

TEN-TEN INTERNATIONAL

NEWS

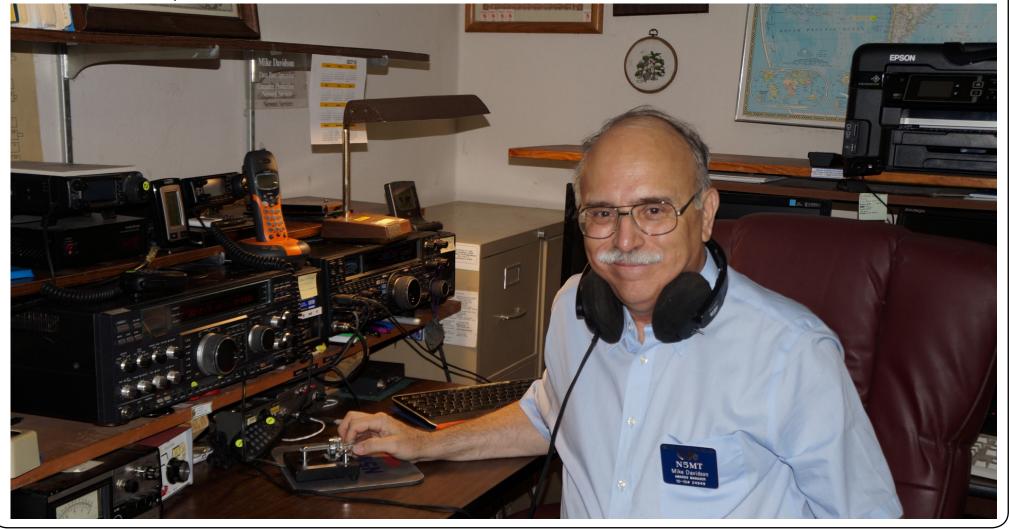


NEWS SERVICE

Volume 52 Issue $\overline{3}$

July 2015 (Summer)

Mike, N5MT First to Earn 10-10 Award for 300 Countries



The Ten-Ten International News

Is published four times annually by the TEN-TEN INTERNATIONAL NET, INC. Publication dates are approximately mid January, April, July and October.

Each paid-up member will receive a copy. This publication is the property of Ten-Ten International Net and the contributors therein. Permission to reprint is hereby granted, providing suitable credit is shown.

News items should be sent to the Editor. Technical articles and information on all 10 meter activities or news are welcome and solicited. All copy submitted must be typed, sent on computer disk or E-mail. Suitable formats will be provided upon request.

Photographs are encouraged. Black and White or Color are acceptable. Include complete information on the back of each photo. Attach a label or other suitable paper to the back of the photo and write all information on the label, not the photo. If sending digital images, high resolution of a minimum 300 dpi must be used. Please do not send newspaper or digitally printed photos as they cannot be used.

DEADLINE FOR NEXT ISSUE: 1 September 2015

PLEASE MAIL ALL ARTICLES AND PHOTOS TO:

EDITOR Ten-Ten News E-mail: editor@ten-ten.org

10-10 CHAPTER ACTIVITY REPORTS: Should be sent to the Chapter Coordinator ADDRESS CHANGES: All members should send address changes to the Data Manger NOTE: 10-10 IS NOT RESPONSIBLE FOR POSTAL SERVICE DIFFICULTIES

Net Officials3
From the Editor3
From the President4
Presidents Award5
New Life Members6
Ten-Ten Operator Award 6
Chapter Coordinator6
Ten-Ten Net Guide8
Scouting on Ten9
QSL Bureau News9
<u>DX News</u> 10
How I made 300 DX Contacts on 10 Meters12
2 Element 10-Meter Quad Antenna
Dayton 2015 Hamvention14
Net Report
30 Years as 10-10 Net Control
<u>QSO Parties</u>
W60I Information20
Scholarship Foundation
<u>DB, DBi and DBd</u> 21
<u>Ten-Ten Awards</u> 25
Award Managers26
Meet the Volunteers27
How I Got Started in Amateur Radio and Ten-Ten28
Silent Keys
<u>SK Sales31</u>
Annual 10-10 Board Meeting31
Raiding the Hardware Store32
Membership Information and Services34
QSO Party Rules 35

OFFICERS AND DIRECTORS

OTTIOET COTTO	010110
President	
Mel Sojka, KD5DE #33513 (2016)	
353 Atlantic Ave., Shreveport, LA 71150-2909	
(318) 861-7012	kd5de@ten-ten.org
Past President	
Gerry Gross, WA6POZ #21274	
1626 Shakespeare Dr., Tallahassee, FL 32317-8688	
(850) 877-8134	<u>wa6poz@ten-ten.org</u>
Vice President	
Larry Berger, WA2SUH #00407 (2016)	
9 Nancy Blvd., Merrick, NY 11566-3119	aOauh@aal.aam
(516) 223-4611	<u>wazsun@aoi.com</u>
Secretary	
Jerry Heien, N9AVY #43313 (2016) P.O. Box 193 Marengo, IL 60152-0193	
(847) 609-2806	n9avv@shcolohal net
Treasurer	<u>nouvytæobogiobul.net</u>
Keith Schlottman, KR7RK #63324	
6206 E. Pima St., Suite #2, Tucson, AZ 85712	
(520) 290-5883	. keith@schlottmancpa.com
Directors	
Robert L. Farrow, N6OPR #45715 (2016)	
23417 S 180th Street, Gilbert, AZ 85298	
(562) 631-1393	<u>n6opr@msn.com</u>
Ray Moyer, WD8JKV #20805 (2018)	
303 Westover Dr., Euless, TX 76039-2081	
(817) 283-8452	wd8jkv@ten-ten.org
Terry Webb, N0TW, #36547 (2016)	
1103 Fulford Road, Monticello, FL 32344-4352	
(614) 216-5334	n0twterry@yahoo.com
Paul Hemby, WN4AMO #73825 (2016)	
40601 Thomas Boat Landing Road, Umatilla, FL 32784-9702	
(386) 837-6101	phemby@hotmail.com
Marcus Lieberman, KM5EH #71103 (2018)	
2300 Hurley Dr. NW, Albuguergue, NM 87120-1013	
(505) 836-1724	buckml@lobo.net
Roger Olson, AD4RX #67754 (2018)	
1032 Anclote Dr., Tarpon Springs, FL 34689-2015	
(727) 934-5243	ad4rx@ten-ten.org
Cliff Taylor, K5FBS #48461 (2018)	
179 Mystic Lane, London, KY 40744	
(606) 312-2062	k5fbs@yahoo.com

Jeff Steinkamp, N7YG #65084 (2016) 6765 E. Rosewood Cir., Tucson AZ 85710

2

NET OFFICIALS

Certificate Manager Ruth Bartholomew, N0KDB #48715 1043 Franklin Court. Sullivan. MO 63080-5502 (573) 468-2898 or (314) 479-5474 <u>n0kdb@fidnet.com</u> **Chapter Coordinator** Cliff Taylor, K5FBS #48461 179 Mystic Lane, London, KY 40744 Data Manager / Supplies David Smith, K6RDK #65812 1349 Vernon Terrace, San Mateo CA 94402-3331 (telephone no. not available)......membership@ten-ten.org Editor 10-10 International News Randy Mather, AJ7B #7675 9625 101st Ave NE Arlington, WA 98223 editor@ten-ten.org General Counsel Net Manager Robert L. Farrow, N6OPR #45715 23417 S 180th Street, Gilbert, AZ 85298 QSL Bureau Manager Terry Webb, N0TW, #36547 1103 Fulford Road, Monticello, FL 32344-4352 QSO Party Manager Dan Morris, KZ3T #41015 3162 Covington Way, Lenoir, NC 28645 (828) 728-5049 <u>dbmorris315@gmail.com</u> Scholarship Manager Larry Berger, WA2SUH #00407 9 Nancy Blvd., Merrick, NY 11566-3119 SK Manager Ruth Bartholomew. N0KDB #48715 1043 Franklin Court, Sullivan, MO 63080-5502 (573) 468-2898 or (314) 479-5474 <u>n0kdb@fidnet.com</u> W60I Station Trustee Jerry Kopstein N9AC #61453 8041 W Lakeshore Drive Burlington, WI 53105 (262) 661-9094 treismine2@yahoo.com



From The Editor

Randy Mather, AJ7B (#7675)

This last quarter has been a busy one for me. Of course toward the end of each quarter there is the push to assemble this newsletter and get it ready for review and publishing. But other than that, between my local radio club, on-air activities like contests and nets, plus the "honey-do" list and the care around the property, I'm exhausted. Of course digging a 7 foot hole for my crank-up tower doesn't help much either. And somewhere in all that I found time to get to this year's Hamvention in Dayton.

Having never been before, the Hamvention was a real eye opener. And I mean bulging eyes at all the gizmos and gadgets one can get there. Met lots of people and heard lots of different stories. I guess that is just part of the ambiance of a hamvention. I hardly ever get to hamventions.

One very interesting part of my trip was being able to attend the 10-10 International Board meeting in Tipp City the day before the Hamvention opened. It was a pleasure to meet the board members who attended the meeting and spend some non-business time with them during meals and in the booth at the Hamvention. A very diverse bunch of people who have a strong desire to keep the 10-10 International Net not only going, but growing as well. As you will read in this newsletter, some interesting ideas were proposed and acted on that I am sure will help the organization move forward and grow. A very challenging goal when the band is pretty dead most of the time and the number of calls in the SK list keep growing each quarter. I am in total support of this team's goals and hope you will do the same. Please let them know where you stand and thank them for their dedication and efforts.

As I close this quarter's column, I want to encourage all members to get on the air and participate. Help bring in some new hams, both young and old. As I understand it, the number of licenses issued last year was up with more hams licensed now than before. A good trend in my mind. Let's find those new hams and get them involved in 10 meters. Even though the 10 meter band isn't cooperating very well at the moment, let's get the local chapters on the air and do what we can to make contacts.

73

Randy - AJ7B #7675



From The President

Mel Sojka, KD5DE (#33513)

UPPER LEVEL QRM

It seems as if the days are getting shorter. Or maybe we are time traveling. I am certain I was writing the April article last week. Maybe age is involved. Who knows? It appears that the current solar cycle is beginning to wane and since it was not the best of cycles, ten meters always gets the worse of it. Listen for the beacons, get your digital modes set up, and dust off the key. No matter what, call CQ. Don't just listen. 2015 has been a good year for me on CW. From my location, I never considered China on ten, but worked it twice this Spring. With a new member in India, I look for that contact as my lifelong goal on ten. I could have made the contact at Dayton but that would not count for anything.

As with many Amateur Radio organizations, it has been a struggle to maintain membership since 2009. That was when instant electronic communication became a worldwide phenomenon. Our problem is that the majority of our members are from the "Baby Boomer" generation. Numbers are declining due to age. Look at the SK listing in this edition. You will see many that were very active on the band. N0KDB recently sent me an update. One of the members listed had just taken first place in a QSO party and may have passed before his certificate arrived. It has been a struggle to maintain current membership for several years.

In response to this problem I made a concentrated effort last year to attend as many events as possible. Most of the time I manned the booth alone. The results were better than expected. I felt that the secret was renewals. Many expressed that they had lost the thrill of instant access. The Internet and social media present no challenge. The thrill was gone. This has given rebirth to the DIY experience. We had significant results from the outings. Nearly 10% of the renewals last year were a result of personal contact at hamfests. We also signed up 6 new members. (It is probable that there were more than 6 new members, it is just hard to track.)

With this in mind, a motion was made at the BOD meeting to equip the

Officials to attend events. The President and Vice President are required by the Bylaws and Operations Manual to represent Ten-Ten at events and respond to personal appearance requests. It is now apparent that all Officials need to share in this responsibility. This created a problem; how to fund this. As a result, it was moved that in the future the BOD would meet as the need arose via online conference. Several organizations have gone this route. This would allow BOD meeting costs to be channeled to membership growth and renewals.

The event attendance would, of course, be on a volunteer basis. Most of our Directors are now Seniors and even with time available there are limits to their travel. Due to issues here at home my travel in the future will be very limited. The age factor within the BOD and their family members is at play. Next year is election year and we need some new and younger Officials. Seventy is not considered old nowadays, but wait until you get close!

The BOD meetings will be announced and will be short sessions to deal with motions or needs when required. Access by the general membership will be possible, but limited to instant messaging the moderator of the session. Details will be announced via Breaking News on the website and over social media.

The BOD did consider the requirements to make a valid Ten-Ten exchange when operating mobile, using some digital modes, and CW. It was reaffirmed that the exchange will continue to be required during the contact. A program to allow after the fact look-up during QSO Party events of other organizations and DXpeditions is being investigated. This type of contact would have some requirements beyond normal Ten-Ten events.

It was moved that barring legal issues, Ten-Ten would sponsor and fund, in part, two DXpeditions during the Summer QSO party in 2016. These would be two member teams at two different locations. The members would be chosen by lottery draw. As soon as legal requirements are cleared, this will be announced and implemented on the web page.

The high point of the BOD meeting was the approval of the Scouts on Ten program. Many of you may be aware of the Stem Initiative developed to motivate and empower our young people to meet the demand for scientists, engineers, and technology specialists. History reveals that Amateur Radio has been a source of these skills and what better pool of candidates than the Scouts. Many of our members are Scouts, Scout leaders and/or have been Scouts. The Stem Program has tapped the Scouts as a source and it was voted that Ten-Ten become involved. This effort began at the ARRL 100 in Hartford when I was approached by a Scout Leader involved with the Stem program in New Mexico. I have appointed Director Moyer to establish our program. He is a retired Scout professional and highly qualified for this task. You will find a paragraph elsewhere in the News from him and his request for input.

It is my pleasure to announce that due to increased donations, next year

the Ten-Ten Scholarship Foundation will award, through FAR, five \$2000 scholarships. This is a significant increase from the three \$1500 scholarships awarded when I became your President. A little note; I spoke to the manager of FAR at Dayton. This year they awarded \$135,000 in scholarships.

The complete minutes of the BOD meeting will appear in the October News.

The official Gathering was a bit better than last. We will continue to hold one every other year as it appears to be successful. The Gathering should be held where we have a large Chapter presence. Maybe in 2017, the Texas Ham Com event would be a good choice. On the subject of Chapters, in 1991 we had 141 active Chapters affiliated with Ten-Ten. Currently that number is less than 60. During the minimum solar cycle, Chapters make the organization strong. Facebook and other social media do very little to create activity on 10 meters.

I mentioned earlier that my travels in the future will be limited. I will only be able to travel to events within a 200 mile radius of home. Family is a priority that must be accepted. I will continue to make as many events as possible and hope to have you sign the log at the events. The greatest thrill would be to work you on 10 meters.

God Bless & 73 Mel KD5DE

PRESIDENT'S AWARD 2015

Annually it is my pleasure to select the one member that has contributed to the organization beyond expectations. With such a large group of volunteers, all making efforts to maintain and strengthen the organization, it can be a stressful obligation. This year it is my pleasure to Award Clifford Taylor K5FBS #48461 the President's Award. Over the past 15 years Cliff has had to endure personal





loss, physical issues and most recently a major emotional crisis. Through all of this, he has continued to place a high priority on the status of our affiliated chapters. Historically, the Ten-Ten chapters gave the organization unity through local activity. We have gone from 150 chapters in the 90's to under half that many. This decline has caused problems that affect the very strength of Ten-Ten. We are beginning to discover that the social media can not replace local activity and does nothing to make use of the 10 meter band. Maybe it is time to organize and build local chapters? Ten-Ten owes a debt of gratitude to Cliff and his committee for the effort to maintain and grow chapters. May his efforts harvest many new chapters in the coming days.

Mel Sojka KD5DE #33513

President

NEW LIFE MEMBERS

12420	KB4XC	John B McMahon II	NC
15621	WD5CAY	Leonard D Cernuch	TX
20946	K5PX	James B Burnette	OK
64313	N5YOH	Lonnie W Philpott	SC
64337	KB5UNX	Morrie C Pickler	TX
67305	KD6MDV	Donald T Tribble	CA
76048	AE7OA	Michael F Nolan	OR
76432	W4EFB	Charles N Kaeff Jr	KY
77327	WB6ZJD	Francis S Nash	CA



Ten-Ten Top Operator Award

This award is based upon the number of times a member's call apppears on new applications. Quarterly winners are awarded a certificate. The overall winner for the year will be awarded a plaque. There are two categories; one for Net Control station and one for the current members at large.

The Top Operators for Q2 are:

Operator - N5MT Mike Davidson #24949

Net Control - K7CWS Ray Roberts #50288



Chapter Coordinator

Cliff Taylor, K5FBS (#48461)

GENERAL NEWS

- 1) If your chapter is planning a special sometime during the months of October, November or December, please let me know and I will announce it in the next newsletter.
- 2) During the months of March, April and May, the following chapters have sent in either quarterly reports or chapter updates, and, therefore, are alive and well: Alii, Aloha, Arizona Desert, Branding Iron I, Branding Iron II, City of Lights, Houston S.H.O.T., Keystone/Keystone Stars,North Georgia, Oregon Trail, Portland 500, Republic of Texas, Tango, Traildriver, and Windfarms. Many thanks to the officials of these chapters for keeping us up-to-date.
- 3) Over the years I have gotten queries about whether chapters are still going on or if chapter seals are still valid. There are a couple of places to check on chapters. The first place to look is on the 10-10 International Net, Inc., web site in the "10-10 Chapters" section under CHAPTERS.

Another place to look is on the internet on the WIN1010DL website and scroll down to the CHAPNAME listing. While there you can also view the SEALNAME listing for all current seals. If you are a Chapter Head or Certificate Manager, you will certainly want to look at the SEALNAME listing to insure that K4HAV through the Chapter Coordinator has your seals either shown or deleted as appropriate.

4) Some chapters are now, or will be going, on Summer hiatus until about Labor Day. The chapters that have notified me of this are the Colorado Centennial, Hanse and New Waterkant.

Just a Reminder for Quarterly Reports Due During the Next Few Months; (July '15) 10-Bar-X.

Quarterly Reports Currently Due: (This article was sent to the Editor on 31 May so any quarterly reports sent after that date will be noted on my notifications of "Changes to the 10-10 Chapters" section of the 10-10 website and included

in the next newsletter) (June '14) Channel Islands, (February '15) Route 66, (March '15) Kentucky Cardinal, Springbok, (April '15) New Mexico Mud Ducks, (May '15) Maine-iacs, Minutemen/Old Ironsides, (July '15) Chesapeake Bay, Fort McHenry/Cornerstone/Yodar Kritch;

CHAPTER NEWS

- 1) Chief Seattle: Several changes have been made to the chapter net times. Check the "Chapter Net Guide" for the current dates and times.
- 2) Major League Baseball: The Certificate Manager's new address is 23417 S 180th St., Gilbert, AZ 85298.
- 3) Neanderthal: The CM is PA2NJC, Nick Cox, Vlodropperweg 1 A, 6061AB Posterholt, Netherlands. Email address remains the same for upgrades to cm.neandrthal@t-online.de.
- 4) North Georgia: The net frequency for the chapter is now 28.410 MHz.

Chapters that Accept Upgrades Via Email (As of 1 June 2015)

All of the listed chapters generally need previous, new, and total points and seals claimed. Any transaction with the CM that requires that a certificate be issued, and most worksheet specials, should still be handled via US Mail. Also to be on the safe side, a detailed listing of the upgrade should be kept in the event that the CM should require verification. Requirements peculiar to a particular chapter are noted.

(* indicates change)

Alii - CM WH6S, wh6s@outlook.com. Use form available from the CM.

Bauxite - CM K5BKT, k5bkt@nwla.com - Bauxite and Arkansas Visitor #'s only

Bay Area - CM K6RDK, k6rdk@arrl.net

Boomtown - CM N5EBA, ed_cisse_neal@yahoo.com

Branding Iron – CM, <u>bic-cm@voits.de</u>

Branding Iron II - CM N5SCA, strelowdaryl@gmail.com

Castle Craig & Castle Craig Plus- CM N1API, n1api@cox.net

Chesapeake Bay- CM N3TGB, n3tgb@aol.com

City of Roses & Portland Bridges - CM K7PRZ, k7prz@isp.com

Colorado Centennial/ Colorado Frontier Gang/Centurion/Golden Aspen- CM WB0CON, wb0con@comcast.net..

Cradle of the Confederacy - CM K4PO, k4po@charter.net

Down Under- CM ZL1AFU, zl1afu@nzart.org.nz

Electric City - CM WA2OIZ, istillwell@att.net

Fort McHenry, Cornerstone & Yodar Kritch - CM K3TUJ, k3tuj@juno.com

Gold City- CM K4QHH, rabisch@hotmail.com.

Hanse - CM DL5HAN, dl5han@t-online.de

Houston S.H.O.T. - CM N5MT, n5mt@aol.com

Keystone & Keystone Stars - CM KA6GPC, ka6qpc@aol.com

Major League Baseball - CM N6OPR, n6opr@msn.com

Minuteman & Old Ironsides - CM WA1ENO, wa1eno@hotmail.com

Neanderthal - CM PA2NJC, cm.neanderthal@online.de

New Mexico Mud Ducks - CM KM5EH, buckml@lobo.net

New Waterkant - CM DK7LA, dk7la@t-online.de

North Georgia – CM W4GKF, 10X@chazcone.com or 10X@w4gkf.com

Oregon Trail - CM W7HO, w7ho@w7ho.com or w7ho@arrl.net

Portland 500 - CM W7HO, w7ho@arrl.net or w7ho@w7ho.com

Republic of Texas - CM WD8JKV, wd8ikv@ten-ten.org

Restoration Project- CM VA7SJ, ve7ssi@shae.ca

Sky Blue Waters & Tin Lizzie - CM KA0ZIA, sbwtl1010@gmail.com.

Santa Fe Trail- CM KA9PCU, ka9pcu@centurylink.net

Space Coast - CM K5FBS, k5fbs@yahoo.com

Speedway- CM W7CAR, w7car@yahoo.com

Springbok - CM (for all except Oceania, Asia) W4ZYD, w4zyd@bvu.net - CM

(for Oceania, Asia) ZL3KR, <u>zl3kr@clear.net.nz</u>

Steamboat Plus - CM KD5DE, kd5de@nwla.com

Steel City - CM KE9WZ, ke9wz@windstream.net

Trail Driver - CM N5SCA, strelowdaryl@gmail.com

Twin Cities - CM K0DBK, kzerodbk@gmail.com

These addresses are as current as the information you provide. If there are any additions, corrections or deletions to this list please contact the Chapter Coordinator, K5FBS, Cliff Taylor via email at k5fbs@yahoo.com or via "snail" mail to 179 Mystic Lane, London, KY 40744-9517.

TEN - TEN NET GUIDE As of June 1, 2015

					713 01 00	•					
DAY	ZSUM	ZWIN	Chapter Name	Location	Freq	DAY	ZSUM	ZWIN	Chapter Name	Location	Freq
SUN	0300	0400	Chief Seattle	Seattle, WA	28430	TUE	1800	1800	Electric City	Melbourne, FL	28425
SUN	1300	1400	Arlington	Arlington, VA	29200	T/W	2330	0030	Republic of Texas	Euless, TX	28560
SUN	1400	1500	Neanderthal/	Leichlingen, DL	28355	T/W	2330	0030	Minuteman/Old	Saugus, MA	28409
			Springbok						Ironsides		
SUN	1430	1430	Cincinnati Area Ten	Milan, IN	28960	WED	0001	0100	Castle Craig	Meriden, CT	28375
			Tuners			WED	0100	0100	Cincinnati Area Ten	Milan, IN	28800
SUN	1630	1730	Possum Trot	Raeford, NC	28345				Tuners		
SUN	1700	1800	Major League	Gilbert, AZ	28375	WED	0100	0200	Houston SHOT	Houston, TX	28488
			Baseball			WED	0100	0200	Gateway	St Louis, MO	28650
SUN	1800	1900	Portland 500	Portland, OR	28350	WED	0200	0300	10 Bar X	Canutillo, TX	28445
SUN	1900	2000	Oregon Trail	Dallas, OR	28803	WED	0300	0400	Chief Seattle	Seattle, WA	28430
SUN	1930	1930	North Georgia	Atlanta, GA	28610	WED	1430	1430	Branding Iron	Bergamen, DL	28345
SUN	1930	2030	Steel City	Eubank,KY	28420	WED	1700	1700	Gold City	Rutherfordtown,	28425
SUN	2030	2030	Santa Fe Trail	Galesburg, IL	28380					NC	
			/Springbok			WED	1700	1800	Channel Islands	Oxnard, CA	28340
SUN	2100	2200	Possum Trot	Raeford, NC	28150 CW	WED	1930	1930	Route-66	Boonville, IN	28370
MON	0001	0100	Chesapeake Bay	Chestertown, MD	28435	WED	1930	1930	Windfarms	Livermore, CA	28485
MON	0100	0100	Arizona Desert	Phoenix, AZ	28445	W/T	2359	0059	Battle Road	Mason, NH	28390
	0.400	2422	10-10 Net			THU	0001	0001	Cradle of the	Pike Road, AL	28350
MON	0100	0100	Milwaukee	Milwaukee, WI	28365		0.400		Confederacy	0	
MON	0100	0100	Lonestar	Arlington, TX	28460	THU	0100	0200	Gateway	St. Louis, MO	28650
MON	0130	0230	Bauxite	Benton, AR	28470	THU	0100	0100	Cow Town	Arlington, TX	28460
MON	2030	2030	Space Coast	London, KY	28355	THU	0100	0200	Milwaukee	Milwaukee, WI	28365
MON	2330	2330	Sky Bl Wtr/Tn Lzz	Inver Grove	28380	THU	0100	0200	Channel Islands	Oxnard, CA	28340
			/Twin City	Heights, MN		THU	0230	0330	Windfarms	Livermore, CA	28485
TUE	0001	0001	Branding Iron	Kemper, TX	28325	THU	0230	0330	Up The Crick	Eugene, OR	28450
TUE	0001	0100	Ft McHenry	Arbutus, MD	28370	THU	0300	0400	Chief Seattle	Seattle, WA	28430
			/Cornerstone			THU	1930	1930	Speedway	Rainer, OR	28350
	0.400		/Yodar Kritch			THU	2000	2000	Branding Iron	Kemper, TX	28345
TUE	0100	0200	CO Centennial	Lakewood, CO	28340	FRI	0001	0100	Fort McHenry	Arbutus, MD	28370
	0.400		/Frontier Gang	0.01 1 11	00450 044				/Cornerstone		
TUE	0100	0200	City of Lights	St Charles, IL	28150 CW	- FD:	0.400	0000	/Yodar Kritch	0 1 1 0 1	00000
TUE	0130	0230	City of Lights	St Charles, IL	28720	FRI	0100	0200	Pikes Peak Ten Ten	Colorado Springs	28390
TUE	0130	0230	Bauxite	Benton, AR	28470	- FD:	0040	0.440	O . I' . I	,CO	00000
TUE	0130	0230	OK Route 66	Oklahoma City,	28390	FRI	0310	0410	Kentucky Cardinal	Russellville, KY	28600
T	0000	0.400	D 4	OK	00.475	FRI	0310	0410	Kentucky Cardinal	Russellville, KY	28480
TUE	0300	0400	Bay Area	Hayward, CA	28475	FRI	1400	1400	New Waterkant	Boerm, DL	28355
TUE	0430	0430	Aloha	Hilo, HI	28490	FRI	2230	2130	Down Under	Auckland, ZL	28530
TUE	1500	1600	New Mexico Mud	Albuquerque, NM	28835	0	0001	0.4.0.0	(Summer in NZ is Winter	,	00777
T. 15	4000	4700	Ducks	0 111 1414	00.400	SAT	0001	0100	MAINE-iacs	North Haven, ME	29777
TUE	1630	1730	Chief Seattle	Seattle, WA	28430	SAT	0300	0400	Chief Seattle	Seattle, WA	28430

DAY	ZSUM	ZWIN	Chapter Name	Location	Freq
SAT	1330	1430	Springbok	Abingdon,, VA	28385
SAT	1430	1530	Steamboat Plus	Shreveport, LA	28430
SAT	1400	1400	Hanse	Hamburg, DL	28355
SAT	1500	1600	Republic of Texas	Euless, TX	28460
SAT	1510	1610	Louisiana Pelican 10-10 Net	Livingston, LA	28450
SAT	1600	1700	City of Roses Portland Bridges	Ridgfield, WA	28835
SAT	1630	1730	Boomtown	Burkburnett, TX	28402
SAT	1730	1730	Tango	Buenos Aires, LU	28650
SAT	1800	1800	Keystone/Keystone Stars	Brea, CA	28765
SAT	2000	2000	Restoration Project /Feline Friends	Port Alberni, BC	28750
SAT	2200	2200	Alii	Lihue, HI	28730

All changes to the above times and/or frequencies should be referred to the Chapter Coordinator if you desire your net information to be accurate. Chapter Coordinator: K5FBS, Clifford A Taylor, 179 Mystic Lane, London, KY 40744. E-mail: k5fbs@yahoo.com.

There are also various 10-10 daily SSB nets (except Sunday) on 28.800 and 28.380 MHz. Information on these nets showing day of week and net control stations is listed under the category "Daily Nets" on the website.

SCOUTING ON TEN

Yes, Scouting on Ten is a new Chapter that will be developed as part of the Ten-Ten International Net. The Board of Directors voted to begin this great Chapter.

Our first task is to identify any of the Boy Scouts that may already be part of Ten-Ten and all the Scouter's that are involved in both Ten-Ten and Scouting. Also we are looking for suggestions on how we can involve the Scouts in our local Chapters, contests and other events like their JOTA, (Jamboree on the Air). What can Chapters do to merge Scouting into your Chapter? Looking for your thoughts, ideas and potential plans in your Chapter or area.

Ideas

- 1. Special Category just for Scouts
- 2. Worked all Scouts Awards
- 3. Promote Scout Events like JOTA
- 4. Local Chapters add Scouts to award programs
- 5. Awards available for working scouts, scouters, events and camps

Let's get started

- 1. Who are Scouts and Scouters
- 2. Ideas for Awards
- 3. Ideas for their involvement

Please contact Ray Moyer WD8JKV #20805

wd8jkv@ten-ten.org

QSL Bureau News

Are you wondering if you have QSLs and/or envelopes at the QSL Bureau?

On the 10-10 Web page is a tab for "Resources". Under that is a tab for "QSL Bureau". On the QSL Bureau page is a box that if you type in your call sign, it will tell you the number of cards and envelopes that are at the bureau.

http://www.ten-ten.org/index.php/resources/gsl-bureau

With poor band conditions the past few years, QSL activity have been slim. With the current band improvements, I expect activity to pick up. With this improved activity, I recommend that you get 1 or 2 envelopes on file at the bureau.

Before sending QSLs to the bureau, it is a good idea to check to see if those hams have envelopes at the bureau. You can do this by using the box mentioned earlier in this article. If you send QSLs to hams without envelopes at the bureau, your QSLs will just sit at the bureau.

It should be noted that you do not have to be a current paid 10-10 member to use the QSL Bureau.

You can make QSOs on any band with other 10-10 members and use the bureau for your QSLs.

Please direct all questions/comments to the QSL Bureau Manager. Terry Webb, at n0twterry@yahoo.com.

Use the following address to send QSLs and envelopes to the Bureau.

Terry Webb 1103 Fulford Road Monticello, FL 32344-4352



DX News

Mike Davidson, N5MT (#24949)

The solar flux numbers in mid-May were down from an average of 156 to 123 from the previous month. The number of sunspots drifted lower reducing the solar flux energy accordingly and our ten meter propagation! Sunspots do not equate to solar flux. The solar flux is an electrical measured number and sunspots are counted on the surface of the sun. Do an internet search and check out the differences between sunspots vs solar flux.

The 10-10 Spring CW QSO Party and the Digital Party were not popular events by our members this past quarter. During the CW weekend, I could not operate on Saturday and only made a few DX contacts on Sunday. My digital setup is still not ready to make contacts but that project will get fixed soon as I do not want to miss the rare DX that might only show up on Digi.

I am getting ready for the big HamCom weekend two weeks from now on June 12-13 in Irving, Texas which is actually Dallas. The old Plano facility was not big enough for a Texas size convention so they moved it this year to Irving which is near the big airport. There will be a 10-10 table at HamCom, so come out to the Irving Convention Center, say hello and sign the book.

In the summer months the Earth tilts and in the USA we usually do not hear Europe or Asia on Ten meters. The other factor that is affecting propagation, is a lower solar flux, so our chances of talking to these DX places as been greatly reduced. There is not as much flux to bounce our radio signals across the ocean. We will have to wait until winter time to hear Europe and Asia.

The next big operating event in the USA will be Field Day on June 27-28th. I expected a solar flux of 110-115 for the Field Day this year and even though this is an ARRL event, please get on and make some ten meter contacts! The band should be open for one hop skip in the USA. You can always ask for a 10-10 number when you work a home station or mobile. Most club stations at Field Day will not have a 10-10 to swap, unless you find a member that happens to be operating.

I received an email from a friend Max **KE5JA** #5185 who moved to A9 Bahrain in November 2014. Max works in Jubail, Saudi Arabia for an oil

company which is just across the border from his weekend home in Bahrain. His Saudi call sign is **7Z1JA**. Max has full residency in both countries so he is just waiting for the A9 license. He will operate from A9 for future contest on weekends and hopefully the call will be A93JA. Max expects to be living in Bahrain for the next three years as he just moved from UA9 Asiatic Russia where he had call sign RA/KE5JA. His new address in Bahrain is not posted on qrz.com. Just use the LoTW for a QSL.

Editor note: In the 1980's, Keith A92P #35025, lived in Bahrain for about six years but he moved back to England. Max may soon provide us with a muchwanted contact from A9 Bahrain. I still need A9 in my log.

I am posting this to the 10-10 website on June 1st.

Countries Award: There was one Basic Countries Award and five upgrades issued to four members this past quarter. We have a new record for 10-10 countries worked, 300 by myself N5MT. When you apply for any 10-10 award, you must have your dues paid up, use a form at the 10-10 website or special software that prints the correct 10-10 forms for emailing.

GENERAL 10-10 DX REPORTED IN THE PAST QUARTER

3D2 Figi Island. Wes **ZL3TE/W3SE** #53431, was back in Viti Levu using call sign 3D2SE from April 10-13th. Wes uses only CW and digital modes. LoTW.

8R Guyana. Esmond **8R1AK** #72405, used a special call sign 8R8AK during May 2015.

A6 United Arab Emirates. Andy **DK5ON** #54260, was active as A6/DK5ON from Abu Dhabi and Dubai, between March 18-27th. Activity was on CW, SSB, RTTY and PSK31.

A9 Bahrain. Chuck **KY4P/A92AA/S9SS** #16955 was active on SSB and Digital using call A92AA from Manama, Bahrain in April and May. He used a special call sign A9150ITU in May.

C6 Bahama Islands. Eric **K9GY/C6AYM** #22330, was on the main island from May 27 to June 1st plus in the WPX CW contest. LoTW. Dan **N8YSZ** #69426, was on Long Island from May 9-16th using SSB and Digi.

CU Azores. Dave **K1ZZ** #4852, operated as CU4DX from Graciosa Island in the CQ WPX CW contest.

EA6 Balearic Islands. Juerg **HB9BIN** #40947, was portable using EA6/HB9BIN from April 8-16th on CW from the Balearic Islands.

DU Philippines. Hannes **OE3SGU** #61527, operated from Luzon Island, from March 25th to April 20th mostly on CW but also digital and SSB. LoTW.

DX0P/1S Spratly Islands. A DXpedition to Pagasa Island in the Spratly group from April 16-23rd. Billy **WE6DX** #64115 was the only 10-10 member.

E3 Eritrea. A DXpedition to Eritrea in East Africa took place from March 6-17th using call E30FB. The 10-10 members were Paul N6PSE #68859 and Dmitri **KP2P/RA9USU** #54234. There were eight ops total, using beams and amps from this rare country.

E5 South Cook Islands. Doug **W6HB/E51DLD** #68854 and Claris **W0VFT/ E51VFT** #33058, were active from South Cook from May 19-24th but the DX packet cluster did not show any ten meter contacts.

FP St. Pierre & Miquelon. Eric **FP/KV1J** #31247 was on the island from February 26th to March 10th on CW, SSB & RTTY.

FS St. Martin. Otis **NP4G** #36218 operated CW on Saint Martin from May 24-29th and using low power.

HP Panama. Tim **HP3/NL8F** #32796, was a guest of HP3AK from February 27th to March 9th using the amp and good antennas of his host on SSB.

P40 Aruba. Dave **K3LP** #13394, was back in Aruba at the P40V station from May 19-23rd. Dave NU4N #26802, was active from P49V, http://www.p49v.com on Aruba from May 26th to June 2nd including the CQ WW WPX CW Contest.

T4 Cuba. Doug **CO8DM** #72112, was active in the WPX CW contest from May 30-31st as T49A.

TF Iceland. Rene **DL2JRM** #69623, operated from Iceland for a short time on March 20-22nd.

V6 Micronesia. Sho **JA7HMZ** #30900, was in Pohnpei, Federal States of Micronesia and operated with call sign V63DX from April 17-24th exclusively on CW.

VQ Diego Garcia Island. Bob **N7XR/VQ9XR** #26991, was using an IC-7600 into a SpiderBeam, was back on Chagos operating from March 19-27th.

YJ Vanuatu. Haru **JA1XGI/E6XG** #55571 operated as YJ0XG from Port Villa, Vanuatu from April 12-18th. This was just after the typhoon hit the island in March.

UPCOMING DX AND NEW 10-10 ACTIVITY

4U1 UN Geneva. The **4U1ITU** #11111 club station will use a special prefix call 4U0ITU the rest of 2015.

C6 Bahamas. Ed **AA7A** #11185 and Larry **WO7R** #43471, will be on Eleuthera Island from June 7-16th.

E5 South Cook Islands. Haru **JA1XGI** #55571, will operate from the South Cook as E51XGI from December 2-10th, which is just before the ARRL Ten Meter contest.

FK/TX3X Chesterfield Island. A DXpedition to Chesterfield Island will happen from October 1-12, 2015. The 10-10 members are: Arnie **N6HC** #29959 who is their team doctor, David **N6HD** #13064, Gene **K5GS** #15119 and Ross **K6GFJ**

#32680. Arnie has operated from places like: St. Brandon, Clipperton, Midway, Kanton, Kiribati, Swains, Banaba, Christmas and FT5ZM Amsterdam Island. Chesterfield is the 23rd most wanted country with past 10-10 activity but do not miss this DX adventure to put a new one in your log. Web site is: http://www.tx3x.com.

HP Panama. Jose **HP2AT** #42071 will use the special call H32AT all year during 2015.

KP2 US Virgin Islands. Craig VE3OP will use club call **KP2M** #75928 during a July 11-26th trip. Ask for the KP2M club number as Craig is not a 10-10 member.

OZ/5P Denmark. Volker **DJ8VW** #69216, will be on Romo Island from December 6-21st, 2015, using call sign 5P8VW on CW and SSB. LoTW.

T30/T32/T33 W. & E. Kiribati & Banaba. Haru JA1XGI #55571, has changed his plans to go to the T3 islands. He will be on South Cook Islands in December.

VP2M Montserrat. Ken **W0ETT** #9620 and Greg **W0ZA** #15171, will be active as VP2MKV from June 10-18th. LoTW.

VR Hong Kong. Dave **K3LP** #13394 is expected to use call sign VR2KF sometime in October 2015. From there he will be on a cruise ship for two weeks ending up in Singapore. He may visit A6 Dubai in October.

W USA. Leslie **AD5WB** #74524, will be on Galveston Island, Texas, from June 6-7th next to the tall ship Elissa for Museum Ships Weekend mostly SSB but some digi.

XW Laos. Ken **K4ZW** #18573 operated in Laos last year and expects to return to Laos later in 2015.

Miscellaneous Items & Notes

Propagation forecast: http://www.solen.info/solar/ .

DX Calendar: http://www.dxwatch.com/ .

More propagation: http://dx.qsl.net/propagation/.

DX: http://www.youtube.com/watch?v=k4dJcK-WVRw.

Propagation: The maximum flux was 193.5 in February 2014, 181.4 in November 2014 and in 2015, the highest was 172 on January 29th. No one knows why we had two solar flux peaks in this cycle similar to the previous cycle. I expect the solar flux to range from 90-145 this next quarter, which is down from the past three months. Since the change of season for the USA, we are not hearing Europe this summer, and QSO scores have been down for the CW and Digi QSO parties. If the solar flux remain lower, the Summer QSO party may have less than the 118 members who participated in 2014. Remember the Open Season event runs the first weekend in June 6-7th. The

Spirit of 76 party runs for seven days during the July 4th week and ends on Sunday the 5th.

On June 1st the solar flux was 94, the A index was 5 and K index 1. That is a 33 point drop in the solar flux since last quarter! In the next four months, look for the best conditions: June 2-3rd, July 1-3rd & 27-30th, August 23-26th and September 22-26th. Conditions for the 2015 Field Day look great for a flux of 110-115 for the June 27-28th contest which will be down 30 points from the 2014 FD level. Over the next four months, for USA stations, expect no chance of DX to Europe or Asia. In the afternoon, look for South America and into the South Pacific later in the day or after sundown. Just listen to the beacons from 28.175-28.300 (especially 28.200) so you will know which direction the beacon is transmitting from and the DX is open towards.

NEW 10-10 DX MEMBERS MARCH TO MAY 2015

March: 77295 VE2BR; **April:** 77311 KH7MS, 77315 EA3GCT, 77318 DO8LEO; **May:** 77341 VU2RBI.

Thanks to the QRZ-DX, The Daily DX by W3UR #25731 and the Ohio/Penn DX Bulletins. Info to Mike Davidson, 3518 Bellefontaine, Houston, TX 77025 USA Email: N5MT@aol.com.

HOW I MADE 300 DX CONTACTS ON 10 METERS

The long road of 10-10 DX chasing started in 1979 when I received my General class license and became a 10-10 member. I soon found out that if you want to be a serious DX'er, and work all 340 ARRL countries, that I would need all the available radio spectrum possible. So by 1982 I had received my Extra license. I set my sights on getting to ARRL DXCC and began to work on the new 10-10 Countries award. 10-10 requires 25 countries for the Basic Countries Award whereas the ARRL requires 100 countries for their DXCC Award. Back then I had a four element antenna on a 75 foot tower, a good radio and amp so I was in great shape as to my equipment. My QSO records were kept on paper but I had a IBM computer at my office with punched cards and a printer for making applications and certificate lists.

My first five bar awards were submitted using the IBM computer, for my 500 bar award where I am still at today, even though I have worked over 17,300 members, 2,200 USA counties, 1,600 prefixes and 300 countries! It just takes so much time to keep the computer records up to date, participate in the QSO parties as Chapter head and weekly net control for the Houston SHOT chapter, plus doing the DX News each quarter and manage the 10-10 Countries Award. So, I limit myself to what awards that I try to keep correct and submit so that means the DX Countries Award!

When the Countries Award began in September 1981, there were 52 members that submitted at least the minimum 25 contacts on their application for the new

award. All members that qualified were put in a pool to have their certificate number assigned by lottery. Alan Sherman K1AS/sk #10781 was the first Countries Award manager which is the ARRL equivalent of the DXCC desk. In the early days of 10-10 DXing you had to collect the QSL cards to verify your contacts. All the rules for ARRL DXCC were used by the 10-10 Countries Award. The Basic award required 25 contacts and 25 QSL cards to be checked. The upgrades began in increments of 10 contacts for 35, 45, 55, 65 and 75 bars. At 80 countries, the increments changed to 5 contacts. Several of us submitted more than the minimum of 25 contacts so I got 35 Bar #18, and 45 Bar #10. Five members got their 55 Bar the next month, but it took me until May 1982 to get my 55 Bar #10. It was not until April 1984 when I got to my 100 Bar #6 so there were six other members chasing the Countries Award!

In April 1983, Bernice Tielemann N9CDO/sk #20025 got to 100 countries first! Bernice's picture was on the next issue of the 10-10 News and what I would like to name the 10-10 DX Hall of Fame which is anyone who talks/works 100 countries, swaps 10-10 numbers and submits for the countries award, should be in the 10-10 DX Hall of Fame! We have 52 members that qualify for the DX Hall of Fame as of today and there are only 13 members that have 150 countries. There are only 3 members with 175 countries and one of them is a silent key, Josef Pusch DJ4BE #49153. The other members are Mike Warnock K7XN #41483, who is still at 175 countries and myself. Joe DJ4BE made it to 210 countries before he died in 1994. I had 225 countries in August 1993, 250 countries in May 2001, 275 countries in Feb 2003 and finally last month in March 2015, I received my 300 countries Bar #1.

The quarterly DX articles that I have been publishing in the 10-10 News and more recently on the 10-10 Website, started in June 1990 so this is my 25th vear being a DX editor. Thanks to a fast personal computer, a good word processor, email and 10-10 software from Jim Hardy K4HAV #17605, I have been able to keep myself and our members informed about members going to DX places around the world for the past twenty-five years. When I took this job I had about 175 10-10 countries in my log and like everyone else trying to get a QSL card for all the new ones. At the same time, I was working on the ARRL DXCC award and I was on the DXCC Honor Roll which is defined as within ten of working them all. ARRL Number One Honor Roll took place in September 2002 when I worked Ed Giorgadze P5/4L4FN #72722 who was in North Korea with the UN Food Program. I helped get Ed his membership as I did all his paperwork and sent it to the DX manager Carol Hugentober WA8YL/sk #29588. Carol issued the 10-10 number and sent it to me so I could give it to Ed over the air for a new 10-10 country. I took care of his dues at the same time that I sent in the membership paperwork to Carol. Over the years I have helped about ten DX members get their membership, like Jim VK9NS, Tony T77C, Marion Island ARC ZS8MI and others.

The radio has changed in my radio room several times but the 4 element Yagi antenna on the tower is still the same. It has worked 325 countries for ARRL DXCC. For 10-10, I missed a few that others have worked but about 20 countries have never had a member operate from their boundaries.

More history of the Countries Award: The second manager of the award was President Tom Henderson K4CIH/sk #33233, who began to computerize the records from Alan K1AS. Russ Gathier N5EJS #1525 took over and completed the computerization of all records in 1996. Russ found a count of 283 countries in 1998 composed of 449 US awards and 94 DX members representing 23,000 contacts. Since April 2001, I have been the Countries Award manager and I have been keeping track of all new countries. Will we ever work them all, probably NO! All the rare places are restricted, have no one living there or some problem: like Mount Athos, Jan Mayen, Vatican, and Arctic islands. All these places do not have a 10-10 member so it will take a visitor to get on and have permission to operate before we can put these rare places in the worked column for 10-10. Anyone want to get Monk Apollo his 10-10 membership? There are 640 Basic Countries Award certificates issued so search through your records and submit for the award.

73

Mike N5MT #24949

2 ELEMENT 10 METER QUAD ANTENNA

This article is geared towards 10-10 members who may be interested in building an antenna with gain and directivity.

The Quad antenna is simply 2 square wire elements mounted on a 5 foot boom. A chain link fence post makes a suitable boom although aluminum pipe (1 $\frac{1}{2}$ to 1 $\frac{1}{2}$ inches in diameter) works well also.

For a design frequency of 28.4 MHz, the Reflector element needs to be 36'-3" in length while the Driven Element needs to be 35'-5". The Driven Element requires an insulator to break up the wire loop while the Reflector Element is continuous (no insulator).

Now the Quad has a feed point impedance of about 100 ohms. If you connect your coax cable directly to the Driven Element there will be a problem with SWR. It is possible to use Gamma, Omega, Delta and other type matches to get the SWR down to close to 1 to 1 SWR. However, any adjustments made with the Quad near the ground will be affected once the antenna is raised to its operating position off the ground. The matching method that I use is the quarter wave matching transformer.

While its name sounds complex, in reality it is really simple to build the quarter wave matching transformer. Let's start with a design frequency of 28.4 MHz.

The wavelength for this frequency is 34.65 feet. $\frac{1}{4}$ of this length is 8.66 feet. Now, we have to multiply 8.66 feet times the velocity factor of the matching coaxial cable.

The matching coaxial cable impedance <u>can't</u> be the same impedance as the 50 ohm feed line coax. To determine what impedance it needs to be, take the quad impedance (100 ohms) times the feed line impedance (50 ohms) = 5000. Take the square root of 5000 and it is 70.7 ohms. RG11 and RG59 are both 75 ohm coaxial cables and will work well for this application. Which ones to use? Well, if you plan to only run 200 watts or less, use RG59. More than 200 watts, use RG11.

If we use RG11, the matching section becomes $8.66 \times .75 = 6'-6''$. Simply connect the matching section to the feed point of the quad and plug the 50 ohm feed line into the other end of the matching section and you are matched. No adjustments necessary and it works great once the antenna is hoisted to its final height.

Regarding spreaders, they need to be slightly less than 7 ft in overall length. Fiberglass makes excellent spreader material while <u>pvc pipe does not</u>. Google fiberglass on the internet and you will find companies selling this product. I use 4 ft 3/4" O.D. fiberglass tubing with 4 ft ½" solid round fiberglass for end sections. This allows 1 ft of overlap of the solid stock inside the tubing.

This article is not a complete design article in that it does not contain photos or a complete description for how to mount the spreaders to the boom, etc. It is my desire that any 10-10 member who wants to build a quad e-mail me and I will answer any construction questions regarding the build.

I run a 4 element 4 band quad with the top of the antenna at 80 feet. It should be noted that the quad also works well at lower heights. I am sold on the Quad's performance.

Terry, N0TW #36547 notwerry@yahoo.com

DAYTON 2015 HAMVENTION

The 10-10 International Net was well represented at this year's Hamvention in Dayton. A number of board members and I stayed after the board meetings and spent some time in the 10-10 booth. This year 279 people signed the log and 39 members renewed their 10-10 membership.



Mel KD5DE explains the 10-10 pins to a visitor. Also in the booth are Larry Berger WA2SUH and Roger Olson AD4RX.

A real bonus this year was the addition of two new members. One of those new members is Bharath VU2RBI from India. Mel said it was a banner year for us this year.



From left: Gerry WA6POZ, Mel KD5DE, Bharath VU2RBI, Jerry N9AVY, Rav WD8JVK, Roger AD4RX

As this was my first time to the Dayton Hamvention, I was impressed with its size and vendor depth. I understand that the attendance was much more impressive in size and scope in the past, especially the flea market area. It was difficult to keep my wallet in my pocket. At least I didn't have to get a second mortgage on my house.

73

Randy - AJ7B #7675

THE AMATEURS CODE by Paul M. Segal, W9EEA (1928)

The Radio Amateur is:

CONSIDERATE..... never knowingly operating in such a way as to lessen the pleasure of others.

LOYAL..... offering loyalty, encouragement and support to other amateurs, local clubs and the American Radio Relay League, through which Amateur Radio in the United States is represented nationally and internationally.

PROGRESSIVE..... with knowledge abreast of science, a well built and efficient station, and operation beyond reproach.

FRIENDLY..... with slow and patient operation when requested, friendly advice and counsel to the beginner, kindly assistance, co-operation and consideration for the interests of others. These are the hallmarks of the amateur spirit.

14

BALANCED..... Radio is an avocation, never interfering with duties owed to family, job, school or community.

PATRIOTIC..... with station and skill always ready for service to country and community.

0



Net Report

Bob Farrow, N6OPR (#45715)

Net reports for first quarter 2015 MONDAY NETS

	- 28.38 MHz			28.80 MHz	
DATE	TOTAL	NO 10X#	DATE	TOTAL	NO 10X#
5-Jan	2	0	5-Jan	16	0
12-Jan	2	0	12-Jan	18	1
19-Jan	2	0	19-Jan	21	0
26-Jan	2	0	26-Jan	22	1
2-Feb	32	1	2-Feb	14	0
9-Feb	9	0	9-Feb	26	1
16-Feb	23	2	16-Feb	17	0
23-Feb	4	0	23-Feb	29	1
2-Mar	53	11	2-Mar	16	0
9-Mar	36	3	9-Mar	17	0
16-Mar	14	1	16-Mar	21	1
23-Mar	2	0	23-Mar	17	2
30-Mar	2	0	30-Mar	22	2

TUESDAY NETS

	- 28.38 MHz			28.80 MHz	
DATE	TOTAL	NO 10X#	DATE	TOTAL	NO 10X#
6-Jan	29	6	6-Jan	10	1
13-Jan	34	6	13-Jan	11	0
20-Jan	19	2	20-Jan	12	0
27-Jan	34	3	27-Jan	11	0
3-Feb	32	2	3-Feb	10	0
10-Feb	50	14	10-Feb	16	0
17-Feb	44	6	17-Feb	14	0
24-Feb	37	3	24-Feb	11	0
3-Mar	31	3	3-Mar	11	0
10-Mar	31	5	10-Mar	18	1
17-Mar	4	0	17-Mar	9	0
24-Mar	24	6	24-Mar	16	2
31-Mar	41	8	31-Mar	31	8

WEDNESDAY NETS							
	- 28.38 MHz -			28.8 MHz			
DATE	TOTAL	NO 10X#	DATE	TOTAL	NO 10X#		
7-Jan	8	1	7-Jan	7	0		
14-Jan	23	3	14-Jan	16	1		
21-Jan	27	2	21-Jan	14	1		
28-Jan	30	4	28-Jan	7	0		
4-Feb	40	7	4-Feb	10	0		
11-Feb	42	5	11-Feb	10	0		
18-Feb	37	5	18-Feb	11	1		
25-Feb	35	5	25-Feb	25	3		
4-Mar	43	2	4-Mar	14	1		

THURSDAY NETS

11-Mar

18-Mar

25-Mar

11

11

42

36

11-Mar

18-Mar

28-Mar

	- 28.38 MHz			28.80 MHz	
ĎATE	TOTAL	NO 10X#	ĎATE	TOTAL	NO 10X#
1-Jan	0	0	1-Jan	20	1
8-Jan	2	0	8-Jan	25	3
15-Jan	2	0	15-Jan	14	3
22-Jan	23	4	22-Jan	22	2
29-Jan	28	2	29-Jan	15	1
5-Feb	0	0	5-Feb	10	0
12-Feb	34	4	12-Feb	15	2
19-Feb	27	2	19-Feb	11	2
26-Feb	33	3	26-Feb	13	0
5-Mar	44	9	5-Mar	14	2
12-Mar	34	8	12-Mar	10	0
19-Mar	4	0	19-Mar	16	2
26-Mar	40	15	26-Mar	8	0

FRIDAY NETS

	- 28.38 MHz			- 28.80 MHz	
DATE	TOTAL	NO 10X#	DATE	TOTAL	NO 10X#
2-Jan	37	12	2-Jan	12	0
9-Jan	31	5	9-Jan	16	2
16-Jan	25	1	16-Jan	10	1
23-Jan	31	4	23-Jan	12	0
30-Jan	51	4	30-Jan	8	0
6-Feb	42	8	6-Feb	18	3
13-Feb	40	5	13-Feb	10	1
20-Feb	53	11	20-Feb	15	1
27-Feb	46	6	27-Feb	13	2
6-Mar	42	4	6-Mar	17	0
13-Mar	33	5	13-Mar	4	0
20-Mar	42	10	20-Mar	10	0
27-Mar	39	5	27-Mar	13	0

SATURDAY NETS							
	- 28.38 MHz			28.80 MHz -			
DATE	TOTAL	NO 10X#	DATE	TOTAL	NO 10X#		
3-Jan	42	11	3-Jan	0	0		
10-Jan	34	2	10-Jan	0	0		
17-Jan	23	1	17-Jan	0	0		
24-Jan	43	10	24-Jan	0	0		
31-Jan	46	5	31-Jan	0	0		
7-Feb	56	13	7-Feb	0	0		
14-Feb	35	4	14-Feb	7	0		
21-Feb	38	0	21-Feb	4	0		
28-Feb	42	5	28-Feb	10	1		
7-Mar	*	*	7-Mar	17	0		
14-Mar	51	7	14-Mar	4	0		
21-Mar	24	2	21-Mar	10	3		
28-Mar	*	*	28-Mar	16	1		
* Co	ntest						

10-10 NET CONTROL STATIONS ALL NETS BEGIN AT 1800Z

Mon (28.380)	Alan, WB9WZI	#76209	IL
Mon (28.800)	Doc, WB6OJB	#70675	CA
Tues (28.380)	Ray, K7CWS	#50288	ΑZ
Tues (28.800)	Ann KE6OIO	#68997	CA
Wed (28.380)	Marilyn, WM2W	#76400	FL
Wed (28.800)	Louise, N6ELK	#36654	CA
Thu (28.380)	Bob, N6OPR	#45715	ΑZ
Thu (28.800)	Robert, KQ4PK	#63201	NC
Fri (28.380)	Terry N0TW	#36547	FL
Fri (28.800)	Bob, K6DNR	#75386	CA
Sat (28.380)	Dan KC8IM	#31959	MI
Sat (28.800)	Open. Contact N6Ol	PR for info	
Alternate	David, N4WDT	#76237	KY

Sunday **NEVER ON SUNDAY**



30 YEARS AS 10-10 NET CONTROL



Hello there. My name is Louise Chapman. N6ELK #36654 VP1528. I reside in Long Beach CA. This is my 30th year to be an NCS on Wednesdays at 1800 UTC on 28.800 my anniversary. I have been the longest NCS in the history of 10-10. I joined 10-10 in 1983. I received a call from Sherm K6PTF #17977 Net control manager in 1985. He asked if I would call the net on Wednesdays and I said sure, and have been doing so ever since. Later I received a call from Morrie Goldman W6EHM #4189. He was the trustee of the 10-10 club station in 1996. He asked if I would give out the 10-10 # W6OI #10-10 109 and VP56 until I became a SK. Then when the Technician class licenses became available, Technicians could operate phone on 10 meters between 28.300 and 28.500. I called Sherm K6PTF to ask him if it would be OK to start a 10-10 net on 28.380. He said no problem. So as you know that has brought new members to 10-10. Has been a great success having a net on 28.380. I am also a VE since the hams took over the task to test would be amateur radio operators.

On Wednesdays when I close the net, I say "Thanks all for checking into the net today and all of you for assisting me. Tomorrow calling on this frequency will be Robert KQ4PK of NC on 28.380 will be Bob of AZ N6OPR. 73 to all. N6ELK closing the net and returning the frequency to regular use. Bye Bye everyone."

NET CONTROL STATIONS NEEDED

Needed: Net Control Station for the 28.380 and 28.800 MHz Nets at 18:00 UTC Monday-Saturday. If interested contact N6OPR via e-mail: n6opr@msn.com.



QSO Parties

Dan Morris, KZ3T (#41015)

2015 SPRING DIGITAL QSO PARTY April 25 - 26

TOP TEN

	CALL	10-10#	CTX W	CTX WO	TOTAL
1.	WA2HMM	40510	32	97	161
2.	KJ4RV	37776	46	40	132
3.	AJ7B	7675	44	39	127
4.	KC7RG	24383	45	36	126
5.	KD7ZLF	75782	46	22	114
6.	KZ3T	41015	26	50	102
7.	K7QXG	5956	41	16	98
8.	LU1BJW	39329	29	38	96
9.	AB6QM	63114	39	16	94
10.	LA7VK	72716	13	64	90

CALL AREA ORDER CALL AREA 1

CALL	10-10#	CTX W	CTX WO	TOTAL
N1API	25468	22	20	64
KD6FEC	77131	6	13	25

			·	<i>luly</i> 201			
CALL AREA 2							
CALL	10-10#	CTX W	CTX WO	TOTAL			
WA2HMM	40510	32	97	161			
W2VTV	71275	18	34	70			
W2IUC	7860	5	3	13			
	CALL ARE	A 3					
CALL	10-10#	CTX W	CTX WO	TOTAL			
WA3GM	46927	15	47	77			
K3URT	77112	18	11	47			
	CALL ARE	<u>A 4</u>					
CALL	10-10#	CTX W	CTX WO	TOTAL			
KJ4RV	37776	46	40	132			
KZ3T	41015	26	50	102			
N3GTY	50585	26	26	78			
AK4YS	75328	32	14	78			
K4ARS	22483	23	26	72			
N4ERM	34524	24	23	71			
KA5VZG	46596	28	15	71			
KF4LVF	72214	22	22	66			
K4SQC	75350	8	1	17			
KJ4OFD	75796	8	0	16			
	CALL ARE	A 5					
0.411	40.40//			TOTAL			

CALL	10-10#	CTX W	CTX WO	TOTAL			
KD5DE	33513	19	13	51			
K5CC	50708	13	0	26			
KM5FF	50356	5	10	20			
NS5R	36388	5	0	10			
KD5HIP	71476	3	4	10			
CALL AREA 6							

10 10# | CTV W | CTV WO | TOTAL

CALL	10-10#	CIXW	CIX WO	TOTAL
AB6QM	63114	39	16	94

CALL AREA 7							
CALL	10-10#	CTX W	CTX WO	TOTAL			
AJ7B	7675	44	39	127			
KC7RG	24383	45	36	126			
KD7ZLF	75782	46	22	114			
K7QXG	5956	41	16	98			
WA7HDZ	13307	27	5	59			
KA7IVB	36769	24	8	56			
N7AME	27859	20	8	48			
KE6K	26831	9	10	28			
W7JSD	76248	12	2	26			
W7RTL	74645	11	1	23			
W7WBB	76700	9	1	19			
	CALL ARE	A 8					
CALL	10-10#	CTX W	CTX WO	TOTAL			
KJ8O	75942	16	34	66			
CALL AREA 9							
CALL	10-10#	CTX W	CTX WO	TOTAL			
K9DEB	53502	5	14	24			
AI9IN	76189	8	4	20			
	<u>QRP</u>	-	•				
CALL	10-10#	CTX W	CTX WO	TOTAL			
N3GTY	50585	26	26	78			
KE6K	26831	9	10	28			
W7WBB	76700	9	1	19			
CO	UNTRY EN						
	ARGENTI		T T				
CALL	10-10#		CTX WO	TOTAL			
LU1BJW	39329	29	38	96			
	CANADA		l o Try rugo l	TOTAL			
CALL	10-10#	CTX W	CTX WO	TOTAL			
VA2MO	75296	19	1	39			

	<u>NETHERLANDS</u>					
	CALL	10-10#	CTX W	CTX WO	TOTAL	
	PA2NJC	30903	16	10	42	
	<u>NORWAY</u>					
	CALL	10-10#	CTX W	CTX WO	TOTAL	

CLUB ENTRIES

CALL	10-10#	CTX W	CTX WO	TOTAL	OPS
W1NRG	29650	22	20	64	N1API
PA6TEN	75925	16	10	42	PA2NJC

CHECK LOGS

CALL	10-10#	CTX W	CTX WO	TOTAL	OPS
VE7HBS	72711	23	7	53	
K7RFW	0	11	6	28	
W9RF	0	2	0	4	
KU7Y	0	1	0	2	

CHAPTER ENTRIES

CHAPTER	LOGS	PTS	
POSSUM TROT	7	543	•
CASTLE CRAIG	2	128	
OREGON TRAIL	1	98	
TANGO	1	96	
NEANDERTHAL	2	84	
STEAMBOAT	1	51	
NM MUD DUCKS	1	20	
NORTH GEORGIA	1	17	
REPUBLIC OF TEXAS	1	10	

2015 SPRING CW QSO PARTY

<u>May 2 - 3</u> <u>TOP TEN</u>

					
	CALL	10-10#	CTX W	CTX WO	TOTAL
1.	KN4Y	17757	47	28	122
2.	ZL3TE	53431	34	41	109
3.	KJ4RV	37776	41	25	107
4.	AC4ZM	72780	19	13	51
5.	WB6OJB	70675	15	2	32
6.	AB6QM	63114	10	10	30
7.	N5MT	24949	6	12	24
8.	KU4W	20986	10	2	22
9.	KD5DE	33513	9	4	22
10.	KZ3T	41015	3	15	21

CALL AREA ORDER

CALL AREA 3

CALL	10-10#	CTX W	CTX WO	TOTAL			
WA3GM	46927	4	2	10			
CALL AREA 4							

<u> </u>				
CALL	10-10#	CTX W	CTX WO	TOTAL
KN4Y	17757	47	28	122
KJ4RV	37776	41	25	107
AC4ZM	72780	19	13	51
KU4W	20986	10	2	22
KZ3T	41015	3	15	21
N4ERM	34524	7	1	15
AK4YS	75328	6	0	12
N3GTY	50585	4	0	8
KA5VZG	46596	2	1	5
KW4BG	47350	2	0	4

		CALL AR	EA 5			
CA	LL	10-10#	CT>	(W	CTX WO	TOTAL
N5MT		24949		6	12	24
KD5DE		33513		9	4	22
K5CC		50708		4	0	8
N5AF		1919		2	2	6
		CALL AR	EA 6			
CA	LL	10-10#	CT>	(W	CTX WO	TOTAL
WB6OJB		70675		15	2	32
AB6QM		63114		10	10	30
KI6OY		50948		6	0	12
WA6LTH		70045		1	0	2
		CALL AR	EA 7			
CA	LL	10-10#	CT>	(W	CTX WO	TOTAL
N7RD		44933	,	7	6	20
AJ7B		7675		1	1	3
		CALL AR	EA 9			
CA	LL	10-10#	CT>	(W	CTX WO	TOTAL
NA9A		31121		2	0	4
Al9IN		76189		1	0	2
	9	COUNTRY E	NTRIE	<u>S</u>		
		ARGEN	ΓΙΝΑ			
CA	LL	10-10#	CT		CTX WO	TOTAL
LU1BJW		39329		5	4	14
		NEW ZEA				
CA	LL	10-10#	CT		CTX WO	TOTAL
ZL3TE		53431		34	41	109
		CLUB ENT	RIES			
CALL	10-10#	CTX W CT	X WO	TO	TAL (OPS
NM5H	68588	3	8		14 N5MT	

CHECK LOGS

CALL	10-10#	CTX W	CTX WO	TOTAL	OPS
HP1AC	10107	21	4	46	
K6DGQ	0	5	5	15	
K6CSL	71078	1	3	5	

CHAPTER ENTRIES

CHAPTER	LOGS	PTS
POSSUM TROT	7	189
HOUSTON SHOT	2	38
STEAMBOAT	1	22
TANGO	1	14
WINDFARMS	1	12
CITY OF LIGHTS	1	4

W60I #109 ON THE AIR

REPORT FOR THE 10-10 INTERNATIONAL CLUB STATION W60I ENDING 06/01/2015

W6OI was on the air for all the 10-10 party events so far in 2015, with not a whole lot of success from here in Wisconsin! Only a couple contacts in each event. Band conditions are ever changing and you don't know how it will be unless you take time to turn on the rig! Listen of course, but do make calls too, since if everyone just listened there would be no contacts made by anyone!

I am usually on most mornings around 1400Z to 1500Z primarily around 28355. And I try to hit some of the daily nets as time permits. Most of the time someone is on! Listen for W6OI around the band and modes and give a call! Catch me during the various 10-10 QSO Parties too.

The 10-10 Club Station, W6OI, is available to any current (dues paid) member or chapter for use as a special event station. AND, also available if any member would like to operate W6OI during any of the 10-10 QSO Parties. Just send your request along with copy of license and paid up membership to:

Jerry Kopstein W6OI License Trustee 8041 W. Lakeshore Drive Burlington, WI 53105 W6OI is one of three official club stations, the others being VE9TEN (trustee Rob, VE9KM) and DL0X (trustee Henry, DL8YBM). W6OI is operated on CW by Brad, K0DBK who makes available FISTS and SKCC numbers. W6VY, Bob operates on Geratol nets to give out W6OI Geratol number and promote 10-10.

Louise, N6ELK continues to operate W6OI on the 10-10 daily nets, which meet at 1800Z on 28.380 and 28.800. Bob, N6OPR also gives out W6OI details on the daily nets if Louise is not available.

Paper chasers working W6OI can request a list from Jerry, N9AC. It is available in ML format or just plain text. LOTW and eQSL are being updated 'slowly' with current contacts.

W6OI - VE9TEN - DL0X

2015 SPECIAL EVENT

The 2015 W6OI – VE9TEN – DL0X special operational event is scheduled for **NOVEMBER 21 AND 22. Mark your calendar now!** It falls on the weekend before Thanksgiving so hopefully folks are free to operate a bit! Plan to participate for as short or extended as you like with any mode. Will be seeking 4 operators from each call area so we dominate the band from all regions, many modes, and throughout the day or evening.

Anyone wanting to volunteer to operate W6OI during this Special Event contact Jerry, N9AC.

Enjoy the band. Look for W6OI, VE9TEN and DL0X in upcoming 10-10 party events. Keep 10 alive!

73's Jerry, N9AC

10-10 SCHOLARSHIP FOUNDATION SUPPORTERS

We encourage all of our members to support the 10-10 International Net Scholarship Foundation. Our goal for the 2014-2015 fiscal year was to fund four \$2000 scholarships entirely through member donations outside the dues structure, and we achieved our goal. These will be awarded shortly. At the recent Scholarship Foundation meeting in Dayton, the Foundation Board voted to guarantee the funding for five \$2000 scholarships to be awarded in 2016. The Foundation was created in 2001 and is a qualified 501(c)(3) tax exempt organization and contributions are tax deductible. Why not consider a donation as a Chapter or an individual in memory of a fellow ham or loved one. If you haven't donated before, we want you to know that all donations are appreciated and they do add up. At the time you make a donation to your favorite charity, please consider a donation to the 10-10 Scholarship Foundation. If you have an employer matching program, please let us know.

If you make a donation of \$15 or more you will receive the current year pin. For a donation of \$25 or more we will also send you one of the older 10-10 pins. To

pay by credit card see payment information on Page 31 or send your check to me or the Data Manager. Our addresses can be found on Page 30.

The members listed below became 10-10 Scholarship Foundation Supporters during the months of March, April and May, and we appreciate their support.

	Platinum (\$1000 or more)	
None		
	Gold (\$500 to \$999)	
K4QYC	Joe Sport	51459
	Silver (\$100 to \$499)	
WB0CON	Eva Donaldson	53964
	Bronze (Up to \$99)	
WB2ZFG	Philip Crepeau	00294

You too can become a 10-10 Scholarship Foundation Supporter by making your check payable to the 10-10 Scholarship Foundation. Please send to:

10-10 International Net Scholarship Manger Larry Berger WA2SUH 9 Nancy Boulevard Merrick, NY 11566-3119

K3TC Joseph Calomiris

W1HGY Thaddeus Figlock

W6HST......Wilbert Harris

See the form at the back of this issue if you want to pay by credit card.

10-10 Scholarship Applicant Information

Each year the 10-10 International Net, through our nonprofit corporation, the 10-10 Scholarship Foundation, funds a number of scholarships, which are administered on our behalf by the Foundation for Amateur Radio (FAR). Four \$2000 10-10 Scholarships will be awarded shortly. Next year, five \$2000 10-10 Scholarships will be awarded. It is suggested that every 10-10 member encourage qualified college-bound amateur radio operators to take advantage of this opportunity.

The four most recent winners are featured in the fall issue of the 10-10 news. Over the past 27 years, 10-10 has funded 99 scholarships valued at \$109,000.

Applicants must be licensed amateurs. There is no restriction on the course of study, but applicants must intend to seek at least an Associate Degree from a college or university. Non-U.S. amateurs and those seeking graduate degrees

are also eligible, as well as students who study outside the United States. Completed applications must be received by FAR prior to April 15th of each year. Download an application from FAR's website: http://www.farweb.org or request an application from:

FAR Scholarships P.O. Box 911 Columbia, MD 21044-0911

10 Meter Beacons

As 10 meter operators one should be aware propagation frequencies are coordinated.

I would appreciate a message from anyone with thoughts of activating a beacon. wj50@amsat.org

73 Bill WJ5O

33876

65453

71857

IARU Region 2 HF Beacon Coordinator

http://www.gsl.net/wj5o/bcn.htm

DB, DBI, AND DBD

Editor's note: This article is a reprint of an article done by L.B. Cebik, W4RNL, #41159 in a previous issue of this newsletter.

A most convenient way to compare power is as a ratio between two powers. For this purpose, we have the decibel or dB. One dB = 10 log (P1/P2), where P1 and P2 are any two powers that is relevant to compare. A power ratio of 2 is 3 dB; a ratio of 4 is 6 dB; a ratio of 10 is 10 dB. These marker points will guide you to intermediate values. Your transceiver output is 100 watts. Your linear output is 800 watts. Hence, your power gain is 9 dB to the antenna. Table 1-1 shows a few common values of the dB scale to acquaint you with the logarithmic curve.

Table 1-1

Power Ratio	dB	Power Ratio	dB
1:1	0.0	7:1	8.5
2:1	3.0	8:1	9.0
3:1	4.8	9:1	9.5
4:1	6.0	10:1	10
5:1	7.0	20:1	13
6:1	7.8	30:1	15

Antennas measure their power gain in the forward direction in dB. Since gain requires 2 powers to make the ratio, where does the second power come

from? It comes from a standard reference. For most theoretical studies, the most common reference is dBi, decibels over an isotropic radiator. An isotropic radiator is a geometric point in space, with no material losses, that radiates equally well in all directions. The isotropic radiator is a theoretic standard that we can only approximate with some specially designed antennas. My rotatable aluminum backyard dipole at 35 feet over soils with average losses has a gain of over 7.5 dBi.

A second standard is dBd, decibels over a dipole in free space made of lossless infinitely thin wire. This equally theoretic antenna has a gain of 2.15 dBi. Hence, my backyard real dipole has a gain of over 5.35 dBd. Ground reflections add that much gain relative to free space, given the specific soil conditions.

For many, if not most of the decisions you will make about antennas, neither dBi nor dBd are the real references. Suppose you wish to buy a 3-element monoband Yagi for 10. What improvement can you really expect over your dipole? Now your own antenna—an aluminum tube (with losses)—becomes the standard.

Unfortunately, manufacturers do not rate their antennas by testing them on your mast in your yard. How can you use your knowledge of dBi and dBd to estimate the improvement the prospective antenna will make?

On way is to make antenna comparisons theoretically and extrapolate to your yard. Table 1-2 shows the gain figures for 3 antennas: a pretty good 3-element Yagi, a pretty good 2-element Yagi, and a dipole, all in free space. The 2-element Yagi has a forward gain of about 4.3 dB over the dipole, while the 3-element Yagi adds another 1.8 dB, for a total of 6.1 dB over the dipole. In the favored direction and in front-to-back ratio for nulling out QRM, you can expect similar performance from equivalent antennas mounted at the same height over the same terrain.

Table 1-2.
Relative Antenna Gain using dBi and dBd and Antennas in Free Space

Antenna					
	In dBi	over Dipole	over 2-el Yagi		
Dipole	2.1				
2-element Yagi	6.4	4.3 dB			
3-element Yagi	8.2	6.1 dB	1.8 dB		

Antenna	Gain		
	In dBd	over Dipole	over 2-el Yagi
Dipole	0.0		
2-element Yagi	4.3	4.3 dB	
3-element Yagi	6.1	6.1 dB	1.8 dB

Do not expect much more improvement than the numbers in the charts indicate, even if the manufacturer cites much higher numbers. The beams in this example can be tweaked for a little more gain or a little more front-to-back ratio, but not much and not both at once. In addition, the ability of the antenna to hold both its gain and it front-to-back ratio over the entire 10-meter band will suffer. In fact, the antenna designs used in generating the numbers in the table are among the finest in their respective classes. Any improvements without adding elements or increasing boom lengths will be difficult at best.

As you might expect after reading the table, it does not matter whether you make the gain comparison starting with figures in dBi or figures in dBd. You will get the same result. The only requirement is that you use the same reference for all your comparisons and calculations.

Since we started with a dipole, the charts seem to prefer dBd. That is an illusion, since we might have as easily started with a quarter-wave vertical, a 2-element Yagi (as column 3 shows), or ZL-Special. Moreover, had we placed the models over real ground, the gain numbers would have been intrinsically higher, beginning with a dipole gain of over 7.5 dBi or 5.4 dBd. But the differences among the antennas would have been very similar to the numbers in the charts.

Figure 1-1 shows the azimuth patterns for the three antennas at a height of 1 wavelength above ground.

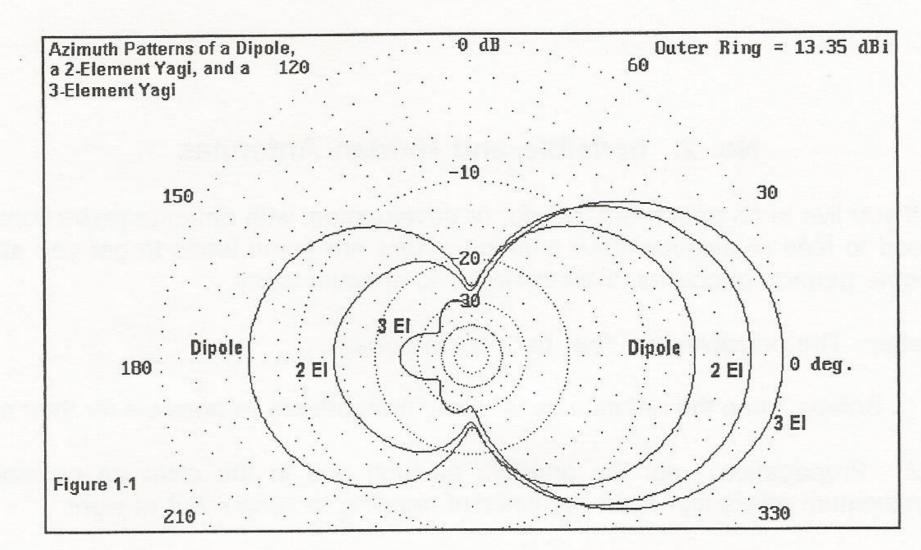


Figure 1-1. Azimuth Patterns for Three Antennas at 1 Wavelength Above Ground

23

Figure 1-2 shows the elevation plots for these same three antennas. Although the maximum gain of the 3-element Yagi is shown in dBi, the relative proportions of the 3 antennas would be identical no matter whether we register the gain values in dBi or dBd. The relative gain of the 2-element Yagi over the dipole is evident, as is the relative gain of the 3-element Yagi over the dipole and the 2-element Yagi. This is what is crucial to know.

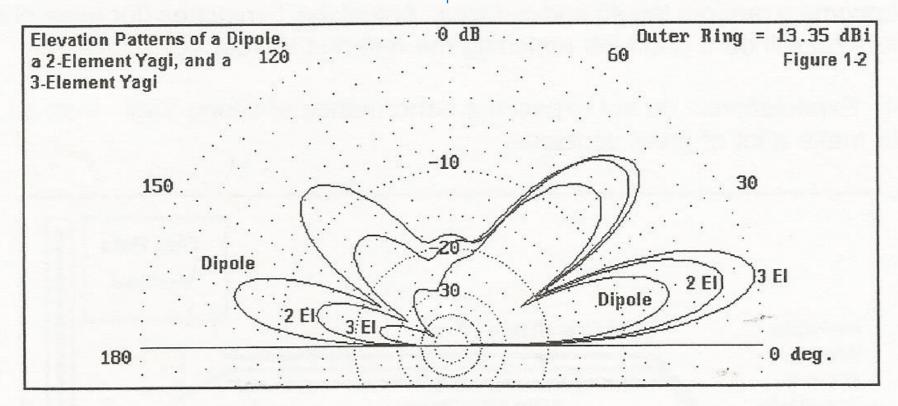


Figure 1-2. Elevation Plots for Three Antennas at 1 Wavelength Above Ground

24

TEN-TEN AWARDS

To apply for any 10-10 Award, paid-up membership is mandatory. You are not required to send in proof as the Awards Manager has the current membership database. All contacts made for any award must be legal 10-10 contacts (a full exchange of Call, Name, QTH and 10-10 number from BOTH members). An application listing the rules for each award is available from the appropriate Awards Manager listed at the end of the award listings. Please send your request with a #10 (business size) envelope, self addressed and stamped with one unit of first class postage (or enclose one IRC for GB Award), to the Award Manager for the Award you are interested in obtaining. Please no phone calls to Award Managers for an application or list of rules. Contact requirements and rules for all Awards are available on the 10-10 website - www.ten-ten.org

TOP TEN HONOR ROLL	TO	PT	ΕN	HO	NO	R	RO	LL
--------------------	----	----	----	----	----	---	----	----

No.	CONTACTS	CALL	10-10#		
1.	24600	WA5JDU	3017		
2.	11700	K0PV	9902		
3.	11700	N5XZ	4530		
4.	11200	DL8YBM	36109		
5.	10500	N1API	25468		
6.	10000	K6PZE	1341		
7.	9800	N5DAS	35877		
8.	8800	AC6FU	10937		
9.	8400	KF7PU	30021		
10.	8200	K5FBS	48461		

TOP TEN CLUB

l	No.	CONTACTS	CALL	10-10#
	1.	10100	WD0SFT	37933
	2.	4400	K6MQ	K6MQ
	3.	2700	DL0X	DL0X
	4.	2000	W8PGW	W8PGW
	5.	1700	W1NRG	W1NRG
	6.	1200	NM5MD	NM5MD
	7.	1100	W4MNM	W4MNM

	1000+ MILESTONE BARS	
	5000 BAR	
NO.	CALL	10-10#
100	LU1BJW	39329
	<u>2500 BAR</u>	
NO.	CALL	10-10#
434	DL0X	75555
	<u>1000 BAR</u>	
NO.	CALL	10-10#
1578	KI4YYY	75326
	<u>W.A.C.</u>	
NO.	CALL	10-10#
631	KA5VZG	46596
	COUNTIES AWARDS	
	100 COUNTIES	
NO.	CALL	10-10#
538	KA5VZG	46596
	COUNTRIES AWARDS	
	BASIC AWARD	
NO.	CALL	10-10#
640	KA5VZG	46596
	35 COUNTRIES	
NO.	CALL	10-10#
377	KA5VZG	46596

	45 COUNTRIES	
NO.	CALL	10-10#
274	KA5VZG	46596
	55 COUNTRIES	
NO.	CALL	10-10#
196	WM2W	76400
	150 COUNTRIES	
NO.	CALL	10-10#
12	NM5H	68588
	155 COUNTRIES	
NO.	CALL	10-10#
7	NM5H	68588
	300 COUNTRIES	
NO.	CALL	10-10#
1	N5MT	24949
	DIGITAL AWARDS	
	Basic Award	
NO.	CALL	10-10#
121	AJ7B	7675
122	KA5VZG	46596

50 CONTACTS			
NO.	CALL	10-10#	
67	K0SU	63890	
68	KA5VZG	46596	
69	AJ7B	7675	
	75 CONTACTS		
NO.	CALL	10-10#	
54	AJ7B	7675	
	200 CONTACTS		
NO.	CALL	10-10#	
18	PA2NJC	30903	
	Mobile Award		
	700 CONTACTS		
NO.	CALL	10-10#	
2	DL8YBM	36109	

AWARD MANAGERS	
BAR 100-900. Dan Morris, KZ3T #41015	dbmorris315@gmail.com
Bar 1000+ Marilyn Webb, WM2W, #76400 1103 Fulford Rd. Monticello, FL 32344-4352 (614) 216-5334	wm2w10@yahoo.com
VP Bar Bob Bishchoff K4QHH #26040 180 Persimmon, Rutherfordton, NC 28139-9319 (000) 000-0000	rabisch@hotmail.com
VP WAS Bob Bishchoff K4QHH #26040 180 Persimmon, Rutherfordton, NC 28139-9319 (000) 000-0000	rabisch@hotmail.com
VP Lucky 13 Dan Morris KZ3T #41015	dbmorris315@gmail.com
WAC Bob Mantell, W4GA,75305 PO Box 1653 Blue Ridge, GA 38513 (404) 890-7265	k4esa@yahoo.com
Counties Brad Kimble, K0DBK #55192 3855 66th St. E., Inver Grove Hts, MN 55076-2222 (651) 450-1173	kzerodbk@gmail.com
Countries Mike Davidson, N5MT #24949 3518 Bellefontaine St. Houston, TX 77025-1310 (713) 668-8408	N5MT@aol.com
	lee.zalaznik@sbcglobal.net
Digital Mel Sojka, KD5DE #33513	kd5de@nwla.com
Mobile Bob Bishchoff K4QHH #26040 180 Persimmon, Rutherfordton, NC 28139-9319 (000) 000-0000	rabisch@hotmail.com
OM/XYL Marcus Lieberman, KM5EH #711032300 Hurley Drive NW, Albuqerque, NM 87120-1013 (505) 836-1724	buckml@lobo.net
WAS Eva Donaldson, WB0CON #53964 12933 W Montana Drive, Lakewood, CO 80228-4244 (303) 989-0475	wb0con@comcast.net
WPX Ed Bryant, KM5FF, #50356 9001 Sunbow Ave SW, Albuquerque, NM 87121-8851 (505) 934-2100	elbble@gmail.com
GB Counties Mike Crawshaw, G4BLH #18446 50 Kibble Grove, Brierfield Nelson Lancs, England BB9 5EW 01144 1282 6137	54 <u>g4blh@zen.co.uk</u>

Meet The Volunteers

A year-long event to find and make contact with all of the people who devote time to keep 10-10 an active organization!

The goal? Make contact with each of the following volunteers during 2015

AD4RX	. Director
AJ7B	. Newsletter Editor
G4BLH	. Awards - GB
K0DBK	. Awards - Counties
K1IEQ	. Committee Member
K4QHH	. Award Manager-Mobile & VP
K5BKT	. Committee Member
K5CC	.Committee Member
K5ERJ	.Committee Member
K5FBS	. Director
K6DNR	
K6RDK	.Data/ Membership Manager
K7CWS	.Net Control
K7PRZ	
KA50VO	
KA5VVD	
KC8IM	
KD4BVG	
KD5DE	.President
KE1HG	
KE60IO	.Net Control
KI6OY	.Awards-CW
KM5EH	
KM5FF	
KQ4PK	
KR7RK	
KZ3T	
N0KDB	3
N0TW	
N1API	
N3ES	
N3FNE	
N4WDT	
N5MT	
N6ELK	
N6OPR	
N7YG	. Director

N9AC	W6OI Trustee
N9AVY	Secretary
NZ1I	Committee Member
VA7SJ	Committee Member
VE3MEW	Committee Member
W4GA	Awards-WAC
W4MAA	Committee Member
W5DJT	Committee Member
W7CAR	Committee Member
W9HT	Committee Member
WA2SUH	Vice President
WA6POZ	Past President
WB0CON	Awards - WAS
WB6OJB	Net Control
WB9WZI	Net Control
WD4EWB	Committee Member
WD8JKV	Director
WM2W	Awards – 1000+ Bars
WN4AMO	Director

RULES FOR THIS EVENT AVAILABLE AT WWW.TEN-TEN.ORG IN THE QSO PARTY HANDBOOK



HOW I GOT STARTED IN AMATEUR RADIO & MY INVOLVEMENT WITH 10-10



Ever since I was a young boy, amateur radio was always a part of our household. My father Abe Berger, W2BLH was licensed in 1931. At that time he was living in Brooklyn and was involved with the Williamsburg Radio Club. In the early 50's he relocated the family to South Westbury and had a station set up in a corner in one of the bedrooms. When I was seven, I remember dad trying to teach me the Morse code. I learned many of the letters but never went very far. In 1961, I was involved in a 4-H Club and we focused on electronics. At the time, there were over 5000 kids in 4-H in Nassau County. Dad suggested to the fathers and sons in our club that they should all get ham radio licenses. Before we knew it we were all enrolled in an adult education class at Uniondale High School. Special permission was obtained for the sons to take the Novice course along with the fathers. At the end of the course five fathers and sons received their licenses and I was proud of my new call, WV2SUH. During the next few months I studied the License Manual and in the fall my friend Ronnie Harris, WV2SUM and I went to the FCC Office in Manhattan on Washington Street to take the General test. I remember the old desks and a gentleman named Charlie Finkelstein who administered the test. First up was the 13 wpm code test. I strapped on the old headphones. I passed but Ronnie failed. You couldn't take the written part if you failed the code. He had to wait while I took the written part and I was so excited that I passed. Ronnie had to go back two more times before he passed the code and then the written. We lived three houses apart so we were always at each other's station. My first transmitter was a Heathkit DX 35 and the receiver was a Hallicrafters SX 25. I

worked CW in the Novice portion of 40 meters. Once the General license came in the mail with the call WA2SUH, I went on 10 meters using a 12 watt AM transceiver called a Black Widow made by Rogers Electronics. Back then there were dozens of mobile stations who hung out on the Nassau County ARES and RACES frequency of 28720. They used to run transmitter hunts on that frequency. (I never got away from those hunts). During the next few summers I worked as a counselor at the Nassau County 4-H Camp in Riverhead. I had a small radio shack with some antennas in the trees and since we were on a cliff close to Long Island Sound, I made some great contacts. I taught woodworking and electricity and also tried to teach the boys the code. I know at least five guys who were in my classes back then who are licensed today. The years have flown by, but I will always remember the thrill of being on the radio in those first few years.

After graduating from Cornell University in 1966, I headed down to North Carolina to work on my Masters in City Planning at UNC. I had that Black Widow 10 meter radio in the car and I spent many hours playing on the band. I joined the radio club W4WE but I really enjoyed the mobile contacts. One time I was sitting outside the Music Department and apparently I was getting into their sound system. An enraged professor came outside and told me to transmit somewhere else (I didn't). While I made many contacts I never heard about 10-10 until I was back in NY and started working for the Nassau County Planning Commission in 1968. I was still on AM and finally accumulated 10 contacts to join in 1969. Grace, K5MRU was the person who encouraged me to join. I received my certificate which was signed by Claude, W6LRY. He wrote a note: "Congratulations, your number 407 is now the highest number." In December 1972 I took a trip to the Los Angles area. I packed a Lafayette HA-410 AM 10 meter radio in a suitcase and put it in a rental car. The band was really dead but a real thrill was being able to check in on ground wave to the daily 10-10 net in Long Beach on 28.800. Back then there was a clear division between those who worked AM and those on SSB so I was limited to working 10-10 contacts only on AM. I finally got my first SSB radio in 1974, a Yaesu FT101B and then I really started making 10-10 contacts. In the next few years I joined the following ground wave chapters: LIARS, Lindbergh, Trotters and Pacers, Brooklyn Bridge and Staten Island. None of those chapters survive today. In 1979, I became the Second District Manager and in 1998 I joined the Board of Directors of 10-10. Both my sons are amateurs. Matt, K2MSB #60606 lives in Syracuse, NY and Michael KC2YPO lives in Manhattan. They are both busy raising families but I hope they will get back to the radio before too long. It's been quite a rewarding experience over the last 54 years and I look forward to many more years of making contacts on the radio, especially with 10-10 members.

73

Larry Berger, WA2SUH, #407



Silent Keys

Compiled by Ruth Bartholomew, N0KDB (#48715)

It is with sorrow that we note the following Ten-Ten members who are now Silent Keys. We extend our sincere condolences to the families and friends of those SK members whose calls and Ten-Ten numbers will forever be kept in the records of the Ten-Ten Net.

10-10#	Call	Name - City, State
310	WA9TSG	Joseph F Williams - Milwaukee, WI
688	K6DSB	Kenneth P Lange - Gardena, CA
1675	K2QZ	Robert G Farricy - Syracuse, NY
3422	KE6KL	Herbert A Saxton - Huntington Beach, CA
4350	K4UFE	Robert S Williams - Destin, FL
5217	WB0EVE	Dale F Heiserman Sr - Lawrence, KS
6201	K8III	Richard J Kowalczyk - Troy, MI
6960	W3IK	John G Kosmak - Gray, TN
7243	WA1PCJ	Charles H Hemminger - Northampton, MA
8180	K5ACE	Charles R Kingston - Denison, TX
8866	KG8BG	Roger B Snyder - Dearborn, MI
9209	K4KA	Frank Mitchell Jr - Ashville, NC
10018	WA4FLZ	Shepard M Faber - Cutler Bay, FL
10055	K8MC	Lawrence L Cochran - Fullerton, CA
11433	WB9NWO	John E Lewis - Peoria, IL
12321	VE2QI	J Perrotte - Sainte Foy, CAN
12557	N8AX	Michael J Witenko - Springfield, OH
13623	W5FFY	John E Little - Forth Smith, AR
14090	K2FE	Walter Hladky - Chatham, NJ
14119	NJ2J	Richard S O Brien - Sleepy Hollow, NY
14186	W5ZPV	Clarence C Laster Jr - San Antonio, TX
14353	WB0JVQ	Margaret E Tyler - Kansas City, MO
14560	K0WN	Paul M Price - Fort Worth, TX
14942	VE2ATS	J C LaChance - Charlesborgh, CAN

15018 15137 16152 17804 18459 20278 20979 21585 22350 22585 22993 23007 23149 23229 23271	AD6J K5NW K8WW W1HAC UA9OA N7DN K4COL WA2JCX NS7I WD0BSL KC8E WA8RZJ N4ADI WB2VDQ N6ATP	Ellis Pilgrim - Santa Barbara, CA John E Hawkins III - Lewsiville, TX David R Vore - Amherst, OH Robert C Benson - S Daytona , FL Alex S. Pashkov - Novosibirsk, RUSSIA Dean G Nielson - Pocatello, ID Robert L Hammond - Hilton Head, SC Frank W Skutsch - Garden City, NY Palmer Hall - Scottsdale, AZ Craig L Tuttle - Eau Claire, WI Dallas T Butcher - Elyria, OH William S Russell - Saint James, MI Royal V Mackey Jr - Winter Park, FL Willis V Avery - Boulder City, NV Ronald M Halem - Prunedale, CA
24206 24880	KD9I W4ROA	William D Coons - Lombard, IL Charles I Baer - Sunrise, FL
25010	KD6ZR	Richard J'Rick' Lutzinger - Patterson, GA
25163	K0JVN	Roy R Faubus - Mountain Home, AR
25394	AJ8Q	Donald C Niese - Ottawa, OH
25797	AG3H	James A Stivanson - Pittsburgh, PA
26170	WB4PQL	Ledford L Sumner - Spartanburg, SC
26297	WS4V	Kenneth L Sturgill - Marion, VA
26610	KA5CQJ	Camille A Serio - Baton Rouge, LA
26638	N5EBA	Charles E Neal Jr - Village Mills, TX
28482	W5RKK	David J Stephens - Corpus Christi, TX
28861	W6AQR	Leon E Savage Sr - Eureka, CA
30480	WB8NDZ	Samuel J Shearer - Jonesville, MI
31147	N9ETV	Robert W Olson - Racine, WI
31967	WD8OCK	William T Stouffer - Uniontown, OH
32181	KA3FUD	William K Whitlock Sr - Mechanicsburg, PA
32569	KK1RR	Richard L Rumphrey - Pembroke, NH
32987	VE2EZI	Claude Oneill - Sillery QC, CAN
33879	KB3YK	Ronald F Riede Sr - Grove City, PA
33880	KC3AF	Adolph W 'Skip' Hoffman - Dagsboro, DE

34301	W7QCI	Leslie A Darling - Gig Harbor, WA	59513	WB6TNY	Eugene E Wood - Mt Shasta, CA
34849	W2DG	Lloyd F Cook - Cumberland, RI	59986	AB7D	Loyd C Stout - Sutherlin, OR
35737	KC4AJ	Carl J Gates - Forest Park, GA	60289	KA9JCW	Harold E Lamb - Quincy, IL
38084	KD5XX	Carter V Beghtol - Houston, TX	60405	N4YNO	James H Dunn - Orangeburg, SC
39193	W0KVM	Elden C Miller - Wahoo, KS	61244	W7CL	Frank J Materiale - Olympia, WA
39793	KK4GV	Richard P Creager - , Ecuador	61686	W1ARO	Dennis A Hart - Norwell, MA
40029	N0OHM	Michael R Langford - Iowa City, IA	61689	N1LBJ	Robert A Poor - Berwick, ME
40250	VE2EBR	Roger Jacques - Quebec, CAN	62468	KB1ALX	Ronald S Haynes - Springfield, MA
41735	KA1LTN	William H Dwyer - Winsted, CT	63053	N3HHM	Warren E Eister Sr - Perkasie, PA
42027	VE5BCS	Harold J Slack - Christopher Lake, SK, CAN	63145	KM6JR	Ernest C Mueller - Palm Desert, CA
42141	N1GXQ	James M Minor - Rochester, NH	63440	HP3BS	Dirk J De Jong - Chiriqui, Panama
42929	VE2BIA	Clement P Beauregard - Quebec, Can	63868	KE1KT	Bernard J Cass - Milford, NH
43094	N1CPX	Kenneth L Mac Laughlin - Concord, NH	64707	KR4ZK	William M Cappelletti - Stamping Ground, KY
43568	KB6LBS	Edward Plummer - Oroville, CA	64815	KX8L	Ernest P Mullinax - Portage, MI
43728	WA7VGZ	Kenneth A Blaise - Las Vegas, NV	65136	KE4BPL	Marlin F Williams - Perry, FL
46240	N7JAM	Douglas D Jenson - daho Falls, ID	65580	WA2OLP	Lawrence G Stanecker - Goode, VA
47086	WB2HHF	Howard Jacobson - Lake Worth, FL	65699	KS4GO	Tommie L Thomason - Elizabethtown, KY
47396	KC4ESC	Frank J Thomas - Mebane, NC	65758	KI7XA	Wayne D Means - Black Diamond, WA
48641	N5MYJ	Herbert Perry Lomax - Tyler, TX	65801	K6EHA	Michael L Bridges - El Monte, CA
48947	W7LMA	Robert E Phillips Sr - Bonners Ferry, ID	66434	KA9RRR	Edward L Nugent - Waterman, IL
49874	W8AKU	George Matinides - Louisville, OH	66440	KG9AS	Joseph B Borghese - Egg Harbor, WI
50198	N6TXT	Alvin L Britton - Fair Oaks, CA	67863	KC5AFL	Jimmy F Austin - Jerusalem, AR
52197	NG5F	Jacob H Covington - Beaumont, TX	68606	KF9AO	Jerry E Clifton - Centralia, IL
52826	KG8BB	Donald R Youngblood - Hamilton, OH	69429	W9PJP	Paul J Pasko - Palatine, IL
52945	N0KYZ	Virginia 'Terry' Thompson - Hanover, PA	69796	N3HS	Howard S Staten - Gaithersburg, MD
52949	K0ASK	Robert V Fahnestock Jr - Ottawa, KS	71215	W1RME	Roger W Doran - Brunswick, ME
54372	K4MIS	William L Uschan - Appleton, WI	72332	K0IKU	John L Galle Sr - Windom, MN
54620	KA7AZY	Byron L Jenison - Helena, MT	73220	N7FSR	Norman L Gray Sr - Show Low, AZ
55010	N1EEC	Henry F Tetrault - Enfield, CT	73505	N1LUM	David N Spalding - Pembroke, MA
55208	K0KKH	Donald W Boehm - Merrill, IA	74543	N3BW	George F Siegrist - Mint Hill, NC
56020	KA4WWN	John P Heniford - York, SC	75198	N9KH	Keith E Harris - Bedford, IN
56514	K1BHY	Roger P Tavella - Monroe, CT	75286	K1UOT	Jerry H Laplante - Auburn, MA
59080	NE6C	Lee A Mc Coy Jr - Bridgeport, CA	75516	KB3KOV	Paul D Keywood - Export, PA
59236	N7MQ	Mark W Perrin - Eugene, OR	75683	K4AAS	Donya F 'Sonny' Howell Sr - Tampa, FL

SK SALES

During a recent trip to the Dayton Hamvention, I noticed that a person had a table with a sign that said I buy entire SK estates.

That started a thought process, we should do that for our local ham radio club. I brought the idea back to our local ham radio club (Lake Amateur Radio Association) Board of Directors. The board thought it was a good idea, so we set up a program. Whenever a member passed, we told the widow that we would sell the equipment for them or they could donate it to the club and take a tax deduction. We are a 501c3 corporation. The donated equipment is either used at our clubhouse, ARES trailer or sold and the proceeds go to the club treasury.



We have a 4 position operating station that includes such modern equipment as ICOM 746 pro, Ameritron 411H amplifier and many other radios. When we sell the equipment for the widows, we charge a commission of 20% (some give the club a higher commission) and the proceeds go to the estate. We usually sell this equipment at various hamfests or from our web page (k4fc.org).

We had some very nice gold foil stickers made for the members to place on their equipment so their widows would know who to call. From our proceeds selling the equipment, we have purchased a 40 foot shipping container placed at the clubhouse, wired with electricity, lights, hangers and shelves to store the equipment. We had a very large banner made to use at the various hamfests which helps draw folks to our location. Since starting this program, we have sold approximately \$16,000 worth of equipment. Our original idea was to dispose of the equipment for the members. However the program has been so

successful that we now dispose of equipment for any local ham. If you want any additional information on how we set up the program, you can contact me at phemby@hotmail.com WN4AMO.

73

Paul Hemby, WN4AMO, #73825

ANNUAL 10-10 INTERNATIONAL NET BOARD MEETING

On May 14, 2015 the 10-10 International Net board held their annual meeting in Tipp City, OH. Following the board meeting there was a meeting of the 10-10 International Foundation Net board. The minutes from these two meetings will appear in the next issue of this newsletter. However, two very important things happened at these meetings. The 10-10 International Net board discussed an idea that may get more people interested in amateur radio as well as the 10-10 organization. In his article, Mel explains a new plan to start a Scout Chapter. See the *Scouting on Ten* article in this newsletter.

The 10-10 International Foundation board agreed to increase each scholarship to \$2,000 and give five scholarships to deserving candidates. See the 10-10 Scholarship Foundation column in this newsletter.



Board members attending the board meeting in Tipp City, OH. Front row (I-r): Marcus Lieberman KM5EH, Mel Sojka KD5DE, Terry Webb N0TW, Paul Hemby WN4AMO. Back row: Jerry Heien N9AVY, Gerry Gross WA6POZ, Larry Berger WA2SUH, Roger Olson AD4RX, Ray Moyer WD8JKV

RAIDING THE HARDWARE STORE

Editor's note: This article is a reprint of an article done by L.B. Cebik, W4RNL, #41159 in a previous issue of this newsletter.

Home-made antennas have no warranties. We build them, modify them, fix them, and then use the pieces for another project. We move them from the roof to a mast and from there to the attic. We fold, bend, staple, and mutilate them with great regularity. We do not have to think like manufacturers when we look for materials for small, experimental antennas. The hardware store will do just fine for 10-meter antennas (except for stock items like coax, ladder line, baluns, connectors, and #14 stranded copper wire).

Think "hardware store" if you build any of the following: attic antennas, portable or field antennas, experimental or short-term antennas, hidden antennas, "hurry-up-and-get-it-in-the-air-because-the-contest-is-about-to-start" antennas. By hardware store, I mean anything from the traditional shop to the giant home improvement depots.

The rule of thumb is this: if it is copper or aluminum, then it may be an antenna element; and if it is plastic—especially PVC or its offshoots—then it may be an insulator.

Here are a few examples to get your creative juices flowing.

1. **Why tubing?** Manufacturers use tubing for at least two good reasons. First, it is relatively strong among available antenna element materials. Secondly, it slips the wind better than most other economically feasible shapes. You can find aluminum tubing in sizes from ³/₄" diameter to 1" diameter in many of the larger home centers. For 20-meter beams, I would stick to aircraft-grade tubing (6063-T832) for strength, but for 10-meter antennas, hardware store stock is very durable. You can find it in 6' and sometimes 8' lengths. Eight feet is just about half the length of a 10-meter element.

Without a good shop, working with tubing is inconvenient for many folks. Lining up holes for connectors is a bear if we only have hand tools. We often crush it with both regular bolts and U-bolts. So, for experimental and field antennas, why not use something else?

Angle aluminum is available in a wide variety of sizes. We can choose 1/16 or 1/8" thickness in half-inch or three-quarter-inch widths. I prefer the 1/16" thickness for its lightness and the 3/4" width because I can mount a coax connector right on the element (after grinding off two of the corners of the connector mounting plate).

Some years ago, I put together a collapsible square quad loop made from a combination of angle aluminum for the horizontal members and wire for the vertical. Construction and field assembly were a breeze because all the nuts and bolts went through flat surfaces. Any difference between the radiation of a

tube and a complex angled surface was washed out in practice.

Hardware stores also have flat aluminum bar and often you can find aluminum rods. The bar stock would flap too much as an antenna element, but it makes good connector straps in short lengths. If you can thread aluminum rod, you can link pieces, as I did some time back with a collapsible dipole. A tap and die set is a good investment for the home antenna maker.

While you are thinking about alternatives to tubing and #14 wire, consider both 300-ohm twin-lead and 450-ohm ladder line. You do not have to make folded dipoles out of them. Instead, just connect the wires together at the ends of an element to simulate a fatter wire for a slightly greater bandwidth than you can usually achieve with a single wire. For attic and field antennas, the slight weight difference may be offset by the wider QSY possibilities.

2. **PVC:** The usual steel mast and steel or aluminum tower is a marvel of engineering, and most handbooks show metal plates using metal hardware to mount a metal mast to a metal boom to metal elements. The operative ideas are durability and lightning protection. For many indoor, experimental, and field operations, these ideas are secondary, at best.

Schedule 40 PVC makes a good partial substitute for steel masting in short lengths. It works easily with hand tools. I have experienced no RF difficulties with it at 10 meters. I have used ½" to 1½" diameters for various element support, mast, and boom exercises. The 2-element Yagi in a past episode used a PVC boom under 6' long, well within the sag limits of the tube. However, white Schedule 40 PVC from the plumbing department varies from one part of the country to another in its resistance to the effects of ultraviolet light. There is also a gray Schedule 40 PVC in the electrical conduit department. This material is certified as UV resistant. It pays to experiment with these materials on a non-critical project to see if they last in sunlight without becoming brittle quickly.

Schedule 40 PVC gives "nominal" or minimum diameters: the actual inside diameters are greater than the listed nominal diameter. 1.25" PVC has closer to a 1 3/8" inside diameter and a 1 11/16" outside diameter. 1" nominal will nest inside 11/4" nominal, but not tightly. However, most other sizes will not nest well or at all.

Consider the following portable dipole. The elements on each side of center are ¾" and 5/8" aluminum tubes that slide into each other for carrying. The center insulator is a 2' to 2.5' piece of 5/8" dowel—a foot or so of antenna element over each end of the dowel. The dowel slides over the end of a section of TV masting. 5' sections of the mast put the antenna as high as safe and feasible, with rope guying. The dipole is turnable by hand over 90 degrees for nulling QRM into the element ends. Wherever the tubing fit is too loose, some electrical tape on the inner tube tightens the grip without gluing the assembly together. It all breaks down into a collection of tubes no longer that 5'

maximum. Nest what you can; then lash the bundle together with the guy ropes for transport. It is possible to drill a hole and fasten a coax connector to the PVC top mast section, or you can make up a little plate for it from some scrap aluminum.

For wire antenna element spacers, portable quad element supports and similar light duty functions, try some of the lighter-weight tubing available. Half and three-quarter inch CPVC tubing is available, as is Schedule 315. For both 90-degree and 45-degree corners, as well as for section couplings, there are fittings that glue together so permanently that I have never had one fail yet.

3. **Flat and angled insulators:** Sturdy plastic insulating plates are easy to fashion from thick freezer containers. They are temperature impervious for normal use liftetimes. The sides are either straight up or slightly angled, making good mount lips. A hacksaw cuts these 4" square containers into handy sizes, and a 5/8" hole saw for wood can cut a perfect coax connector hole. The uses are limitless, but the first use that comes to mind is as a center insulator for either straight wire or folded dipoles.

However, do not overlook round and "squared" plastic bottles for special uses. The semi-rectangular bottles used for some liquids have rounded 90-degree corners. Cut a pair of round holes (to match a boom, a mast, or an antenna element), one on each surface of a corner section. Squeeze the corner together and slip it over the mast, boom, or tube. Let go, and the corner grips well enough to withstand small loads and winds up to 45 mph. You can use this scheme to space feed line from a boom or mast or to suspend linear loading elements beneath a main element. Another very good material for this application is scrap from house vinyl siding, It has the advantage of being free (if you ask the installer politely).

4. Wood and the "auto" section: For most experimental, indoor, and field antennas, metal mast-to-boom and boom-to-element plates are not necessary (unless you just happen to have a stock of 3/16 to 1/2" thick aluminum). 3/8" or 1/2" plywood will do as well.

Put away the simple outdoor varnish, because it will not last long in the weather. Even marine-grade spar varnish requires regular renewal. Instead, look in the auto supply part or any of the X-mart stores for a can of auto body work fiberglass resin liquid (a two-part mix of resin and hardener). Prepare the wood by being sure that it is rough—to give the resin something on which to "grab." Spread the resin liberally over the plywood piece (already cut and drilled). Give special care to the edges, where plywood is very porous. Once dry, recheck the hole sizes for easy hardware passage and drill again as needed. If your wood plate is lumpy, sand the surface flat, but not down to wood again. If you slip up, retouch the area. Now your plate is sealed against weather much more perfectly than any varnish I have found. Note that I do not use the

fiberglass cloth in this process. It is unnecessary for this application.

The one exception to my "no-paint" rule of thumb is epoxy paint made to seal concrete and similar benches, tables, etc. It does much the same work as auto resin and about as well, but is not always readily available.

5. **Hardware:** For antenna work, use stainless steel hardware (nuts, bolts, washers, hose clamps, etc.) wherever possible. Stock sizes are now readily available in the depot-type stores, and there are in many medium to large cities specialty suppliers of stainless steel hardware. If it is rustable, do not use it for an electrical connection out of doors. Beware, for example, of those little wireend rings: most turn to rust in a few months.

For hardware that does only mechanical, but not electrical work, clear sprays can extend their useful lifetimes. Of course, such coatings take the hardware out of the secure grounding system. So if you need a ground lead from your antenna boom to the rod in the earth, run a separate flat braid, strap, or heavy wire. Do not rely on coated or rustable hardware for this job.

Stainless steel hardware generally does not react with other metals, such as aluminum. Different metals generally can produce corrosion even without weather to help the process along. So beware of combining aluminum and copper tubing and fittings.

This small listing is just the start. If you like to play with experimental antennas, especially for 10 meter, just wander around a hardware depot. Buy a few fittings that look promising and cheap just to stare at in your leisure. I am sure you will find a use for some of them in your next project. Remember: antennas do not have to look like commercial versions to do the job you need them to do. They just have to be electrically and mechanically sound enough as antennas and convenient enough relative to your situation.



WOULD YOU LIKE TO JOIN 10-10?

Here is what you need:

- 1. You must hold a valid amateur operator license.
- 2. Your valid amateur operator license MUST authorize or qualify you for unsupervised transmitting operations in the ten meter amateur band under your own personal call sign.
- 3. You must make contact with ten members of 10-10 and submit a log listing all contacts, their 10-10 number, call sign, name (as received off the air), date of contact, and QTH (state/province/country). The contact form and membership application is provided on the page that follows.
- 4. You must remit dues for one or more year's full membership. Fee schedule and payment information can be found in Section 2 of the page that follows.

TYPES OF MEMBERSHIPS

To become a member either fill out the form on the following page and mail to the Data Manager at the indicated address or go on-line to the 10-10 web page, www.ten-ten.org and follow the links from 'membership' to 'application' and select membership category.

Primary Membership

Primary membership is available with yearly dues, although there is a special incentive available when you pay for three years at once.

Family Membership

Family membership consists of a primary member and one or more family members who qualify as a 10-10 member (has made the necessary 10 contacts) and who reside at the same location and postal address. Family memberships run concurrently with that of the primary member. Add \$5.00 for each additional family member for each year. Only the primary member will receive a copy of the 10-10 News.

Life Membership

Life membership is available and may be paid in one lump sum or spread across two or three yeas. For information refer to the "Life Membership Application" form on the web or contact the 10-10 Data Manager.

Senior Life Membership

Senior life membership is available to anyone who is currently 65 years of age or older. Payment can be made as one lump sum or within a one year period. For information refer to the "Life Membership Application" form on the web or contact the 10-10 Data Manager.

Family Life Membership is no longer available

Club Membership

Club membership is available to any Amateur Radio Organization which holds a valid Amateur Radio License. Application must be made by the club trustee. Dues are the same as the Primary member. No family or life memberships are available. Clubs have all the same rights and privileges as primary members except the right to vote in elections.

Electronic Membership

Electronic Membership is available to anyone who qualifies for any of the types of membership listed previously. Electronic membership means that all communications, including the 10-10 NEWS, from 10-10 to the qualifying member will be conducted via email distribution. The exception to this policy is when a member qualifies for a certificate from either one of the various QSO Parties or from one of the Awards programs.

MEMBERSHIP RENEWALS

Either fill out on the following page the top half of Section 1, including your 10-10 number and Section 2 and mail to the Data Manager at the indicated address or go on-line to the 10-10 web page www.ten-ten.org and follow the links from 'membership' to 'renewals' and select the membership category.

DATA MANAGER SERVICES

Call/Name/Address Changes

All changes are to be sent to the 10-10 Data Manager. Please include your address label (or a copy) with necessary corrections. This also can be accomplished at www.ten-ten.org using the membership/update link.

All payments may be made by Check, Money Order or IRC's (\$1USD per IRC). Due to banking regulations Credit Cards cannot be accepted for merchandise. Membership Services and Scholarship Donations can be made via credit card using the secure shopping cart at www.ten-ten.org

Mail to:

Data Manager, 10-10 International Net, Inc. 1349 Vernon Terrace San Mateo, CA 94402-3331

SCHOLARSHIP DONATIONS

Donations to the 10-10 Scholarship Foundation are encouraged by our members to help fund five \$2000 10-10 Scholarships that will be awarded next year. For donations of \$15 you will receive a current year's lapel pin as a thank you gift, and for \$25 or more a second pin from a previous year will be sent. To pay by credit card, see the payment information on page 31. Your check should be made payable to the 10-10 Scholarship Foundation and sent to the Data Manager (address shown above) or the Scholarship Manager:

Larry Berger, WA2SUH 10-10 Scholarship Manager 9 Nancy Blvd. Merrick, NY 11566-3119

TEN-TEN QSO PARTY RULES

5.2 10-10 QSO PARTIES

10-10 QSO Parties are events that are held for fun and to meet old, new and prospective members around the world. The rules listed here are for all general QSO parties. The Spirit of 76 and Open Season QSO Parties are specialty events and do have additional rules. The Anniversary and Meet the Volunteers are year long contact events.

5.2.1 WHO IS ELIGIBLE?

QSO Parties are open to all amateurs with operating privileges on the 10 meter band, however, logs will be accepted only from active members as of the date of the event with the following exception: Open Season event logs will be accepted from all amateurs. Other logs received will be handled as check logs. Check logs are used to validate (check) other logs, but do not qualify the sender for any awards. A QSO party contact log submitted by an Amateur that intentionally submits erroneous contact information to cause errors on membership applications and awards, will be considered an invalid log. Ten-Ten will not accept any log of contacts from an Amateur who had his or her membership/1010 number revoked.

5.2.2 WHEN ARE THE QSO PARTIES?

There are currently nine QSO Parties held throughout the calendar year:

Winter Phone - held on the first full weekend in February 0001 UTC Saturday through 2359 UTC Sunday. **Spring Digital** - held on the last full weekend in April. 0001 UTC Saturday through 2359 UTC Sunday. Spring CW - held on the first full weekend in May. 0001 UTC Saturday through 2359 UTC Sunday. Open Season (PSK) - held on the first full weekend in June 0001 UTC Saturday through 2359 UTC Sunday. Spirit of 76 - 7 day, 6 mode event around 4 July each year 0001 UTC Monday through 2359 UTC Sunday. Summer Phone - held on the first full weekend in August. 0001 UTC Saturday through 2359 UTC Sunday. **Sprint** - a 24 hour event held on October 10th (10-10). 0001 UTC through 2359 UTC. **Fall CW** - held on the third full weekend in October. 0001 UTC Saturday through 2359 UTC Sunday. Fall Digital - held on the second full weekend in November. 0001 UTC Saturday through 2359 UTC Sunday.

5.2.3 FREQUENCY AND MODES

Direct unassisted contacts only are permitted. Repeater, Satellite, IRLP, Echolink, or any other similar type of assisted contacts are NOT allowed. Based on the appropriate band plan for the country of operator, CW QSO Parties should be operated in the CW area of the 10 meter band and operated using CW only. Digital QSO Parties should be operated in the digital area of the 10 meter band and operated using Digital modes only (RTTY, PSK, etc). Phone QSO Parties must be operated in the PHONE area of the 10 meter band and may be operated using any approved method (SSB, FM, AM). The SPRINT utilizes all operating modes in the 10 meter band. NOTE: A QUIET ZONE between 28.490 and 28.510 shall be in effect during QSO Parties using the Phone portion of the 10 meter band to allow for others to use the band.

5.2.4 ENTRY CLASSIFICATION

Entrants may submit a log in ANY of the following classifications:

INDIVIDUAL: Includes single station operators and can also include OM/XYL teams or any families or groups of people using individual call signs and 10-10 numbers.

QRP: same as an individual as listed above except that output power does not exceed 5 watts with CW/Digital operations and/or 10 watts with Phone operations during the entire event.

CLUB: A Club must have a valid club station license issued by their National Licensing Authority and must have an active 10-10 membership. Club entries must list the call, name, and 10-10 number (if any) for all operators using the club call. Club operations will take place at one location using one set of equipment. Operators entering under a club entry may also enter an individual log for contacts made using their own call sign.

MOBILE: A mobile applies to car, truck, RV, motorcycle, boat, airplane or other mode of transportation. Use of a base station antenna, amplifier or commercial power is not permitted. Operation while your vehicle is parked across a county line, occupying two counties, counts as two counties and two contacts. Marine and aeronautical mobiles must be able to establish counties of operation. Safety is paramount while operating mobile. If you are unable to park near multiple county lines due to safety issues (i.e. on a bridge, on a freeway, etc.), please move to the closest area which would provide the best operating conditions and still be able to give out multiple counties. Duplicate entries are allowed when working in multiple counties. In addition to the normal log information provided the County Worked from and County worked must also be included. Mobile stations will receive awards within their own category and will not be included in the individual sections or Top Ten in the World. Mobile entries will only be accepted for Winter & Summer Phone and 10-10 Sprint QSO Parties.

5.2.5 TRANSMITTER INFORMATION

An operator may operate mobile, portable or fixed. If they change their exchange QTH during the QSO Party, the operator must show same in their log. The operator may enter a log from one call district, province, or DX country. Multi-transmitters (two or more transmitters operating simultaneously, sharing one call sign) are NOT permitted in any QSO Party. If a single transmitter becomes inoperable, it is permissible to change to a replacement transmitter.

5.2.6 EXCHANGE

10-10 members send call sign, name, 10-10# and QTH (State, Province or Country). If received exchange does not have a 10-10#, then record a zero(0) in the log.

5.2.7 QSO POINTS

Two (2) points are awarded for contacts WITH a 10-10 number. One (1) point is awarded for contacts WITHOUT a 10-10 number. Duplicate entries should be retained in log and show a zero (0) for points. Any log showing 10% or more errors may be handled as a check log. A station may be counted only once regardless of mode except during certain specialty events.

5.2.8 CHAPTER SCORE ASSIGNMENT

Any entrant who is a chapter member and whose operating location is within 150 miles of the primary net location of that charter, may assign the entrant's score to that chapter.

QSO Party scores for the Sprint may not be assigned.

5.2.9 QSO PARTY ENTRIES

Logs shall be forwarded to the QSO Party Manager as identified in the 10-10 NEWS or on the 10-10 web site. It is strongly suggested that logs be sent as soon as possible after the close of the event. It is also recommended that DX logs should be sent AIR Mail to insure they are received in good time. Any logs received with a postmark date AFTER the deadline date will be handled as a check log. Any logs received more than 15 days after the entry deadline, regardless of postmark, will be discarded. All logs may be sent via Email. Logs (if cabrillo, adif, or text) may also be uploaded at www.hamclubs.info/scorer/. Please no .Q95 files.

5.2.9.1 ENTRY DESCRIPTION

Entries must contain a Cover Sheet, Log and Dupe Sheet as described here: COVER SHEET will list the Event Entered, Entry Classification, US Call Area (W0-W9 or DX Country), Chapter Score Assignment (if any), number of contacts and points with 10-10#, number of contacts and points without 10-10#, and total contacts and points claimed. LOGS must be listed in date/time order and list UTC Date, UTC Time, Call, Name, 10-10# (zero (0) if none), QTH and Contact Point Value. A DUPE SHEET is required for any logs exceeding 50 contacts. It may be either a list of all calls contacted in call sign order or hand entered on a dupe sheet grid.

5.2.9.2 ENTRY DEADLINES

Entries for all QSO Parties listed EXCEPT the Sprint shall be postmarked no later than 15 calendar days (this will always be a Monday) after the close of the event. Mailed entries for the Sprint (held on 10/10) shall be postmarked no later than October 25th, unless that day falls on a Sunday, then the postmark deadline shall be October 26th.

5.2.10 QSO PARTY RESULTS AND AWARDS

QSO Party results will be posted on the 10-10 web site about 15 days after the closing deadline for the event and also printed in the 10-10 NEWS in the appropriate issue. Awards will be issued by the certificate manager for Top Ten Individual scorers in the World, the top individual scorer in each Us Call Area (W0-W9), each DX Country, and for top QRP, CLUB, MOBILE and CHAPTER. Electronic certificates will be sent to the 2nd and 3rd place scorers in these categories.

5.2.11 ANNIVERSARY and MEET THE VOLUNTEERS EVENTS

These events run from January 1 0001 UTC to December 31 2359 UTC. In the Anniversary event, entrants may submit a log of contacts with members that have the anniversary year contained in their membership number. Example: 2010 is the 48th anniversary year of 10-10 International Net, Inc. Contact with members containing a "48" in their membership number (i.e.,72048, 69485,64854, 48126, 00487) would count toward the event. Each year the anniversary number changes, making a new group of members the focus of the event and promoting the use of the 10-meter band. All general rules are applicable with the following exceptions: During the calendar year (January 1 through December 31) make legal 10-10 contacts with 10-10 Number, Date, Call Sign, QTH with members containing the anniversary year in their membership number as described above. In the MEET THE VOLUNTEERS event, entrants may submit a log of contacts with members listed in the 10-10 NEWS as being a 10-10 volunteer. One contact per volunteer is permitted, regardless of mode of contact. In both events, contacts must be made on the 10-meter band with any legal mode (AM, SSB, FM, PSK, CW, etc.). All submitted logs must contain only one entry for each 10-10 number contacted. Contacts MUST be listed in 10-10 number order and each entry must list the 10-10 Number, Date, Call, Name, QTH

and Mode, in that order. These events are for Individual entries as described in section 5.2.4 and certificates will be awarded for the TOP Ten, however all entrants will be listed in the 10-10 NEWS. Logs MUST be postmarked no later than January 15th of the year following both the Anniversary and Meet the Volunteers events. Only members in good standing (with dues paid) are allowed to submit logs.

5.2.12 SPIRIT OF 76 (7 Days, 6 Modes) QSO PARTY

This event will run for 7 days and be around July 4th of each year. Make as many contacts as you can during the week using 6 modes. The modes that will be used are as follows as well as the suggested frequencies to monitor:

- 1. USB (28.345) 2. RTTY (28.086) 3. CW (28.050)
- 4. FM (29.600) 5. PSK (28.120) 6. AM (29.000)

Scoring will be as normal for QSO Parties, 2 points for members and 1 point for nonmembers. Dupes will be allowed once for each mode. It will be possible to work the same call 6 times in each of the various modes for a maximum total of 12 points per call. All other normal rules apply. Logs shall be forwarded to the QSO Party Manager.

5.2.13 10-10 SPRINT (October 10) QSO PARTY

An award will be issued for working all 10 USA Call Districts.

5.2.14 W6OI/VE9TEN/DL0X SPECIAL EVENT

This event is held during the 3rd weekend of November each year from 0001 UTC Saturday through 2359 UTC Sunday. This special event operation is where volunteers operate the 10-10 official club stations (W6OI/VE9TEN/DL0X) seeking to work anyone anywhere. Any mode of operation is permitted. Many operators will be authorized to operate W6OI from most US states and VE9TEN from various Provinces/Territories simultaneously. DL0X is operated by Henry, DL8YBM. The purpose is to have fun promoting 10-meter activity making contacts with 10-10 members and of course, non-members. This is a great way to increase membership! Exchange is similar to any 10-10 party event - name, call, QTH, 10-10 number if one is available. As contacts are made, provide info on 10-10 organization and where to find our website - www.ten-ten.org. If anyone wants to volunteer to operate W6OI during this event contact Jerry, N9AC. Members in Canada should contact Rob, VE9KM for permission to operate VE9TEN.

5.2.15 FOR MORE INFORMATION

Current information about 10-10 and upcoming 10-10 QSO Parties and events are always available on the 10-10 web site. Cover sheets, logging forms and dupe sheets are also available for downloading or printing at http://www.ten-ten.org. Any unanswered questions regarding the QSO Party rules may be forwarded to the QSO Party Manager.