roster

Call	Name	Location / Notes	Call	Name	Location / Notes
N5BA	Brian	Houston	WB5NKC	Arley	Oklahoma City OK
W5CU	Sam	Edmond OK	N5NVP	Jim	Scott LA
K5CZ	Ed	Temple	* N5PWG	Jay	Pasadena
* W5DY	Rodney	Goliad	K5QOW	Gary	Reagan Wells
N5EL	Floyd	Temple	WA5MUF	Bill	Watauga
* W5ESE	Scott	Dripping Springs	W50MR	Geoff	Houston
W5GKH	Charlie	West Columbia	* K5RG	Ken	Houston
K5GM	Pete	Austin	N5RL	Randy	San Antonio
W9GVW	Eric	San Antonio	W5ROK	Steve	Richardson (K6JT)
AA5J	Lee	Arkansas	N0SSS	Adam	Oklaunion
KJ9J	Newt	Pharr TX (winter)	W5TMO	Mike	Austin
K5JRN	Si	Austin	W5TV	Tom	Nacogdoches

	Call	Name	Location / Notes	Call	Name	Location / Notes
*	K6JT	Steve	Plano	KD5TXD	Pat	Kingsville
	KA5KLU	Doug	San Antonio	K5RDW	RD	Vilonia AR
*	K5KV	Benny	Star	W5UFK	Ken	College Station
*	W6LFB	Jim	Denton	WB8WKQ	Jeff	Michigan
	WA5MS	Marty	Highland Village	* NK5Z	Tom	Conroe
	N7NET	Scott	McKinney	W5ZD	Pat	Kingsville (KD5TXD)

^{*} Capable of 160 meter operation

Operating:

There still seems to be a little confusion about who calls whom when sent off frequency to handle traffic. Remember that it is the station who will **receive** the traffic that picks a spot clear of interference and calls the sending station. If the assigned frequency is busy, look up and down a KHz or so and then call the sending station. The sending station expects to be called immediately, so if there is no call heard, the sender should tune up and down a KHz or two, looking for the receiver.

If nothing is heard in about 30 seconds, the sending station should call the receiving station or at least announce he is waiting on the assigned frequency by sending his call.

If, after a minute or two, no contact is made, both stations should return to the NCS and inform him that there was no contact and they need to try again. If no clear spot can be found near the assigned frequency, report that to the NCS.

Finally, if signals are very weak, it may be necessary to ask for a QNB (relay) station to help. The NCS should either send a QNC asking for a QNB between the two stations or choose a likely station that may be in a good position to perform the relay and ask directly.

That brings up another item about Q-signals that seems to have become confused in the past few years. In the "old days" of CW traffic handling, QSP meant **only** that the station could take a message either for delivery or relay to another net. It did not mean to relay between stations on the current net. That is the purpose of the QNB signal. Please try to use these two Q-signals in the manner described. It will make me happy. \bigcirc

Until next month,

73. Steve

(TSN Corner starts on the next page)

TSN Corner

Texas Slow Net (Daily) 1945 CT 3552.0 KHz +/- QRM http://www.atcweb.com/tsn/Texas_Slow_Net.htm
Pat Allison KD5TXD (pja@atcweb.com)
TSN Net Manager

The telegraph key image is courtesy of FCIT

Greetings from the Wild Horse Desert – home of your TSN Manager

Everyone did a great job this month. Special thanks to Carl, AA5JW, for his faithful checkins to the net. As always, thanks to Arley and Pat for keeping things going.

On the local side South Texas has been under a fire watch for some time. Charles and I panicked this last week when we were smelling and seeing thick smoke in our neighborhood. It turned out to be from the wild fires far to our north, near the Austin area. The answer to these problems is rain. Keep thinking rainy thoughts.

August 2011 TSN Roster

Name	City	ST	Call	Name	City	ST
					 '	MO
						TX
	Cicvolaria	177				TX
	Abilene	TX				TX
		_				OK
						OK
			_			LA
						TX
						TX
					Fort Worth	TX
						TX
	Austin					TX
Louis	Deer Park		NOSSS			TX
Eric			KB5TCH			TX
Russ		TN	W5TMO	Mike	Austin	TX
Herbert	Rockford	IL	KD5TXD, W5ZD	Pat	Kingsville	TX
Patti	Kerville	TX	WB5UPS	Ron	Port Neches	TX
Lee	Cabot	AR	N5UZ	Rick	Cedar Park	TX
Steve	Plano	TX	KD5VGJ	Jay	Flower Mound	TX
Jim	Chilliecothe	IΑ	K4VIZ	Tom	Conway	AR
Carl	Stafford	TX	W4VLL	Victor	Pembroke	VA
Jim	St. George	UT	W5VXI	Dave	Caddo Mills	TX
Alton	Bandera	TX	WB8W	Bob	Cincinnati	ОН
Benny	Star	TX	WB5WKQ	Jeff	Dryden	MI
Steve	Norman	OK	N5XGG	Joe	Colmesneil	TX
Wolfe	Defiance	ОН	NK5Z	Tom	Conroe	TX
			WJ5Z	Roy	Tyler	TX
	Eric Russ Herbert Patti Lee Steve Jim Carl Jim Alton Benny Steve	Arch Lafayette Sam Cleveland Club Call Lynn Abilene David Pensacola David Newburg Craig St Louis Rodney Goliad Scott Dripping Springs Mike Medicine Lodge Curt Edmond Pete Austin Louis Deer Park Eric San Antonio Russ Lewisberg Herbert Rockford Patti Kerville Lee Cabot Steve Plano Jim Chilliecothe Carl Stafford Jim St. George Alton Bandera Benny Star Steve Norman	Arch Lafayette LA Sam Cleveland TX Club Call Lynn Abilene TX David Pensacola FL David Newburg ND Craig St Louis MO Rodney Goliad TX Scott Dripping Springs TX Mike Medicine Lodge KS Curt Edmond OK Pete Austin TX Louis Deer Park TX Eric San Antonio TX Russ Lewisberg TN Herbert Rockford IL Patti Kerville TX Lee Cabot AR Steve Plano TX Jim Chilliecothe IA Carl Stafford TX Benny Star TX Steve Norman OK	Arch Lafayette LA KCOM Sam Cleveland TX KD5MMM Club Call N7NET Lynn Abilene TX N5NK David Pensacola FL WB5NKC David Newburg ND WB5NKD Craig St Louis MO N5NVP Rodney Goliad TX AA5NZ Scott Dripping Springs TX N5PWG Mike Medicine Lodge KS KE5PYF Curt Edmond OK K5QOW Pete Austin TX N5RL Louis Deer Park TX N0SSS Eric San Antonio TX KB5TCH Russ Lewisberg TN W5TMO Herbert Rockford IL KD5TXD, W5ZD Patti Kerville TX WB5UPS Lee Cabot AR N5UZ Steve Plano TX KD5VGJ Jim Chilliecothe IA K4VIZ Carl Stafford TX W4VLL Jim St. George UT W5VXI Alton Bandera TX WB8W Benny Star TX WB5WKQ Steve Norman OK N5XGG Wolfe Defiance OH NK5Z	Arch Lafayette LA KCOM Larry Sam Cleveland TX KD5MMM Phil Club Call N7NET Scott Lynn Abilene TX N5NK Rondel David Pensacola FL WB5NKC Arley David Newburg ND WB5NKD Pat Craig St Louis MO N5NVP Jim Rodney Goliad TX AA5NZ Web Scott Dripping Springs TX N5PWG Jay Mike Medicine Lodge KS KE5PYF David Curt Edmond OK K5QOW Gary Pete Austin TX N5RL Randy Louis Deer Park TX N0SSS Adam Eric San Antonio TX KB5TCH Carroll Russ Lewisberg TN W5TMO Mike Herbert Rockford IL KD5TXD, W5ZD Pat Patti Kerville TX WB5UPS Ron Lee Cabot AR N5UZ Rick Steve Plano TX KD5VGJ Jay Jim Chilliecothe IA K4VIZ Tom Carl Stafford TX W4VLL Victor Jim St. George UT W5VXI Dave Alton Bandera TX WB8W Bob Benny Star TX WB5WKQ Jeff Steve Norman OK N5XGG Joe Wolfe Defiance OH NK5Z Tom	Arch Lafayette LA KCOM Larry Branson Sam Cleveland TX KD5MMM Phil Fentress Club Call N7NET Scott Allen Lynn Abilene TX N5NK Rondel Zephyr David Pensacola FL WB5NKC Arley Oklahoma City David Newburg ND WB5NKD Pat Oklahoma City Craig St Louis MO N5NVP Jim Scott Rodney Goliad TX AA5NZ Web Goldthwait Scott Dripping Springs TX N5PWG Jay Pasadena Mike Medicine Lodge KS KE5PYF David Fort Worth Curt Edmond OK K5QOW Gary Reagan Wells Pete Austin TX N5RL Randy San Antonio Louis Deer Park TX N0SSS Adam Oklaunion Eric San Antonio TX KB5TCH Carroll Douglassville Russ Lewisberg TN W5TMO Mike Austin Herbert Rockford IL KD5TXD, W5ZD Pat Kingsville Patti Kerville TX WB5UPS Ron Port Neches Lee Cabot AR N5UZ Rick Cedar Park Steve Plano TX KD5VGJ Jay Flower Mound Jim Chilliecothe IA K4VIZ Tom Conway Carl Stafford TX W4VLL Victor Pembroke Jim St. George UT W5VXI Dave Caddo Mills Alton Bandera TX WB8W Bob Cincinnati Benny Star TX WB5WKQ Jeff Dryden Steve Norman OK N5XGG Joe Colmesneil Wolfe Defiance

This is a great place to learn how to handle traffic on CW. If you are a voice net traffic handler this is a great addition to your amateur radio skill set. See you on the air!!

TSN Activity Report for August, 2011

Total Sessions 31, Total Check-ins 124, Total Traffic 28 by 14 different operators.

August 2011 QNS

August	Callsign	Name	QTH	STATE
31	WB5NKC	Arley	Oklahoma City	OK
31	WB5NKD	Pat	Oklahoma City	OK
22	AA5JW	Carl	Stafford	TX
11	W5VXI	Dave	Caddo Mills	TX
8	KB5TCH	Carroll	Douglassville	TX
8	KD5TXD, W5ZD	Pat	Kingsville	TX
7	KD5MMM	Phil	Fentress	TX
1	K0CMH	Craig	St Louis	MO
1	K5FAL	Curt	Enid	OK
1	N5AF	Sa,	Cleveland	TX
1	W4CCU	David	Pensacola	FL
1	W5DY	Rodney	Goliad	TX
1	W5ESE	Scott	Dripping Springs	TX
1	WJ5Z	Roy	Tyler	TX

73!! Pat KD5TXD September 8, 2011