



The DX HUNTER

SEPT 08

TVDXA CLUB INFO

MEETINGS: 2nd THURSDAY OF EACH MONTH

SEPT MEETING: 9/11/08 - 6:30PM @ WALLY's

OCT MEETING: 10/9/08 - 6:30PM @ WALLY's

TVDXA WEBSITE: TVDXA.com

DX Packet Cluster: 144.990 @ 1200 Baud

DX Tele-net: k4jw.no-ip (41414)

Chat Frequencies: 145.500/446.600

Editor E-mail: howard.thickman@erlanger.org

"More than a Club - We are Friends"

CLUB NEWS

Island Hoppers are heading for NA - 067

TVDXA Island Expeditioners will lounge in the sun, play on the beach, swim in the Atlantic and spend some quality time on the radios. Hatteras Island, NC., is part of North Carolina's Outer Banks. The island is one of the longest in the contiguous United States, measuring 42 miles. They are scheduled to be there from 9/27 to 10/4, work and spot them every chance you get.

Field Day has just ended and now the club is in need of a volunteer(s) to head up the '09 event as I have "retired" as the FD Coordinator. Please contact Dick N4LT if you are interested in this important club leadership position. It will take someone that is "detail oriented" and is willing to devote some time to make sure all the needs are covered. This position can not wait until the last minute to fill – the club needs someone to take over the reins now.

TVDXA PERSONALITY

FOR SALE:

Most of this equipment belonged to W4HCS, a recent silent key. All equipment is working:

Yaesu FT 990AT HF Extra SSB filter and MDI Desk Mike, original manual, **\$625.00**

Yaesu FT 897, all-mode, built in 110V Power Supply and built-in tuner and LDG external analog meter, original manual, **\$875.00**

Kenwood H.T. THF6 3-band 2-meter, 220 and 440 AC-DC, Power charger and Maha Speaker Mic, original manual, **\$150.00**

Call Tab, 423-468-3541 (Home) or 828-507-5912 (cell); or email at nr4rr@comcast.net. All equipment is in Chattanooga.



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CONTESTING NEWS

SEPTEMBER 2008

DATE	WEEKDAY - TIME UTC	CONTEST NAME	MODE
1- 2	Mon 2300 - Tue 0300	MI-QRP Club Labor Day CW Sprint - CW	
2	Tue 0100 - 0300	ARS Spartan Sprint - CW	
4	Thu 1700 - 2100	10 meter NAC - CW/SSB/FM/Digi	
6- 7	Sat 0000 - Sun 2400	All Asian DX Contest - SSB	
6	Sat 0000 - 2400	Russian "Radio" RTTY WW Contest - RTTY	
6	Sat 0600 - 0800	Wake-Up! QRP Sprint - CW	
6	Sat 1300 - 1600	AGCW Straight Key Party - CW	
6-7	Sat 1300 - Sun 1259	IARU Region 1 Fieldday - SSB	
6-7	Sat 1300 - Sun 1300	RSGB SSB Field Day - SSB	
7	Sun 0000 - 0400	North American Sprint Contest - CW	
7-13	Sun 0001 - Sat 2359	FISTS Straight Key Week - CW	
7	Sun 1100 - 1700	DARC 10 m Digital Cont. "Corona" - DIGI	
7- 8	Sun 1800 - Mon 0300	Tennessee QSO Party - All	
7	Sun 2000 - 2359	QRP ARCI End Of Summer Digital Sprint - DIGI	
12-13	Fri 2000 - Sat 0200	(Your LOCAL time) 070 Club 80m Autumn Sprint - PSK31	
12-14	Fri 2300 - Sun 2300	G3ZQS Memorial Straight Key Contest - CW	
13-14	Sat 0000 - Sun 2359	Worked All Europe DX-Contest - SSB	
13-14	Sat 1300 - Sun 2100	South Carolina QSO Party - All	
13	Sat 1300 - 1859	Swiss HTC QRP Sprint - CW	
13-14	Sat 1400 - Sun 0600	Arkansas QSO Party (1) - CW/PSK/SSB	
13	Sat 1500 - 2100	QRP Afield - All	
13-15	Sat 1800 - Mon 0300	ARRL September VHF QSO Party - All	
13	Sat 1800 - 2400	SOC Marathon Sprint - CW	
14	Sun 0000 - 0400	North American Sprint Contest - SSB	
14	Sun 0000 - 2359	SKCC Weekend Sprintathon - CW	
14	Sun 1400 - 1500	SSA Månadstest nr 9 - CW	
14	Sun 1500 - 2400	Arkansas QSO Party (2) - CW/PSK/SSB	
14	Sun 1515 - 1615	SSA Månadstest nr 9 - SSB	
15	Mon 0100 - 0300	Run For The Bacon QRP Contest - CW	
17	Wed 1800 - 2000	MOON Contest - CW/Digi/SSB	
18	Thu 0030 - 0230	NAQCC Straight Key/Bug Sprint - CW	
18-20	Thu 1400 - Sat 0200	YLRL Howdy Days - All	
20-21	Sat 0300 - Sun 0300	JLRS Party Contest - Phone	
20-21	Sat 1000 - Sun 0400	Colorado QSO Party - All	
20-21	Sat 1200 - Sun 1200	CIS DX Contest - CW/RTTY	
20-21	Sat 1200 - Sun 1200	The 50th Scandinavian Activity Contest - CW	
20-21	Sat 1300 - Sun 1300	SRT HF Contest - SSB	
20	Sat 1500 - 1700	Feld-Hell Club Sprint - Feld-Hell	
20-21	Sat 1600 - Sun 0700	Washington Salmon Run (1) - CW/SSB/Digi	
20-21	Sat 1800 - Sun 1800	QCWA QSO Party - All	



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21	Sun 1600 - 2400	Washington Salmon Run (2) - CW/SSB/Digi
22	Mon 0000 - 0400	Fall QRP Homebrewer Sprint - CW/PSK31
24	Wed 0000 - 0200	SKCC Sprint - CW
25	Thu 1700 - 1900	BCC QSO Party - CW/SSB
27-28	Sat 0000 - Sun 2400	CQ WW RTTY DX Contest - RTTY
20-21	Sat 0300 - Sun 0300	JLRS Party Contest - CW
27-28	Sat 1200 - Sun 1200	The 50th Scandinavian Activity Contest - SSB
27-28	Sat 1400 - Sun 0200	Texas QSO Party (1) - All
27-28	Sat 1700 - Sun 1700	Coast to coast FISTS Clubs QSO Party - CW
28	Sun 0600 - 1000	ON Contest 80 m - CW
28-29	Sun 1300 - Mon 0700	Classic Exchange (CX) - Phone
28	Sun 1400 - 2000	Texas QSO Party (2) - All
28	Sun 1800 - 1900	CAV Contest - CW



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ANNOUNCED DX OPERATIONS

SEPTEMBER 2008

DATES		LOCATION/CALL	QSL VIA	INFO
2008 Sep01	2008 Sep15	Belize	V31HC	K7HC By K7HC; 80-10m, possibly 60m; CW SSB
2008 Sep02	2008 Sep08	Tuvalu	T2	See Info By JA1KAJ as TBD; 160-10m; SSB CW RTTY, perhaps PSK31 SSTVI; yagi + longwire; QRV for AA DX Phone
2008 Sep03	2008 Sep08	Cambodia	XU7YYY	7K3BKY By 7K3BKY fm Sihanoukville; mainly CW; QRV for All Asian DX SSB
2008 Sep03	2008 Sep12	Aruba	P41USA	W3TEF By W3BTX P43JB W3TEF; 160-2m; commemorating 9/11 attacks
2008 Sep04	2008 Sep08	Mariana Is	KH0	See Info By N2QP as KH0/N2QP fm Saipan (OC-086); QRV for AA DX Phone; QSL direct: Satoshi Kouya, 2-7-5 Iwamoto-cho, Chiyoda, Tokyo 101-0032, Japan
2008 Sep04	2008 Sep18	Netherlands Antilles	PJ2	LY4F By LY4F as PJ2/LY4F; all bands; all modes; QRV for WAE DX SSB perhaps as PJ2F; QSL OK via Buro or direct
2008 Sep04	2008 Sep14	Paraguay	ZP6	DL7VEE By DL7VEE as ZP6/DL7VEE fm ZP0R stn; 160-10m; CW SSB RTTY PSK; also DL7UFN w/ ZP6/DL7UFN (QSL via DL7UFN)
2008 Sep05	2008 Sep26	Tokelau	ZK3	By DJ7RJ DL2AH as TBD fm Nukunonu; exact begin and end dates uncertain
2008 Sep12	2008 Sep18	Svalbard	JW4LN	LA4LN Direct By LA4LN fm Spitsbergen I; 160-2m + 70cm, w/ JW1V on 60m; mainly CW, some SSB + digital, perhaps satellite; yagi for 20 15 10m, perhaps also 6m, wires
2008 Sep14	2008 Sep14	Sardinia	IQ0QP	See Info By Sardinia QRP Club fm Quirra I (EU-165); 40 20m; SSB CW; FT-817, KX1 etc; QRP; 09:00-16:00z; QSL direct: PO Box 81, 09047 Selargius - CA, Italy
2008 Sep15	2008 Sep20	Alaska	KL7	K6UMO Direct By K6UMO as K6UMO/KL7 fm Kodiak I (NA-019, AK-004S), Unalaska I (NA-059, AK005S), Attu I (NA-064, USI AK009S)
2008 Sep15	2008 Oct11	South Cook Is	E51NOU	N7OU By N7OU fm Rarotonga; 40-10m; CW only; low power; mostly spare time operation; will try to be QRV at grayline times to Europe



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2008 Sep18	2008 Sep27	Madagascar	5R8JM	F1BCS	By F1HDI + others fm Sainte Marie I; 160-6m + 144 MHz EME (5R8EM); SSB CW SSTV PSK31 RTTY; also 5R8GM on phone and 5R8IM in digital modes
2008 Sep19	2008 Sep26	Svalbard	JW7WCA	LA7WCA	By LA7WCA fm Spitzbergen; 160-10m; SSB, some CW; also LA8BCA with JW8BCA and LB9UE with JW/LB9UE
2008 Sep20	2008 Oct15	Glorioso Is	FR/G	F5OGL	By F5OGL F5PTM F5IRO F5PRU 5U5U TT8SS as TO4Gxx (TBA); 3 or 4 stations; operation very tentative and dates subject to change
2008 Sep21	2008 Oct05	Morocco	CN2IPA	HA3JB	By HA3JB; CW RTTY PSK SSTV, some SSB; QRV for CQ DX RTTY
2008 Sep23	2008 Oct06	Botswana	A25	DL7DF	By DK1BT DL4WK DL5CW DL7DF DL7UFR SP3DOI as A25/DL7DF; 160-10m; CW SSB + one stn dedicated to RTTY PSK31 SSTV
2008 Sep25	2008 Oct04	Montenegro	4O	Home Call	By DL3NER DL9MB DG5NGI DG5NGJ DG8NGI DK9NCX, as 4O/DL3NER and 4O/home_call; 160-2m; SSB CW RTTY PSK31
2008 Sep26	2008 Oct03	St Kitts & Nevis	V4	AH6HY	By AH6HY as V4/AH6HY fm St Kitts; 40-10m; SSB only; QSL OK via Buro or direct



Tensioning Guy Wires

from Bill Fisher, W4AN (SK) and Mark Lowell, N1LO

Rohn specifies that guys should be tensioned to 10% of the breaking strength of the guy size that is recommended for a particular tower. One rule of thumb is 8% if the guy is out at 100% of tower height, 10% if at 80% of tower height (standard Rohn drawings) and up to 15% if the anchor point is at 65% of tower height. You lose a lot of wind load in this last type of installation.

For Rohn 25, 3/16 EHS is recommended, having a breaking strength of 4,000 lb. Therefore, 400 lb tension is appropriate for Rohn 25 tower. The primary failure mode for Rohn 25 is in compression of the legs, so it is important not to over tension the guys, resulting in greater compression of the tower legs. 1/4 inch EHS is 6650 and tension should be 665 pounds for towers where 1/4 is specified by Rohn.

For Phillystran, there is some new information from the factory and it looks like it doesn't stretch as much as it 'relaxes'. What they recommend is that the Phillystran be initially tensioned to 15% of its ultimate breaking strength and then over time, it will 'relax' to the 10% desired tension. According to their chart, It goes from 15% down to 12% within about 10 hours and then finally reaching 10% within 30 days (a guess since their graph doesn't extend out that far).

The TIA-222 tower spec allows a tolerance of 1 part in 400 for tower alignment; that's 3 inches per 100 feet so your tower doesn't have to be perfectly plumb. Start with the bottom set of guys and an intermediate tension around 100 pounds, verify the plumb (or pull into plumb) using a long level (4-6 feet) and then adjust to the final tension. If all the guy anchors are at the same level, you only have to measure one guy; they should all be the same. Once you've got your intermediate tension and plumb, it doesn't take much travel in the turnbuckle to get to the final tension - maybe as little as 1 turn. Actually, using this method you don't need much turnbuckle to adjust. Going from 100# to 400# tension might be less than 6 turns of the TB, so there's not much problem with pulling the tower out of plumb. Move up to the next set and repeat until finished.

Use your arithmetic measurement for how long the guy should be and then make the piece of guy wire closest to the ground on that first one 10 feet too long. Since you are splicing the guys by insulating them this first one will give you a good feel for how close your arithmetic guesstimate is. i.e. if you have ten feet too much your math is one hell of a lot better than mine! I assume you are using a bolt cutters for cutting your EHS...they can be had cheap at flea markets...you have seen them they have the big long red handles and menacing black jaws. If you are using an AB Chance or similar anchor into the ground/concrete you have a closed eye that is your attachment point. You need to pass something through that eye which will act as a place for you to attach a come-along. Depending on the installation you use this will vary as you will need to try and avoid the actual guy wire's path as best you can. If you have an equalizer plate you can use an adjacent hole on the plate as an attachment point.

With the come-along and a Chicago grip (or another, second, guy grip applied several feet up the guy wire) moderately tension the guy wire. I say moderately so you don't pull the tower over or throw it out of plumb from the start. Once the guys are moderately taught check the tower for plumb, adjust the guy that needs to be tighter first and, if necessary, later on you can let out the far side guy(s). If you can tighten that first guy and bring the tower into plumb there is a good chance you will have also tightened the other guys in the process. If increased tension does not plumbize the tower, then you should consider letting out on the other guys. You will have a loose end pointing at your guy anchor with the come-along doing the work. I recommend you have a turnbuckle there as it will allow you to fine tune your adjustments later on. Start with the turnbuckle 3/4 out. With the force on the come-along, and the bottom side of the turnbuckle attached to your anchor you know how long the wild end of the cable needs to be. Cut it so that it corresponds to where it should end at the high side of the turnbuckle. Trim it, and marry it to the turnbuckle's upper end with a preformed guy grip. It should only take a couple of twists of the turnbuckle at this point to transfer the load off the come-along and onto the turnbuckle. It will take a couple of hits/misses for you to find how far up the guy wire to attach your come-along/Chicago grip so that you will not interfere with the turnbuckle, still be able to take up, and - be able to reach that upper point! Don't make it too high.



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We have had great luck with using the Loos gauge as a method for equalizing the force on the guy wires. While it may not give an exact number it does give you a repeatable number, strive to have all your guys have equal tension (this assumes the end points are all the same distance from the base of the tower, of course). If you are going into an equalizer plate, remember that as the other upper guys attach to the plate it should want to change its angle with respect to the ground as the later guys attach to it. This creates a situation where the bottom set will be drawn tighter than when initially installed. The best way to handle this is to compensate for it by having several inches of extra take up on the lower turnbuckle when it is originally installed so that they can be backed out as the upper guys tighten, allowing the eq plate to rotate. I encourage you to purchase a Chicago-Grip (the Florida Rednecks call it a Pork Chop...when you see it you will know why) - this device when used with the come-along makes the job of tightening the guy wires no big deal. Having a second person is a big plus on this job as you can really zip from one to the other with one guy in charge of attaching the hardware and the other in charge of tightening, etc.....I recommend a Dad!

After you have done the first level (assuming you took my advice and got that pork chop - don't leave home without it) you will zip through the subsequent guy levels. If you are a member of a club you might wanna encourage the club to buy a pork chop for all the members to use. We have used these techniques successfully, repeatedly. Oh yeah, one other thing - the pork chop is a great way to grab the lower end of your tram line when you are putting up your antennas....but, we will wait for you to ask about that in a month or so :-)

Using preforms, you do not cut the turnbuckle end of the guy wire at all. Just let it lay on the ground or coil it up if you like. Only when you are sure your tower has grown tall enough would you cut the excess length with bolt cutters.

Make sure you put a cable, or one of the long ends through all the turnbuckles to prevent them from loosening. Also, loop a cable through all of the thimbles (in a circle) in case one of the turnbuckles breaks. If you are afraid of vandalism, you should put the loop through the centers of the turnbuckles as well, rather than the loose end serving this purpose. The advantage of using the loose end, is that tightening of the turnbuckles requires less time, since no cable clamps need be removed.

To tighten the guys, I use a preform about 6' up each guy wire and a come along attached to the preform (lever end of come-along). The cable end of the come-along hooks at a convenient place on the anchor or equalizer plate. Make sure the tower is vertical to the first set of guys via 4' level (what I use) or plumb bob (never tried this). Then, as long as the first part of the tower is vertical, you can site up the legs to see which way you need to go with the rest of the guys. There will be interaction between adjustments of sets of guys.

Vibroplex Keys

If you have an old Vibroplex lying around the shack, the [Vibroplex Company](#) has a program to refurbish that old bug, clean it up and makes it as much like new as they can. Just send in one your older bugs and just get it back in super condition. It will run like a dream. If you are interested, just send it in (very well packed) to them and mark the package for "Betsy". She'll take it apart, shine it up and replace any worn or damaged parts." You might want to call first, of course.