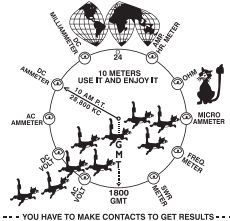


TEN-TEN INTERNATIONAL NET, INC.



TEN-TEN INTERNATIONAL

# NEWS

Volume 56 Issue 1

January 2018 (Winter)



Member  
AMATEUR RADIO  
NEWS SERVICE

## Happy New Year

Official Publication of the Ten-Ten International Net, Inc. - [www.ten-ten.org](http://www.ten-ten.org)  
Monitoring 28.380 and 28.800 MHz daily at 1800Z except Sunday

## 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.

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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 March 2018**

**PLEASE MAIL ALL ARTICLES AND PHOTOS TO:**

**EDITOR Ten-Ten News**

**E-mail: [editor@ten-ten.org](mailto: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 Manager

**NOTE:** 10-10 IS NOT RESPONSIBLE FOR POSTAL SERVICE DIFFICULTIES

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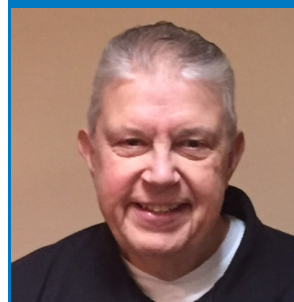
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# From the Editor

Randy Mather, AJ7B  
 (#7675)

Happy New Year! I hope you had a great Christmas. Now if we could only get Santa to do something about propagation.

Looking down the pipe at the newsletter for this year, I could really, really use more article input. A difficult challenge when conditions on 10 Meters are so unfavorable toward making contacts.

Saddled with the present conditions, a number of you have started looking at the Weak Signal software to keep making those 10 Meter contacts. These new Weak Signal digital modes can get through even when CW can't make it. You will see two articles in this newsletter about the FT8 mode of the WSJT-X Software. Yes, in the last (Fall) issue Charlie created an article on the FT8 mode. Since then, Charlie had some more thoughts on the subject. So, instead of spreading out the information over two issues, I decided to take the article done last time and add the additional thoughts Charlie presented to me. So, check out "Some More Thoughts on the New FT8 Mode." On the same subject, Greg Malone (QSO Parties Director) has submitted a short article after the Board of Directors discussed the new digital modes and how they can work for 10-10 QSO Parties. I suggest you give WSJT a try. I started using it and made a number of contacts on all the HF bands. Yes, even 10 Meters.

Thanks to those who helped fill the pages of this newsletter. Keep the articles coming.

73 Randy AJ7B #7675

## ARTICLES

There is always a need for articles in the News. There have been a couple requests for Do-It-Yourself articles. If you have something you would like to see in print please feel free to submit it. The most popular articles seem to be those relating to antennas, DIY projects, and kit building. Send your submissions to [editor@ten-ten.org](mailto:editor@ten-ten.org).





## From the President

Terry Webb N0TW  
#36547

I am recovering from some minor surgery, so this article may be a bit brief.

The Board of Directors had an on-line telecommunications (ZOOM) meeting on 11/19. Here are some highlights of that meeting.

**QSO Party Proposed Rule Changes.** Over the years there has been a problem with encouraging everyone to submit logs for the QSO parties. Many members feel they can not compete with stations running amplifiers. The BOD decided to create Low Power and High Power classifications for these events. 150 watts is the cut-off value between Low and High power. So, for upcoming QSO Parties there will be QRP, Low and High Power entries. The idea of changing the award structure from Call Areas to ARRL Divisions did not pass.

There were problems with the last Digital QSO Party. Some members were using FT8 and JT65 modes which does not support sending the 10-10 number as part of the exchange. Since it is imperative that the 10-10 number must be exchanged, the BOD felt that additional information should be published to emphasize that 10-10 numbers must be passed. There are several modes that are much quicker than others and it is these modes that we will encourage be used. It is recommended that members use digital modes that allow the passing of 10-10 numbers. FT8 and JT65 modes will have to be done in the MANUAL mode. Greg, WA3GM will be writing an article for this issue of the newsletter dealing with these issues.

Dan, KZ3T suggested that a standardized format be used when reporting logs for the Open Season. Dan received 20 log entries for the last Open Season QSO Party and everyone used a different format for log submission. Dan will be preparing a short article detailing the correct format for log submission.

Following the regular BOD meeting, a meeting was held to discuss the award of 2018 scholarships. Currently we award five \$2,000 scholarships. Usually we have enough contributions to fund this amount. This year, contributions have been less than in past years. The BOD decided to continue with the funding of five scholarships and review where we are next year. If sufficient funding is not donated, we may elect to return to funding four scholarships.

Larry, WA2SUH reported that KR7RK is still having problems dealing with

reservations for the Dayton (Xenia) hamfest. Through the diligence of Keith, KR7RK, we ended up with a very nice location last year and hopefully we will do the same for 2018. For those of you who missed last year at Xenia, the location was very nice and clean. I hope to meet lots of you all at Dayton/Xenia during 2018.

I have reported in the past that 10-10 was represented at 11 hamfests. In 2018, we are planning to attend the same hamfests which are: Orlando (HamCation), Yuma, Tucson (twice), Charlotte, Houston, Las Vegas, Dayton (Xenia), Ham Com, Sea Pac, Friedrichshafen (Germany), Huntsville, and Shreveport. If you attend one of these hamfests, be sure to drop by the 10-10 booth and sign our attendance log. You can also renew your dues at the booth.

With poor band conditions, now is a good time to work on your awards. If you do not have the VP award, look back through your logs and see if you have 500 contacts that you can use. Everyone loves it when a new VP number shows up as they all love to work the new ones. Also, the Bar Awards is fun to work towards.

I would like to encourage any member who has an article they would like to get published in the newsletter to submit it to our Editor. There is always room to publish articles, photos, etc.

## Ten-Ten Top Operator Award

This award is based upon the number of times a member's call appears 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 Operator for Q3 is:

Operator - **N5XZ Allen Brier #4530**

Net Control - **N6OPR Bob Farrow #45715**

The Top Operator and Net Control for 2017 are:

Operator - **N5XZ Allen Brier #4530**

Net Control - **N6OPR Bob Farrow #45715**

## Digital Modes for QSO Parties

At the board of directors meeting last week the subject of Digital modes for the Digital QSO party was raised in light of the some of the new modes appearing such as FT8. In most of the digital modes you are able to make the proper exchange quite easily.

The question raised was are you able to fulfill the QSO Party rules with respect to the proper exchange in the FT8, JT65 and JT9 modes.

In the case of FT8, JT65, JT9 etc. the answer is yes. Specifically the FT8 mode may be operated in two modes, automatic and manual. In the automatic mode the program takes over the QSO and handles all the exchanges with the typical signal report, RRR and 73. In the manual mode you are able to type in your own exchanges up to 13 characters so there is a way to make the legal exchange for a ten-ten contact. From the rules a legal exchange is as follows:

### 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.**

Please see the "Some More Thoughts on the New FT8 Mode" provided by Charlie, WA2HMM in this issue of the newsletter. Thank you Charlie for your input. It is much appreciated.

In the JT65 and JT9 modes there is no automatic mode so you can type your exchanges in manually. As each exchange takes 45 seconds each way a typical QSO could take up to 5 minutes or more depending whether or not the exchange went through properly. To me this would be like watching paint dry and certainly would not be for me. FT8 is much quicker with a 15 second exchange rate each way which would complete the QSO in about 1 minute.

We will work on changing the rules page to take out the word 'etc.' with relationship to the modes so there is no confusion.

73 & C U on Ten  
Greg Malone, WA3GM  
Director, QSO Parties

## LoTW and FT8 Mode

I have had quite a few folks email me saying "LoTW will not take their FT8 QSO submissions".

LoTW WILL take them, but you must have the updated Data file. Figure 1 shows the latest version of TQSL that will allow you to upload FT8 QSOs to LoTW.

73, Charlie, WA2HMM, #40510

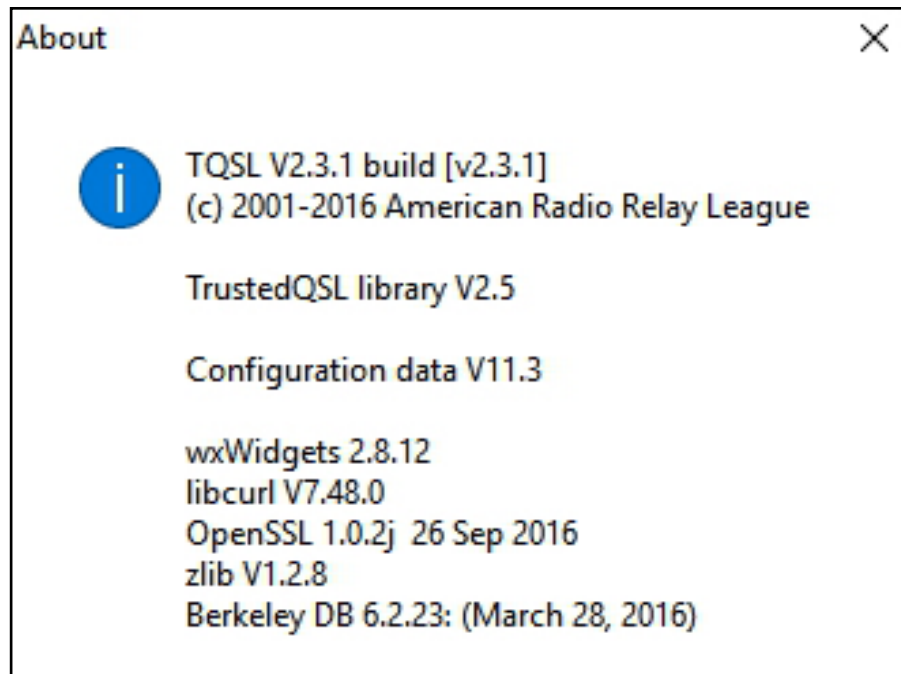


Figure 1. Latest Version of TQSL

## CW Corner

Hello again friends; it is once again time for our quarterly gathering here at the CW Corner. It seems like just the other day when I was pecking out a few notes for the Fall edition of our 10-10 News.

On November 10, the postman brought me a letter dated October 30 from Bill Wilson, W5VDM, #76438 of New Ulm, Texas. Bill's letter was giving me accolades for my quarterly musing, which sure made this old man feel encouraged to push the column along. It admittedly does get a little disheartening at times with propagation being as pitiful as it is; even the lower bands such as 20 and 40 have been quieter than normal, although I do have to wonder how much of that is factual and how much of that is me reminiscing about how the bands were, or at least how they seemed to be, back in the late 1980s and early 1990s. On a positive note however, CQWW DX Contest was the weekend of 24 and 25 November, and 15 meters seemed to have a good deal of contest traffic, at least more activity than I've heard on 15 meters in quite some time. Sadly, I had other engagements to consume my time, so I didn't get to participate. The only real operating activity I've partook was the Illinois QSO Party back in October, of which I scored only 14,000 points – about half of what I did the year previous. I'm not sure if that can be attributed to

propagation, lower participation, or a combination of the two.

By the time this goes to press and gets to your mailbox, the 2017 ARRL 10 Meter Contest will already be in the books. I hope you all are granted the time and band conditions to participate.

In January, 2018, the Straight Key Century Club will be hosting their annual Anniversary Celebration. Ops are scheduled from all 10 call districts; I am unsure what DX entities have signed up, but there are managers for the continental regions such as AF, AS, EU, etc. The call used will be K3Y/x, with the district of the operator being listed with the call. For further information, please see [www.skccgroup.com](http://www.skccgroup.com).

The North American QSO Party will commence once again the weekend of January 13 and 14. This is one I've also enjoyed in the times that I've remembered the contest. I do have a problem with absent-mindedness. Rules can be found at <http://ncjweb.com/naqp/>.

The week of March 3 – 10 gives us a fairly new operating activity – it's come on the scene in the last few years and is now really beginning to take off. It is known as the Novice Rig Roundup, and its purpose is to get vintage equipment on the air. Points are granted based of course on number of contacts, but multipliers are based on if the rigs on each end are crystal controlled, have a vfo, and the input power to the rig's final amplifier. More details can be found at <http://novicerigroundup.com/>.

Lastly, for this time around: I have also assumed the position of Elmer Director for SKCC. The purpose here is to have Elmers in place throughout the organization in as many locations as possible. When we have a new ham come to the organization needing assistance, be it something theoretical for an upcoming exam, questions regarding operating procedure, or assistance with setting up a station, Elmers are in position to help. This is a service I personally feel is an essential, perhaps more now than years ago, due to the decline of local clubs, and a shift in our culture that has become less personal and more private. I am curious what my fellow 10-10ers think of this, and the notion of 10-10 implementing such a thing within the organization. I would of course volunteer for it.

Get on the air y'all, and Enjoy!

73, Jim Stoeber, w19x #49635

#### ARTICLES

If you have a Ten-Ten related adventure/experience you think would be good to share with the other members of the Ten-Ten International organization, please send your story to [editor@ten-ten.org](mailto:editor@ten-ten.org).

## REPORT FOR THE 10-10 INTERNATIONAL CLUB STATION W6OI

W6OI continues to be on the air for all 10-10 QSO parties. Band is mostly quiet, but I keep trying! Even trying more digital modes and still not too active. Do hear some from South America. To make contacts you must do lots of calling and of course listening!

Sprint, October Fall CW and Fall Digital party came up a bust. Band was mostly dead as you all know. I do make some PSK31 and FT8 contacts occasionally. I usually try to send out a notice on the ten-ten.org email list service so folks know to turn on their rigs when I am on the band! Everyone try to do the same so we can at least give a listen. If you are not subscribed to the ten-ten.org email list notification services, go to the ten-ten.org website to sign up. Just click on the drop down menu "Forum/Misc", and then click on the menu item "Ten-Ten List" where you can get all the details for this free service. If you are not subscribed to this service you are missing out on a whole lot of good material that is shared between the members.

Continue to watch the propagation forecasts but don't stop there. The best way is to just listen to the noise and you can tell the difference between just a regular hiss and that noise which has some static along in the background. Then just check the beacons to see if your hearing is on track! Then back to calling anywhere from 28345 on up to about 28500. Good luck.

I am in Southwest Florida now for most of the winter so give a listen for me down this way.

The 10-10 Club Station, W6OI, is available for operation 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 confirmation of license and paid up membership to the following or via email ([treismine2@yahoo.com](mailto:treismine2@yahoo.com)):

**Jerry Kopstein N9AC**  
**8041 W. Lakeshore Drive**  
**Burlington, WI 53105**

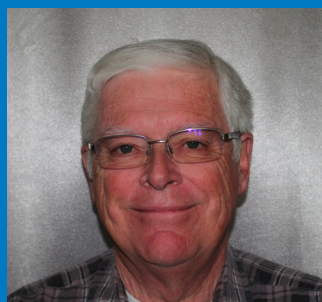
W6OI is one of three official 10-10 club stations, the others being VE9TEN (trustee Rob, VE9KM) and DL0X (trustee Henry, DL8YBM). W6OI is operated on CW by Brad, K0DBK who makes available FISTS and SKCC numbers. W6VY, Bob operates on Geratol nets to give out W6OI Geratol number and promote 10-10.

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 list from Jerry, N9AC. It is available in ML format or just plain text. Listen for W6OI!

73's Jerry, N9AC





## Chapter Coordinator

Jim Fox, KA0ZPP  
(#43428)

### GENERAL NEWS

- 1) **All CH/CM:** Please double check the TEN-TEN Net Guide to be sure your net(s) are listed correctly. If there are changes, be sure to let me know so I can update the list.
  - 2) If your chapter is planning a special during the months of April, May or June, please let me know before March 1st so I can include the details in the April newsletter.
  - 3) Reminder of Quarterly Reports Due: **In Extremis** (no report in over a year): 10 Bar-X, Bauxite, Louisiana Pelican, Space Coast. Past Due (no report received during the prior quarters when due): Chief Seattle, Twin Cities, Minuteman/Old Ironsides. Reports received after November 30 (date of this report) are not included here and will be acknowledged in the Chapters section of the 10-10 website.
- Chapter Reports **Due during first quarter:** Channel Islands (Mar), City of Lights (Mar), Fort McHenry/Cornerstone/Yodar Kritch (Mar), Portland 500 (Jan), Possum Trot (Feb), Sky Blue Waters/Tin Lizzie (Jan), Up the Crick (Feb). Note that Quarterly Chapter Reports may be sent any time. The months indicated here are the dates in 2017 in which the last report was received.
- 4) A number of chapters have been sending in minimal chapter reports in order to maintain affiliation. I ask **ALL CH/CM** to send me a **complete report** during 2018 so I have up to date contact and net information. I thank you in advance for your help.

### CHAPTER NEWS

- 1) Since CH Mac, K6VMN, became a Silent Key in 2016, several members of **Channel Islands** still are trying to resurrect the chapter. The status and activity are uncertain and may become QRT.
- 2) **Cincinnati Area Ten Tuners (CATT)** is adding a new net on an experimental basis. Immediately following their normal net on 28.800 MHz, Wednesday at 0100 UTC, they will QSY to 28.490 MHz to see if they can pick up new licensees. If they receive enough interest, they will consider making the new frequency permanent. No update received to date (November 30).
- 3) **Santa Fe Trail** runs specials almost every month. Watch for posts on the TenMeters email list from CH Larry, KA9PCU, for details. CH Larry is also

looking for an assistant to learn the ropes of running the chapter. If you are willing to help, or want more information, contact Larry at (309) 342-5977 or (309) 299-0246.

4) We have a **New Chapter. Southern Illinois Ten Meter Club** has been accepted. Their net meets 0100 UTC Monday on 28.405 MHz. CH is Rich, N9XCO, #77527, in Centralia, Illinois. Check them out and welcome them to Ten-Ten!

5) **Restoration Project** has reluctantly gone **QRT** when the club station the CH/CM had been using to maintain the net lost its antenna and has no interest in replacing it. Best wishes go out to Gary, VE7SSJ, Janis, VA7JN, and all their cats.

6) Chapters below accept email upgrades as of November 30. All 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, it is good practice to keep a detailed listing of the upgrade in the event that the CM should require verification. Requirements peculiar to a particular chapter are noted.

(\*\* indicates change)

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**Colorado Centennial/Colorado Frontier Gang** – CM WB0CON, [wb0con.comcast.net](http://wb0con.comcast.net)

**Cradle of the Confederacy** – CM K4PO, [pcsalley@gmail.com](mailto:pcsalley@gmail.com)

**Down Under** – CM ZL1AFU, [z1afu@nzart.org.nz](mailto:z1afu@nzart.org.nz)

**Fort McHenry/Cornerstone/Yodar Kritch** – CM K3TUJ, [k3tuj@juno.com](mailto:k3tuj@juno.com)

**Gold City** – CM K4QHH, [rabisch@hotmail.com](mailto:rabisch@hotmail.com)

**Hanse** – CM DL5HAN, [dl5han@t-online.de](mailto:dl5han@t-online.de)

**Houston S.H.O.T** – CM N5MT, [n5mt@aol.com](mailto:n5mt@aol.com)

**Major League Baseball** – CM N6OPR, [n6opr@msn.com](mailto:n6opr@msn.com)

**Minuteman/Old Ironsides** – CM WA1ENO, [wa1eno@hotmail.com](mailto:wa1eno@hotmail.com)

**Neanderthal** – CM PA2NJC, [cm.neanderthal@online.de](mailto:cm.neanderthal@online.de)

**New Mexico Mud Ducks** – CM KM5EH, [buckml@lobo.net](mailto:buckml@lobo.net)

**North Georgia** – CM W4GKF, [10X@chazcone.com](mailto:10X@chazcone.com)

**Oregon Trail/Portland 500** – CM W7HO, [w7ho@w7ho.com](mailto:w7ho@w7ho.com) or [w7ho@arri.net](mailto:w7ho@arri.net)

**Restoration Project** – Now QRT \*\*

**Santa Fe Trail** – CM KA9PCU, [ka9pcu@centurylink.net](mailto:ka9pcu@centurylink.net)

**Sky Blue Waters/Tin Lizzie** – CM KA0ZIA, [sbwtl1010@gmail.com](mailto:sbwtl1010@gmail.com)

**Space Coast** – CM K5FBS, [k5fbs@yahoo.com](mailto:k5fbs@yahoo.com)

**Speedway** – CM W7CAR, [w7car@arri.net](mailto:w7car@arri.net)

**Steamboat Plus** – CM KD5DE, [kd5de@nwla.com](mailto:kd5de@nwla.com)

**Twin Cities** – CM K0DBK, [kzerodbk@gmail.com](mailto:kzerodbk@gmail.com)

If any chapter not listed accepts email upgrades or if the email listed has changed, please let me know so I can update the list. Thanks.

Jim Fox, KA0ZPP, PO Box 135 Mayhill NM 88339, email: [ka0zpp10ten@gmail.com](mailto:ka0zpp10ten@gmail.com)

## TEN-TEN NET GUIDE

As of December 1, 2017

DAY	ZSUM	ZWIN	Chapter Name	Location	Freq	DAY	ZSUM	ZWIN	Chapter Name	Location	Freq
SUN	0001	0100	Chesapeake Bay	Chestertown, MD	28345	WED	0001	0100	Cincinnati Area Ten Tuners	Milan, IN	28800
SUN	0300	0400	Chief Seattle	Seattle, WA	28430	WED	0001	0100	Cincinnati Area Ten Tuners	Milan, IN	28490 NEW
SUN	1300	1400	Arlington	Arlington, VA	29200	WED	0100	0200	Houston SHOT	Houston, TX	28488
SUN	1400	1400	Neanderthal Chapter	Leichlingen, DL	28355	WED	0200	0300	10 Bar X	El Paso, TX	28445
SUN	1630	1730	Possum Trot	Raeford, NC	28345	WED	1400	1500	EU DX/Branding Iron	Bergamen, DL	28355
SUN	1700	1700	Major League Baseball	Gilbert, AZ	28380	WED	1700	1700	Gold City	Rutherfordton, NC	28425
SUN	1800	1900	Portland 500	Portland, OR	28350	WED	1930	1930	Route-66	Boonville, IN	28370
SUN	1900	2000	Oregon Trail	Dallas, OR	28330	THU	0001	0100	Cradle of the Confederacy	Pike Road, AL	28350
SUN	1930	1930	North Georgia	Atlanta, GA	28610	THU	0100	0200	Gateway	St. Louis, MO	28650
SUN	2030	2030	Santa Fe Trail	Galesburg, IL	28345	THU	0100	0100	Cow Town	Arlington, TX	28460
SUN	2100	2200	Possum Trot	Raeford, NC	28150 CW	THU	0100	0200	Milwaukee	Milwaukee, WI	28365
MON	0100	0100	Arizona Desert 10-10 Net	Phoenix, AZ	28445	THU	0230	0330	Windfarms	Livermore, CA	28485
MON	0100	0200	Milwaukee	Milwaukee, WI	28365	THU	0230	0330	Up The Crick	Eugene, OR	28450
MON	0100	0100	Lonestar	Arlington, TX	28460	THU	0300	0400	Chief Seattle	Seattle, WA	28430
MON	0100	0100	So. Illinois Ten Meters Club	Centralia, IL	28405 New	THU	1930	1930	Speedway	Rainier, OR	28350
MON	0130	0230	Bauxite	Benton, AR	28470	FRI	0001	0100	Fort McHenry/ Cornerstone/Yodar Kritch	Arbutus, MD	28370
MON	1630	1730	Chief Seattle	Seattle, WA	28430	FRI	0300	0400	Chief Seattle	Seattle, WA	28430
MON	2330	2330	Sky BI Wtr/ Tn Lzz/Twn Ct	Inver Grove Heights, MN	28380	FRI	1400	1400	Hanse	Humburg, DL	28355**
TUE	0001	0100	Ft McHenry/ Cornerstone/Yodar Kritch	Arbutus, MD	28370	FRI	2230	2130	Down Under (Summer in NZ is winter in US)	Aukland, ZL	28530
TUE	0100	0200	CO Centennial/ CO Frontier Gang	Lakewood, CO	28340	SAT	0300	0400	Chief Seattle	Seattle, WA	28430
TUE	0100	0200	City of Lights	St Charles, IL	28150 CW	SAT	1430	1530	Steamboat Plus	Shreveport, LA	28430
TUE	0130	0230	City of Lights	St Charles, IL	28720	SAT	1510	1610	Louisiana Pelican 10-10 Net	Livingston, LA	28450
TUE	0130	0230	Bauxite	Benton, AR	28470	SAT	1600	1700	City of Roses/ Portland Bridges	Ridgefield, WA	28835
TUE	0300	0400	Bay Area	Hayward, CA	28475	SAT	1730	1730	Tango	Buenos Aires, LU	28650
TUE	0430	0430	Aloha	Hilo, HI	28490	SAT	2200	2200	Alii	Lihue, HI	28730
TUE	1500	1600	New Mexico Mud Ducks	Albuquerque, NM	28835						
T/W	2330	0030	Minuteman/ Old Ironsides	Saugus, MA	28409						
WED	0001	0100	Castle Craig	Meriden, CT	28375						

\*\* Indicates a change since the last published list.

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: KA0ZPP, Jim Fox, PO Box 135, Mayhill, NM 8839-0135. E-mail: [ka0zpp10ten@gmail.com](mailto:ka0zpp10ten@gmail.com).





## DX News

Mike Davidson, N5MT  
(#24949)

Hurricane Harvey produced more than forty inches of rain on my station in August and reduced my radio room to a wet disaster. Once the power came back on in the house, friends came over and helped me pull up all the water soaked carpets. This allowed the remaining wood floors to dry, and for me to move back into the house. But we soon made the big decision to move back to my home state of Louisiana and find a house where I can begin to rebuild a ham radio station. The big seventy foot tower that had been up for thirty-five years and the HF antennas that talked with more than 340 countries, were taken down by a large crane a few weeks ago. The ten foot tower sections are now stacked neatly in the back yard. I am down to a Butternut multi-band vertical in the middle of three trees in my back yard. I will continue to call the weekly Houston SHOT net with my amp and vertical on Tuesday nights until I get a final moving date, which has not been determined yet. I presently have limited internet using a Wi-Fi connection to read mail and surf the internet looking for a new home near younger relatives that can provide family help as needed. With the help of our Louisiana relatives, we are slowly packing up everything for a move. I am currently looking at home listings via my internet connection but I have not found the perfect place where my antennas could be put up at a new site location. I might change the tower to something like a motorized crank-up that would have a smaller number of HF antennas on it, as I am interested in Ten and the WARC bands for now. There are about three tons of packed boxes ready to be moved and I expect to pack three dozen more boxes to get the rest of the house packed plus some furniture. Now all I need is a big truck and a new house, hi. After I move to Louisiana, I plan on keeping my net control position for the Houston SHOT Tuesday 8 pm net that I have been running since 1981 so try to check in and hear how it will be done.

Anyone who needs a 10-10 Countries certificate or upgrade will have to wait until after I can set up my computer resources when I get moved and settled. All the 10-10 records for the Countries awards are saved on a computer running Windows XP. The current Windows 10 operating system does not like to run old DOS programs. There are backups of the 10-10 data in several places so no data has been lost in the Harvey flood.

I just changed all my clocks back an hour since daylight-saving time is over for the year. There has been one DXpedition to Annobon Island this year in October and there were no 10-10 members in the group that went to this rare African location. We did have a rare visit by a 10-10 member to Nepal by Declan EI9HQ #71019 earlier this year. Declan told me they did not make many QSO's on Ten but he did work about six 10-10 members that he recognized. When someone turns in for country credit, a 9N7EI contact on a Countries Award application, Nepal could be the next new 10-10 country!

The Fall DX contest season started with the CQ WW DX SSB contest the last weekend in October. Two big contest stations on the East coast made 300 to 500 contacts on Ten during the two-day contest, so the band was open to Europe and Africa. However, the best propagation was on 15 and 20 meters with hundreds more contacts!

The solar flux has settled back to its 66-100 range the past three months with only one significant surge in the solar flux in early September. I expect poor conditions on Ten for the next two years as this cycle reaches its final days and cycle #24 ends. The flux will stay in the 70's and 80's for the rest of Cycle 24 and Cycle 25 is expected to start about the fall of 2019. Be sure to upload your logs at least each quarter to LoTW!

**Countries Award:** There were no Basic Countries Awards submitted and no upgrades issued this quarter. Be sure to read the Rules at the 10-10 website for all awards and try not to make a mistake. If you apply for any award, get the correct forms at the 10-10 website.

**NOTE:** Of the top twenty-five most needed countries in the world, only 11 of 25 have never had any 10-10 activity.

About 30 countries remain to become a 10-10 country

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

### GENERAL 10-10 DX REPORTED IN THE PAST QUARTER:

**6Y Jamaica.** Six Europeans used call 6Y0W during the CW CQ DX contest the last weekend of November. The only 10-10 member was Nick **LZ3ND/6Y0ND** #72407.

**9U Burundi.** A DXpedition to Burundi Africa, took place from November 6-17th by a large group of ops. Team leader was Antonio **I28CCW** #70101 and the other 10-10 member was Gerard **F2JD** #63443, who likes CW.

**CT3 Madeira Islands.** Alfons **DJ8VC** #69618, was on Madeira from October 3-17th on all HF bands and modes using the club station CW3L.

**FJ St. Barthelemy Island.** A group of four operators were on Pointe Milou, St. Bart from October 17-26th. The only 10-10 member was Greg **W0ZA** #15171. They operated CW, SSB and RTTY into a SteppIR vertical and a big Hexbeam,

on whatever band was open.

**FS St.Martin & PJ7 Sint Maarten.** Jim **K3NK** #25287 and W3HNC, were there from October 23rd to November 1st during the SSB CQ WW DX contest. Outside the contest, Jim used PJ7/K3NK and FS/K3NK.

**HS Thailand.** A large group of ops were in the CW CQ WW contest the last weekend of November with call HS0ZAR. The only 10-10 member was Fred **K3ZO** #8859. They may have use call HS0ZGD before/after the contest.

**P4 Aruba.** Jim **K8JH** #16250 and Mike **KB8KB** #16251 were using calls P40N and P40M from September 27th to October 3rd. They were on the HF bands using SSB, CW, Digital plus FT8. <http://www.KV1J.com/FP/July17.html> Note the consecutive 10-10 numbers!

John **W2GD** #14109 was using call P40W again, during the CW CQ DX contest the last weekend of November.

**T2 Tuvalu Island.** Tony **3D2AG** #72719, was able to operate from Tuvalu from October 20th for a week on SSB, CW, RTTY and FT8.

**V8 Brunei.** Tom **KC0W** #67688, arrived in Brunei on November 25th and might stay until the Ten Meter contest! QSL direct to Tom, no LoTW, no bureau. DX stations need to send two dollars but US hams can send an SASE for a card. He has an FT-857D running 75 watts and a high noise level on the low bands, so he wants all to use an amp to boost signals. Tom tried using FT8 and after 55 QSO's he gave up saying "too many idiots who have no clue what they are doing." Tom got back on the air on CW during the last weekend of November in the CQ WW contest. Tom did not have an internet connection at his contest station to upload to Club Log so his alternate plan is to upload logs every few days from a friend's location. Tom is expected to stay in Asia for his next DX location before returning for the holidays. He was in Cambodia where he used call XU7XXX and before that, he was on the air from Vietnam as 3W9CW for one day total and then had technical issues.

**VK9/M Mellish Reef.** A DXpedition to Mellish Reef took place from November 1-16th by nine operators using call VK9MA. The only 10-10 member is Hawk **SM5AQD** #52781. Mellish is the 29th most wanted country and their website is: <https://VK9MA.com>.

**VP5 Turks and Caicos Isl.** Will **AA4NC** #15774 and K4QPL, used call VP5M in the CQ WW DX CW contest.

**VP2M Montserrat.** Dennis **N0SMX/VP2MMX** #72727, was with George K2DM in Saint Peters from October 26-30th and during the SSB CQ WW DX contest. They used a K3 and amplifier to a TH7, two el 40, and a CL-33 tri-bander. They operated mostly SSB, FT8 and then uploaded all logs to LoTW after they got home.

**YN Nicaragua.** Mike **AJ9C** #41205, was in Nicaragua for the CQ WW CW

contest the last weekend of November. He used call YN2CC from November 21-29th. LoTW.

#### UPCOMING DX & NEW 10-10 ACTIVITY:

**3B6 Agalega & St. Brandon Isl.** A DXpedition to the 39th most needed country will occur in April 2018, next year. This will be the same team that operated from Juan de Nova in March 2016 when Flo **F5CWU** #71812 was the only 10-10 member of FT4JA. Flo likes SSB so good luck. Website: <http://www.SaintBrandonDX.com>.

**3D2/R Rotuma Island.** Tony **3D2AG** #72719, plans to be back on Rotuma from February 23rd to March 16th of 2018. There will be four friends with him but none of them are 10-10 members so you will have to find Tony to swap 10-10 numbers! The call sign will be 3D2EU. Rotuma is 646 kilometers north of Fiji in the South Pacific. The island is small with no ham radio population. There will be a south radio station set up, and one north, both running all bands and modes. Website: <http://www.rotuma2018.de>.

**3Y0 Bouvet Island.** There will be several 10-10 members going to Bouvet Island in February 2018. Ralph **K0IR** #2609, Bob **K4UEE** #75256, Dmitri **KP2P/RA9USU** #54234 and Mark **ON4WW** #49103. These operators have many years of experience, so good luck! Website: <http://www.bouvetdx.org>.

**6W Senegal.** Jacques **F6HMJ** #52711, will arrive in Senegal, Africa on December 21st and operate as 6W7/F6HMJ until January 15, 2018 mainly on CW.

**7Q Malawi.** Members of the EIDX group who went to Nepal and operated 9N7EI earlier this year, will activate 7Q7EI from Malawi from March 21st to April 3rd 2018. Of the fourteen ops only Declan **EI9HQ** #71019 is a 10-10 member. All bands and modes. LoTW & QORS. Website: <http://www.7Q7EI.com>.

**C9 Mozambique.** A large group of ops using call C6T from May 2-15, 2018. The only 10-10 member is Francis **ON6LY** #73607, so be sure to find him to get his 10-10.

**V4 St. Kitts and Nevis.** Bernie **W3UR** #25731 and his wife Becky N3OSH, will celebrate their 30th wedding anniversary on the island of Saint Kitts soon. Bernie will be staying at the V47JA station running CW and SSB on all bands and using his call sign V47UR. They expect to arrive January 29th and leave on February 12, 2018.

**VP6 Ducie.** A two week DXpedition in November 2018 will use call VP6D. Look for Arnie **N6HC** #29959 and Gene **K5GS** #15119 as the only 10-10 members of 14 ops.

**XW Laos.** Ken **K4ZW/XW4ZW** #18573, will be on the air from December 3-8th. QSL via K1SE or LoTW and he has also set up a log search on Club Log.

## MISCELLANEOUS ITEMS &amp; NOTES:

Propagation forecast: <http://www.solen.info/solar/> ,  
[www.SolarHam.net](http://www.SolarHam.net) and <http://ARRL.org/Propagation>.

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

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

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

**Propagation:** I expect the solar flux to range from 66-90 during the Winter of 2017. The Winter Solstice is on December 21st, when HF propagation shifts to a more east/west path. After year end, will be your best chance to talk with Europe and Asia from the USA on Ten.

The peak solar flux of cycle #24 was in February 2014 with a value of 170.3. Our solar cycle #24, has been the weakest solar cycle in more than 100 years and it is slowly going through the solar minimum phase and then we might begin cycle #25, probably in 7-24 months. The natural cycle of the sun is 11 years and we are now nine years into cycle #24. I still think cycle #25 will start at the end of 2019. Some US agencies predict cycle #25 may be a weaker cycle than our current cycle #24!

The **maximum solar flux for each month of 2017** was: Jan 87, Feb 83, March 91, April 112, May 82, June 79, July 95, August 87, Sept 133, Oct 87 and Nov 76. A sudden grouping of 122 sun spots caused the Sept 4th max!

The **minimum flux for the same period 2017:** Jan 71, Feb 72, March 70, April 71, May 69, June 71, July 68, August 68, Sept 71, Oct 69 and Nov 66.

**On December 1st, the solar flux was 71, the A index was 11 and K index 3.** The sun produced a few solar flares this fall but the solar flux high for November was 47 points lower than the May 2016 high of 123.

**My Prediction:** Over the next four months, the best conditions: Dec. 23-25th, Jan. 19-23rd, Feb. 15-17th and March 7-10th. For USA, expect a slight 5-10% chance of DX to Europe or Asia with a 25-35% chance of DX to S. America and the S. Pacific, later in the day. Listen to the beacons from 28.175-28.300 so you will know which direction the DX is coming.

**NEW 10-10 DX MEMBER'S SEPTEMBER TO NOV. 2017:**

**Sept:** None; **Oct:** None; **Nov:** None.

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](mailto:N5MT@aol.com).

DX IS! 73 Mike Davidson N5MT #24949

## Story of a Casual DXer

By Marv Feldman, K4KEW

As a 12 year old kid I ordered my first rig from HeathKit. It was a crystal controlled DX-40 which I spent weeks soldering together. Of course, when complete, it went up in smoke due to my building mistakes! Fortunately, my Elmer sorted out the problem and got me on the air in the 40 meter Novice (CW) bands. I spent endless weeks calling CQ with no answers. One evening, a professor at a local college heard me and responded for my first QSO—what a thrill!

DX? No, that was for the big guns with huge towers and powerful amplifiers! Over the next 10 years I completed high school and university, continuing to enjoy casual contacts with that old DX-40. Then I joined the United States Air Force and, with my first officer's pay check, upgraded the station with a Drake TR-3 transceiver, my first single sideband rig. Nonetheless, my old "comfort zone" was (and continues to be even today) CW.

During my first overseas military assignment, I got on the air from the Azores with a call sign of CT2BC. The first contact was with Roger Burt (now N4ZC). Roger and I were both serving in the military; he was a chief in the Coast Guard in Virginia and I was a lieutenant in the Air Force in the Azores. Roger asked me who my QSL manager was and I responded, "What is that?" That was the beginning of a life time friendship between this casual DXer and an extraordinary super DXer. I learned a lot from Roger about DX, antennas, contesting, QSLs, awards, etc. It was very easy for me to earn the DXCC award from the Azores because DXers would come to me - I did not have to chase them. It was the WAS award from the Azores that was challenging. With 49 states worked, I still needed Utah, so I spent endless hours calling CQ Utah! (Reminiscent of the novice days of calling CQ with no answer!) During the last week I was on the island, just before having to pull apart and pack the station, I gave "CQ Utah" one last shot. After my desperate call, a "W2" from New Jersey responded with hardy laughter! He told me that there was a "W7" on frequency from Utah calling CQ DX at the same time I was calling CQ Utah! What a thrilling way for me to contact the last needed state for this reward.

The 30 year Air Force career continued and assigned me duty all over the world, including a year on Johnston Island, and duties in Korea, Midway, Japan, Greenland, the Philippines, etc. - all giving me the opportunity to be on the receiving end of huge pile-ups.

Now, retired in Florida, I have a fine ham radio station, have earned the DXCC awards for nine bands and have even had success on VHF and the digital modes. They say that the first love is special, so it is with my continuing affinity for CW which gives this casual DXer supreme joy!

Part of the beauty of our hobby is the willingness of hams helping each other. I have built stations, climbed towers, given spare parts and made DX skeds for many. There are two of the kind hams who have helped me here in my Florida retirement home. Paul Sturpe, W3GQ who computerized my old paper logs and modernized my station in countless ways and Brian Alsop, K3KO whose innovative approach to modern technology has made my old fashioned system sparkle with his innovations.

Is it true that DX is "only for the big guns with huge towers and powerful amplifiers?" This casual DXer does not think so!



## The 10 Meter L-Antenna

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

A large number of 10-10ers are just getting started. They are unsure of whether to go with a vertically polarized antenna or horizontally polarized antenna. They have heard that cross polarization reduces signal strength by some amount from 3 dB on upward. They do not yet know what the prevalent polarization is in the local area. They do not want to put a lot of money into their first antenna, but they would like to enjoy 10 meters for both skip and local contacts. They may also have some severe space restrictions. What's a person to do?

There is a simple and cheap solution. But first, a little background. For skip paths, polarization makes no difference almost all the time. The ionosphere skews polarization. Highly elevated beams have an advantage, but simple antennas perform well on 10 meters, whether vertical or horizontal.

Polarization makes the greatest difference with local area contacts, where line of sight is the general rule. Some of the gang run verticals, some horizontals. How to get started before one discovers which types of operating are the most fun is the tough question.

Why not make a simple L antenna out of hardware store supplies, as in Figure 1. Suppose you have a typical rooftop about 25' up, and a chimney or similar solid mounting point. Less than 10' of aluminum tubing and less than 10' of copper or aluminum wire, along with some mounting hardware to keep the parts solidly mounted but insulated, will produce a nice compromise antenna.

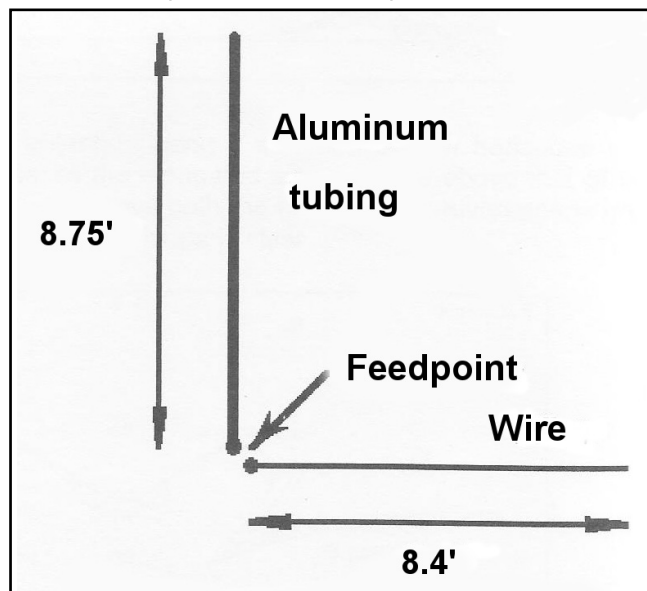


Figure 1. Standard Quad Loop

The vertical section consists of 2 pieces of tubing in the  $\frac{3}{4}$ " diameter vicinity. The tubing is self-supporting once you fix the base area solidly. The horizontal portion is wire, perhaps running along the roof ridge, elevated at least a few inches and more if you can manage it. Dimensions are not too critical. You can adjust the wire horizontal part by pruning the far end. And you can adjust the vertical part by sliding one section of tubing inside the other before clamping.

Adjusting the antenna for minimum SWR will do just fine. The modeled feedpoint impedance is about 40-45 ohms, so it makes a good match for RG-58, RG-8, RG-8X and RG-213 coax. I highly recommend a choke balun, such as the W2DU ferrite-over-coax designs, at the feedpoint to minimize RF on the outer braid of the feedline.

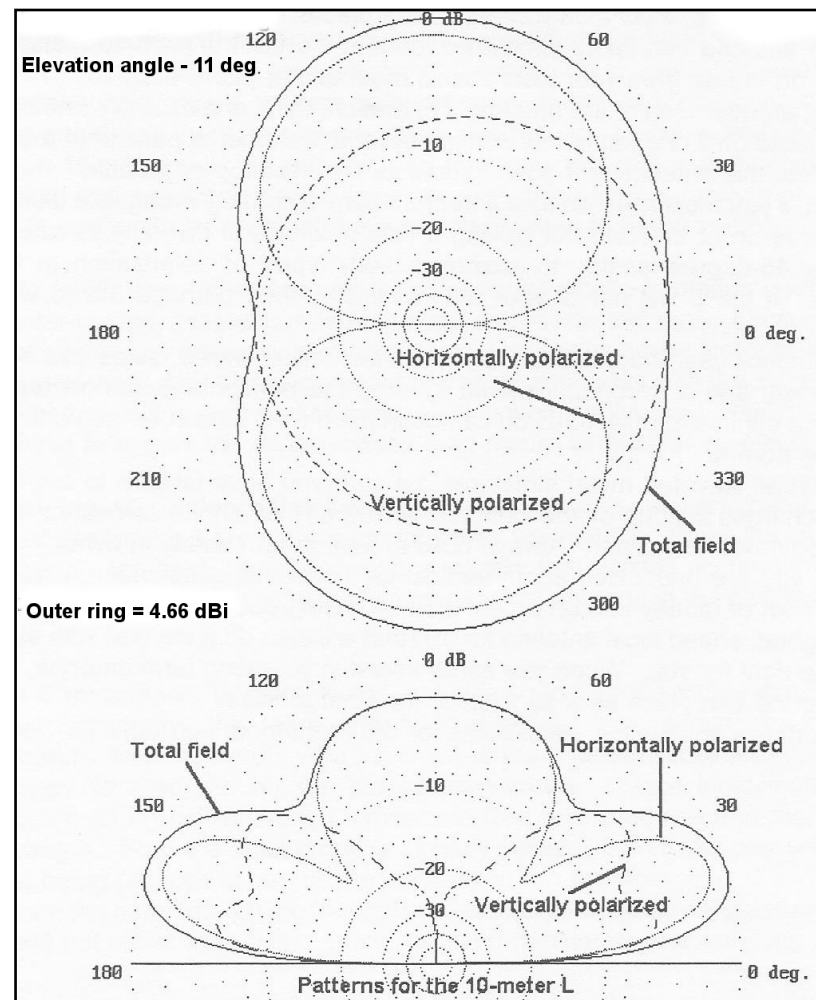


Figure 2. Patterns for the 10-Meter L

What do you get for your \$15 investment? A pretty good local antenna with both vertical and horizontal polarization. The patterns in Figure 2 assume the antenna is mounted atop the typical 25'-high rooftop crest. As the patterns show, the vertical part produces a vertically polarized signal (and receives the same) that is almost as strong (or sensitive) as a pure vertical. The horizontal wire produces horizontally polarized signal (and receives the same) about half as good as a full size dipole. The result is a low-angle total pattern shaped like a kidney bean that will handle signals, whatever their polarization.

By using light tubing for the horizontal piece, with perhaps a collapsible AM radio whip as the end section, you can make up a dandy portable or hill-topper antenna. A few nesting sections of PVC along with antenna pieces that also nest when not in use will make an antenna that takes almost no room in the car trunk. 5-10 minutes work, and you are on the air from your local scenic mountain or picnic area.

To get a better idea of the antenna's operation, think of it as an inverted Vee that has been rotated until one leg points straight up and the other is parallel to the ground. Unlike the Vee, this antenna is a good candidate for a rooftop or an attic.

In fact, if you must have an attic antenna, there is nothing wrong with using a Vee, either right-side-up or inverted, for getting a little polarization diversity to catch all the locals. Use 45-degree angles to maximize both types of polarization in the best compromise. If the L will not fit your attic vertically, then perhaps a Vee will fit the space.

For outdoor use, the L is likely a better mechanical choice, since you need only one solid mount and a secondary mount to keep the horizontal wire horizontal. The antenna has a minimal profile, and you can even put a PVC tube over the vertical tubing and fly a flag from it.

As with all elevated metal structures, be sure you have fat wire to a ground rod to bleed off charges built up by the weather. A 100 mH RF choke across the feedpoint terminals would not hurt either. Always build antennas with safety in mind.

So, if you are undecided about vertical vs. horizontal polarization, if you do not want to put a lot of money into an antenna while finding out which you prefer, or if you just need a good, cheap local antenna for 10 (that will also do quite well with skip), then the L may be right for you. When you finally invest in your long term antenna, you may want to keep the L in place as a back-up or for emergencies.

For further construction possibilities for the L-antenna, See QST for Dec., 1999 pp. 52-45.

### QSL Bureau News

It's been a very slow quarter here in the bureau, suspect largely due to poor propagation. Nothing to report.

73,

Jim Stoeber, w9x #49635



## Net Report

Bob Farrow, N6OPR  
(#45715)

### Net reports for 3rd Quarter 2017

#### MONDAY NETS

----- 28.38 MHz -----			----- 28.80 MHz -----		
DATE	TOTAL	NO 10X#	DATE	TOTAL	NO 10X#
3-Jul	6	0	3-Jul	13	1
10-Jul	2	0	10-Jul	9	0
17-Jul	2	0	17-Jul	13	1
24-Jul	2	0	24-Jul	11	0
31-Jul	2	0	31-Jul	8	0
7-Aug	2	0	7-Aug	8	0
14-Aug	2	0	14-Aug	11	1
21-Aug	2	0	21-Aug	11	0
28-Aug	9	1	28-Aug	10	1
4-Sep	2	0	4-Sep	11	0
11-Sep	2	0	11-Sep	6	0
18-Sep	6	0	18-Sep	7	0
25-Sep	2	0	25-Sep	12	1

#### TUESDAY NETS

----- 28.38 MHz -----			----- 28.80 MHz -----		
DATE	TOTAL	NO 10X#	DATE	TOTAL	NO 10X#
3-Jul	6	0	3-Jul	x	x
10-Jul	26	6	10-Jul	x	x
18-Jul	13	1	18-Jul	x	x
25-Jul	9	1	25-Jul	x	x
1-Aug	7	0	1-Aug	8	0
8-Aug	11	1	8-Aug	2	0
15-Aug	6	0	15-Aug	3	2
22-Aug	8	1	22-Aug	2	0
29-Aug	5	0	29-Aug	2	0
5-Sep	4	0	5-Sep	2	0
12-Sep	5	0	12-Sep	3	1
19-Sep	7	0	19-Sep	2	0
26-Sep	5	0	26-Sep	2	0

## WEDNESDAY NETS

28.38 MHz			28.80 MHz		
DATE	TOTAL	NO 10X#	DATE	TOTAL	NO 10X#
5-Jul	4	0	5-Jul	6	0
12-Jul	8	0	12-Jul	7	0
19-Jul	3	0	19-Jul	8	0
26-Jul	6	2	26-Jul	5	1
2-Aug	4	0	2-Aug	4	0
9-Aug	2	0	9-Aug	8	0
16-Aug	3	0	16-Aug	8	0
23-Aug	4	0	23-Aug	9	1
30-Aug	4	0	30-Aug	8	0
6-Sep	5	1	6-Sep	9	0
13-Sep	5	0	13-Sep	8	0
20-Sep	4	1	20-Sep	7	0
27-Sep	4	1	27-Sep	6	0

## THURSDAY NETS

28.38 MHz			28.80 MHz		
DATE	TOTAL	NO 10X#	DATE	TOTAL	NO 10X#
6-Jul	4	1	6-Jul	6	2
13-Jul	13	0	13-Jul	4	1
20-Jul	5	0	20-Jul	3	0
27-Jul	6	0	27-Jul	3	0
3-Aug	14	3	3-Aug	3	0
10-Aug	4	1	10-Aug	6	1
17-Aug	6	0	17-Aug	6	2
24-Aug	6	0	24-Aug	4	1
31-Aug	6	0	31-Aug	7	2
7-Sep	3	0	7-Sep	3	0
14-Sep	5	0	14-Sep	4	0
21-Sep	4	0	21-Sep	5	1
28-Sep	6	0	28-Sep	3	0

## FRIDAY NETS

28.38 MHz			28.80 MHz		
DATE	TOTAL	NO 10X#	DATE	TOTAL	NO 10X#
7-Jul	24	3	7-Jul	9	0
14-Jul	2	0	14-Jul	9	0
21-Jul	2	0	21-Jul	8	0
28-Jul	2	0	28-Jul	7	0
4-Aug	20	4	4-Aug	10	0
11-Aug	6	1	11-Aug	9	0
18-Aug	2	0	18-Aug	8	0
25-Aug	12	2	25-Aug	8	0
1-Sep	2	0	1-Sep	10	0
8-Sep	2	0	8-Sep	9	0
15-Sep	2	0	15-Sep	8	0
22-Sep	2	0	22-Sep	5	0
29-Sep	2	0	29-Sep	5	0

## SATURDAY NETS

28.38 MHz			28.80 MHz		
DATE	TOTAL	NO 10X#	DATE	TOTAL	NO 10X#
1-Jul	3	0	1-Jul	x	x
8-Jul	4	1	8-Jul	x	x
15-Jul	11	2	15-Jul	x	x
22-Jul	2	0	22-Jul	2	0
29-Jul	29	13	29-Jul	2	0
5-Aug	8	0	5-Aug	2	0
12-Aug	3	0	12-Aug	2	0
19-Aug	X	X	19-Aug	x	x
26-Aug	2	0	26-Aug	2	0
2-Sep	5	0	2-Sep	x	x
9-Sep	6	4	9-Sep	x	x
16-Sep	2	0	16-Sep	x	x
23-Sep	2	0	23-Sep	x	x

X= No Net Held

## 10-10 NET CONTROL STATIONS

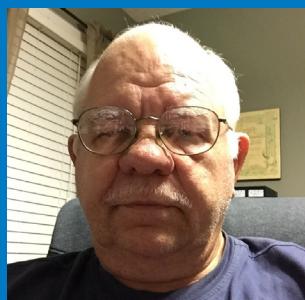
### ALL NETS BEGIN AT 1800Z

Mon (28.380)	Alan, WB9WZI	#76209	IL
Mon (28.800)	Doc, WB6OJB	#70675	CA
Tues (28.380)	Ray, K7CWS	#50288	AZ
Tues (28.800)	Mike, KF4WKY	#70191	NC
Wed (28.380)	Open. Contact N6OPR for info		
Wed (28.800)	Louise, N6ELK	#36654	CA
Thu (28.380)	Bob, N6OPR	#45715	AZ
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)	Mike, KF4WKY	#70191	NC

Sunday **NEVER ON SUNDAY**

10-10 Has Two Official Daily Nets  
 28.380 and 28.800 MHz  
 Both Run At 1800z  
 Every Day Except Sunday  
 Listen And If You Can Hear Us Join IN!!!





# QSO Parties

Dan Morris, KZ3T  
(#41015)

## 2017 Sprint QSO Party

October 10

### TOP TEN

CALL	10-10#	CTX W	CTX WO	TOTAL
1. DL8YBM	36109	37	96	170
2. KQ4PK	63201	10	21	41
3. DL6DK	39944	11	10	32
4. DJ2YE	68904	14	1	29
5. K8DEL	2978	6	8	20
6. K8IZK	73889	5	2	12
7. W8PJY	14574	4	2	10
8. N6OPR	45715	4	0	8
9. N7QOZ	62599	1	4	6
10. KZ3T	41015	2	1	5

### CALL AREA ORDER

#### CALL AREA 1

CALL	10-10#	CTX W	CTX WO	TOTAL
N1YKH	70147	1	0	2

#### CALL AREA 4

CALL	10-10#	CTX W	CTX WO	TOTAL
KQ4PK	63201	10	21	41
KZ3T	41015	2	1	5

### CALL AREA 5

CALL	10-10#	CTX W	CTX WO	TOTAL
AD5IF	73372	1	0	2

### CALL AREA 7

CALL	10-10#	CTX W	CTX WO	TOTAL
N6OPR	45715	4	0	8
N7QOZ	62599	1	4	6

### CALL AREA 8

CALL	10-10#	CTX W	CTX WO	TOTAL
K8DEL	2978	6	8	20
K8IZK	73889	5	2	12
W8PJY	14574	4	2	10

### QRP

CALL	10-10#	CTX W	CTX WO	TOTAL
AD5IF	73372	1	0	2

### MOBILE

CALL	10-10#	CTX W	CTX WO	TOTAL
WA2SUH	407	0	2	2

### COUNTRY ENTRIES

#### GERMANY

CALL	10-10#	CTX W	CTX WO	TOTAL
DL8YBM	36109	37	96	170
DL6DK	39944	11	10	32
DJ2YE	68904	14	1	29

**2017 FALL DG QSO PARTY****November 11-12****TOP TEN**

CALL	10-10#	CTX W	CTX WO	TOTAL
1. WA2HMM	40510	10	26	46
2. N4ZCG	56067	13	3	29
3. KM4ODS	77504	12	1	25
4. KJ4RV	37776	11	0	22
5. AK4YS	75328	10	1	21
6. N4ERM	34524	7	0	14
7. K4QHH	26040	6	0	12
7. N3GTY	50585	6	0	12
8. KD5DE	33513	4	3	11
9. W2VTV	71275	1	5	7

**CALL AREA ORDER****CALL AREA 0**

CALL	10-10#	CTX W	CTX WO	TOTAL
W0RTV	13962	1	0	2

**CALL AREA 2**

CALL	10-10#	CTX W	CTX WO	TOTAL
WA2HMM	40510	10	26	46
W2VTV	71275	1	5	7

**CALL AREA 3**

CALL	10-10#	CTX W	CTX WO	TOTAL
WA3GM	46927	1	0	2

**CALL AREA 4**

CALL	10-10#	CTX W	CTX WO	TOTAL
N4ZCG	56067	13	3	29
KM4ODS	77504	12	1	25
KJ4RV	37776	11	0	22
AK4YS	75328	10	1	21
N4ERM	34524	7	0	14
K4QHH	26040	6	0	12
N3GTY	50585	6	0	12
KZ3T	41015	2	0	4

**CALL AREA 5**

CALL	10-10#	CTX W	CTX WO	TOTAL
KD5DE	33513	4	3	11

**QRP**

CALL	10-10#	CTX W	CTX WO	TOTAL
KJ4RV	37776	11	0	22

**COUNTRY ENTRIES****ARGENTINA**

CALL	10-10#	CTX W	CTX WO	TOTAL
LU1BJW	39329	1	0	2

**CLUB ENTRIES**

CALL	10-10#	CTX W	CTX WO	TOTAL	OPS
K4MN	24874	6	0	12	N3GTY

**CHAPTER ENTRIES**

CHAPTER	LOGS	PTS
POSSUM TROT	8	139
GOLD CITY	1	12
STEAMBOAT	1	11
GATEWAY	1	2
TANGO	1	2

**2017 FALL CW QSO PARTY****October 21-22****TOP TEN**

CALL	10-10#	CTX W	CTX WO	TOTAL
1. HP1RIS	75617	11	12	34
2. N4ZCG	56067	7	3	17
3. KQ4PK	63201	3	8	14
4. ZL3TE	53431	4	2	10
5. KN4Y	17757	2	3	7
6. KZ3T	41015	1	3	5
7. KR7RK	63324	0	4	4
8. N5AF	1919	1	0	2
8. KI4EZL	74359	1	0	2
8. KI4EZK	77510	1	0	2

**CALL AREA ORDER****CALL AREA 4**

CALL	10-10#	CTX W	CTX WO	TOTAL
N4ZCG	56067	7	3	17
KQ4PK	63201	3	8	14
KN4Y	17757	2	3	7
KZ3T	41015	1	3	5
KI4EZL	74359	1	0	2
KI4EZK	77510	1	0	2

**CALL AREA 5**

CALL	10-10#	CTX W	CTX WO	TOTAL
N5AF	1919	1	0	2

**CALL AREA 7**

CALL	10-10#	CTX W	CTX WO	TOTAL
KR7RK	63324	0	4	4

**QRP**

CALL	10-10#	CTX W	CTX WO	TOTAL
KI4EZL	74359	1	0	2
KI4EZK	77510	1	0	2

**COUNTRY ENTRIES****NEW ZEALAND**

CALL	10-10#	CTX W	CTX WO	TOTAL
ZL3TE	53431	4	2	10

**PANAMA**

CALL	10-10#	CTX W	CTX WO	TOTAL
HP1RIS	75617	11	12	34

**CHAPTER ENTRIES**

CHAPTER	LOGS	PTS
POSSUM TROT	5	40

**CHECK LOGS**

CALL	10-10#	CTX W	CTX WO	TOTAL	OPS
HP1AC	10107	3	0	6	0

**NEW LIFE MEMBERS**

19333	KB4OF	Stephen A Meade	VA
49819	KB8AGJ	Gerald J Sande	MI
52779	K7YMA	George Scott III	AZ
68478	N1KRC	Paul R McNulty	MA
69138	N4VXH	Robert C Wallenhorst	KY
71022	VE2GT	Pierre Jolin	DX
73228	WA6BZ	Bruce V Zieminski	CA
76849	W5NI	William K Hulse	MO
76912	W6AER	Lucas Ford	CA
77182	K6UDE	Jim Ude	CA



## Some More Thoughts on the New FT8 Mode

Weak Signal digital modes have been around for a while now. However, the new FT8 mode seems to be taking the HF bands by storm. These digital modes were first developed for transmissions in conditions where signals are weak and very intermittent. Some examples are meteor scatter, moon bounce and ionospheric scatter. It was also noted that these weak signals could be decoded and understood in the HF bands when even CW couldn't be decoded. The FT8 mode was developed just for this purpose.

You may already be using this mode or you have heard about it and haven't taken the dive into this digital mode yet. Then again maybe this is the first time you are learning these modes even exist. This article is just a brief overview of FT8. Details about these digital modes can be found online. A good place to start is the WSJT Web Page: <http://www.physics.princeton.edu/pulsar/K1JT/>. There you will learn about how and why the modes were developed and details on how it all works. The January 2018 QST also has two articles on FT8 mode.

This article's purpose is to give you enough information to get started as well as how you can use the FT8 mode for 10-10 contacts.

### THE BASICS

You will need a PC that is connected to your HF rig. You at least must have two-way audio transfer between your rig and the computer and a PTT connection. The PC decodes the digital signals from the audio stream. On transmit, it encodes the signals onto the transmit audio. Because these signals are encoded and decoded based on time, your PC must have a fairly accurate and stable clock. The clock must be within 1 sec of UTC. There are many free programs that you can download and run to keep your PC's clock synced. I use NetTime.

It doesn't take a lot of RF power to communicate using these digital modes. 20 watts is considered QRO. You can make good solid QSOs with these digital modes using only 5 to 10 watts. In fact, if you keep your rig at 100 watts, you may actually cause QRM to adjoining stations. I have worked DX stations who are running 2 watts into a dipole antenna mounted inside their house on 20 meters. Almost any antenna will work.

You will also need the Weak Signal communications software. It is Free. You can download it from the same WSJT link given earlier in this article. After downloading and installing the software, you will launch WSJT and the main screen shown in Figure 1 will show on your monitor.

The online User Guide will walk you through making the connections between the software and your HF rig. There is also an online "Basic Operating Tutorial" to help you get started. If the User Guide and tutorial doesn't do it for you, then there is a user group where you can post your questions and get the answers you need.

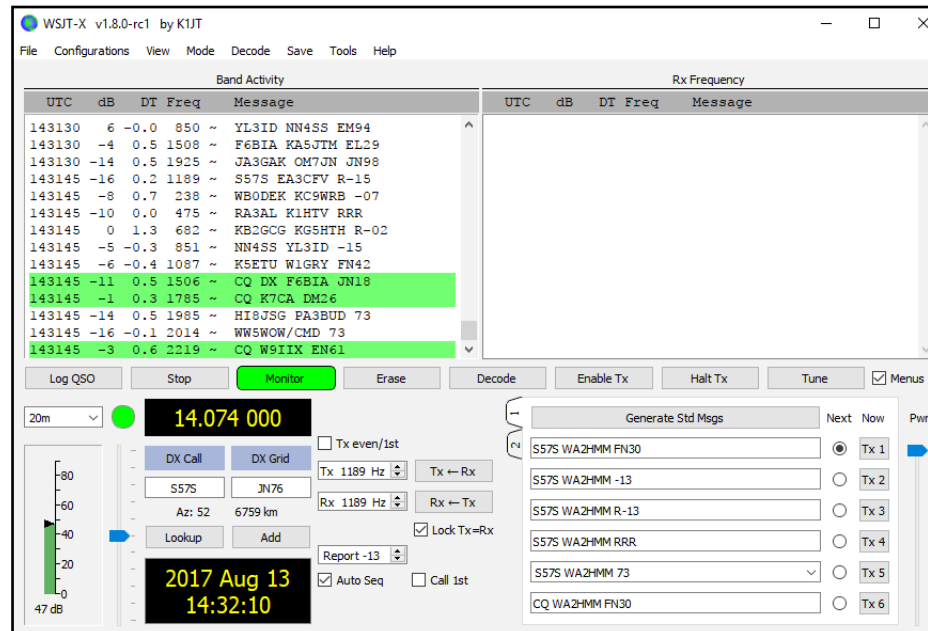


Figure 1. WSJT-X Main Window

To help navigate around the WSJT signals in the band, a waterfall display can be activated. A sample of the waterfall display is shown in Figure 2.

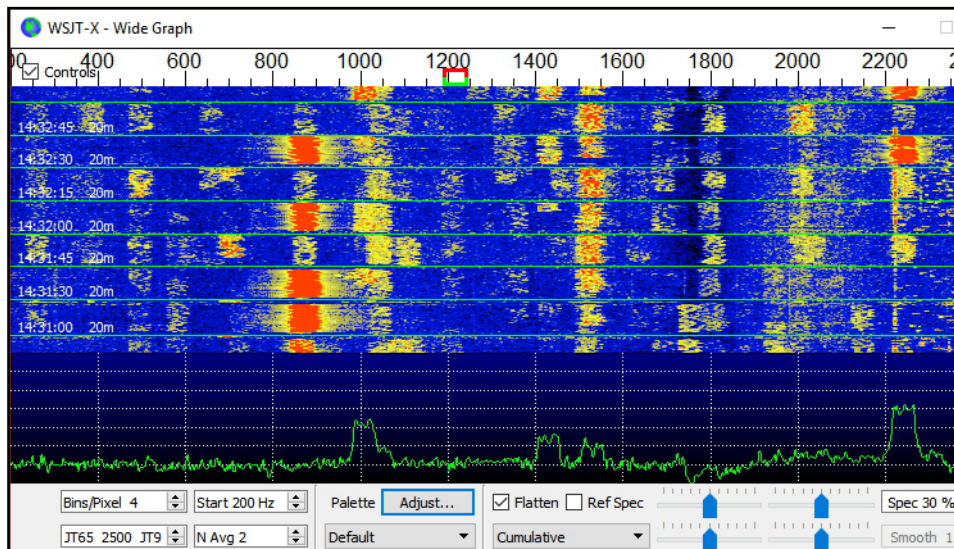


Figure 2. WSJT-X Waterfall Display

As you will quickly determine, FT8 is not a mode where you can carry on the usual rag-chew session. The transactions are very quick and very limited in verbiage. Each transmission has a limit of 13 characters. You might think this limitation would preclude us from using this mode for 10-10 QSO Parties. Well, as it turns out, the WSJT software gives just enough flexibility to accomplish the typical 10-10 exchange.

According to the rules, a 10-10 exchange consists of your call, Name, 10-10 number, and QTH (State, Province or County). Even though WSJT has automated the typical FT8 QSO exchange, there are ways to do a little freelance communications. The transmission of the call sign is already automatically sent by the WSJT software. After you install the software, you enter your call sign in the Settings window during the configuration and setup. This allows the software to include it in all the automatic transmissions. With the call sign taken care of, you will need to transmit the 10-10 number, your name, and your QTH using "Text Messages."

FT8 text messages are limited to 13 characters, including the spaces. If you can pack those three pieces of information into one 13 or less character string, then you're set. For example, "BILL 12345 CT" would work. If you can't make it fit into 13 characters, then you will need to break it down into two messages. I use "CHARLIE NY" as one message and then "10X 40510". I also have another text message of my VP number for those times when a VP number is appropriate.

There are a number of ways the software allows you to transmit a text message. The Message Control Panel where messages sent from your station are composed, is in the lower-right corner of the Main Screen. See Figure 3 for a closer view of the Message Control Panel.

Figure 3 shows six text fields where text can be entered for transmission through your rig. These fields show only when tab "1" (see upper-left of the text area) is enabled. Text can be entered into any of these fields and selected for transmitting. The one feature tab 1 provides is the automatic progression through these text messages when the "Auto Seq" (Auto Sequence) checkbox is checked. When you click on the "Enable Tx" button, the software will progress automatically through all six of these messages depending on what is decoded from the messages sent by your QSO partner. While the progression is going, you may jump ahead or back by clicking on the option button next to the text you want sent next. You can force immediate transmission of a text string by clicking on one of the Text buttons under the "Now" label.

Note: You may notice that all six of the text messages shown in Figure 3 are longer than 13 characters. The software has special rules built-in to compress call signs so they take up less bits of data and therefore allow a few more characters to be sent. Explanation of these rules is beyond the scope of this article and left up to you to research them in the User Guide found at the link

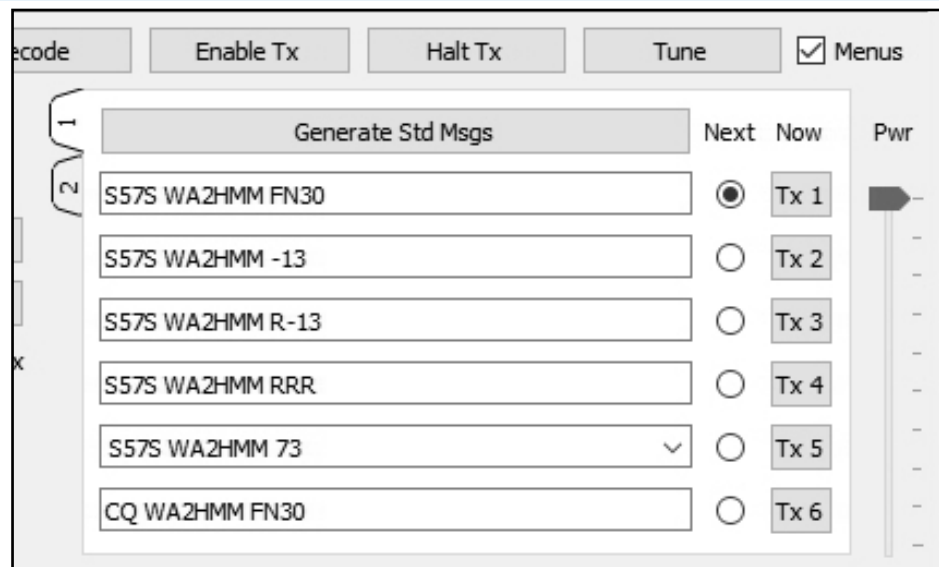


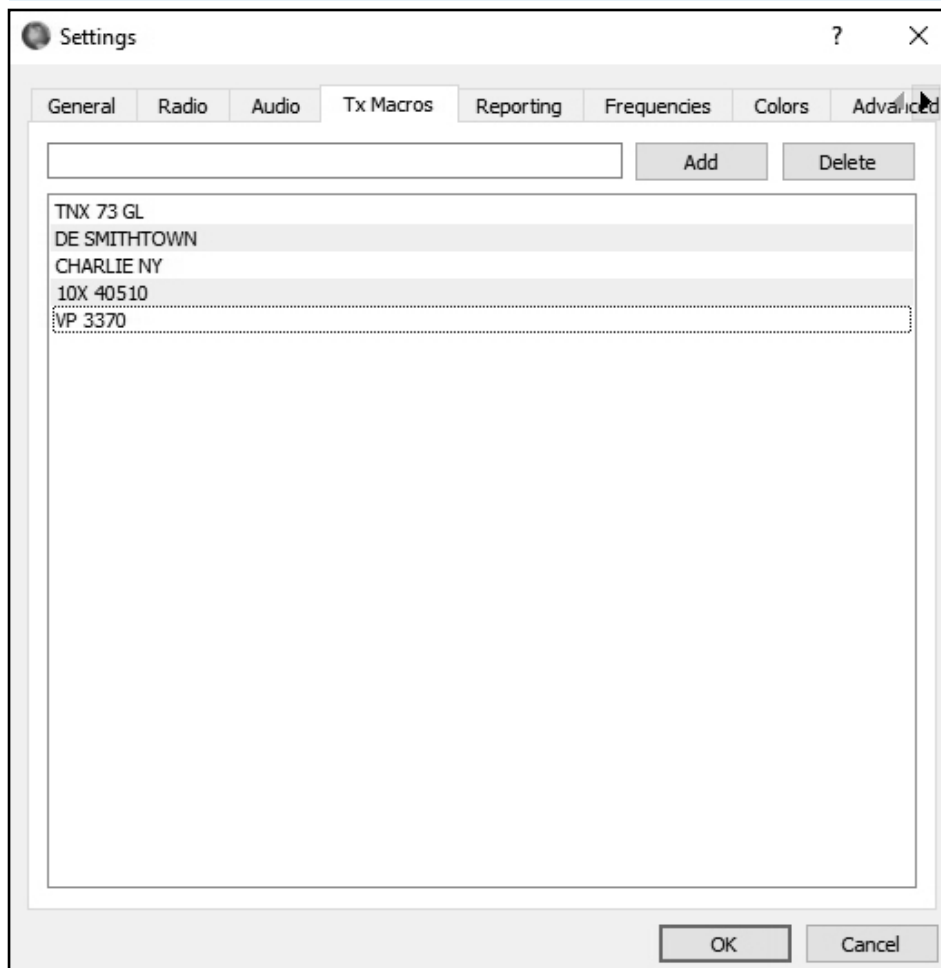
Figure 3. Message Control Panel - Tab 1

provided earlier.

To get back to the 10-10 exchange, you could insert the one or two text messages into any one of the six text fields. As the software progresses through the six fields, your text message or messages would be transmitted. Although possible, this is not the recommended method. However, if you take a closer look at text field 5 you will notice a drop-down arrow at the right end of the field. When you click on the drop-down arrow, a list of text messages will appear below the text field. The list of text messages are the Tx Macros that have been entered under the Settings Screen as shown in Figure 4.

As shown in Figure 4, the three text messages I created with my 10-10 information are listed as text macros. Having the text stored in this way allows for the quick insertion of the text in a transmission sequence.

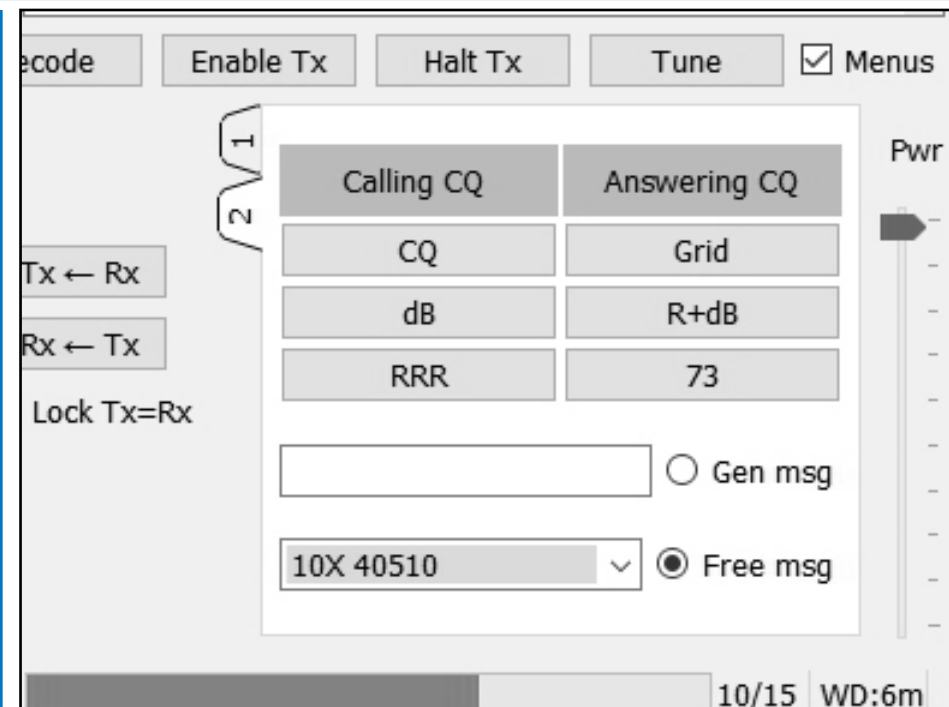
In the text 5 field of the Message Control Panel, click on the drop-down arrow and click on the first text macro to send. After the first text message is sent, the next text macro can be selected through the drop-down box and then transmitted during the next transmit cycle.



**Figure 4. Tx Macros in Settings Window**

The second method for transmitting 10-10 information is done through Tab 2 of the Message Control Panel. See Figure 5 for a closer view of Message Control Panel with Tab 2 selected.

In the Tab 2 screen, you have more manual control over the messages you want sent at any time. Clicking on the buttons (CQ, Grid, dB, etc.) will insert the appropriate text in the field labeled "Gen msg". As you progress through the QSO with your QSO partner, you click on the appropriate button. When you want to transmit a message that is not generated by the software, you enter the text in the field labeled "Free msg" and click on the option button to the right of the field. Whatever is in the Free msg field is transmitted at the next transmit cycle.



**Figure 5. Message Control Panel - Tab 2**

Note the drop-down arrow at the right edge of the Free msg field. Yes that's right, the text macros are shown so you can select one by clicking on it. Thereby sending your QSO partner the 10-10 information they need from you to make a valid 10-10 contact.

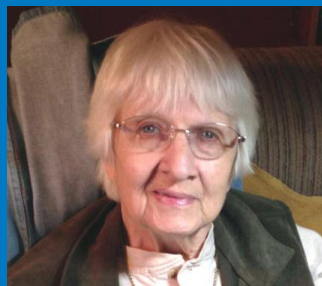
So there you have it. A brief overview of how to use the WSJT FT8 mode to transmit your 10-10 information to a QSO partner. For more information on Weak Signal modes, go the link provided earlier. I hope to catch you on 10 meters (28.074 MHz for this mode) for an FT8 QSO.

73 Charlie, WA2HMM #40510

### ARTICLES

There is always a need for articles in the News. There have been a couple requests for Do-It-Yourself articles. If you have something you would like to see in print please feel free to submit it. The most popular articles seem to be those relating to antennas, DIY projects, and kit building. Send your submissions to [editor@ten-ten.org](mailto:editor@ten-ten.org).





## Silent Keys

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
1622	W8ROT	Paul Marshbanks - Farmington Hills, MI
2028	W1GAR	Charles B Peck III - Falmouth, ME
2915	DL8HD	Hermann Schwarz - Schwalbach, GER
3673	K9RZP	Donald D Coston - Carmi, IL
4029	K7ARR	Herbert Q Ash - Goodyear, AZ
4537	KA1VS	John Godzyk - Kensington, CT
5276	KE2XJ	Glenn J Gerber - Poughkeepsie, NY
5791	WB0GIH	Michael R Collier - Kingman, AZ
5953	N1CC	James F Laporta - Frankston, TX
6602	W8UMH	Donald T Blizzard - Hilliard, OH
7588	K1SVP	Francis A Cascio - Saugus, MA
8164	K4CNW	George Jack Burks Jr - Columbia, SC
10476	WA0NDN	Gary L Buda - Waukegan, IA
10847	W4GKC	Lewis F Robertson Jr - Raleigh, NC
11219	K0EQY	John E Knaak - Hillsboro, KS
11295	K8LJE	John G Krutsch - Clinton Township, MI
11789	KD4AK	Harry K Mc Lemoire - Madison, MS
12028	N0ZC	Charles D Brune - Ballwin, MO
12110	N2UN	Anthony F Japha - New York, NY
12813	W0EEA	James C Smith - Elizabeth, CO
15887	W0RNA	Chuck L Lilligren Sr - Anoka, MN
16243	K8BS	William C Hunter - Charleston, WV
16720	W3GKC	Richard L Selby - Easton, PA
17876	WB1BXS	Roger W Taksar - Bolton, CT
18717	KF4SQ	Robert E Hinds - Fern Park, FL
19601	WD0HID	Samuel K Bowman - Independence, MO
19726	WA6SKC	John P Dixon - Sonoma, CA
19802	W6TAG	Thomas V Berne - Los Angeles, CA
22970	WB8HHZ	George E Henzler - Fountain, FL
24711	WD4IJT	John 'Jack' R Grafing - Fletcher, NC
24985	KA5BML	Charles E Webb - Prairie Grove, AR
25176	K0QM	Eugene I Harper - Colorado Springs, CO
26092	KF4CB	Roy A Zeigler - Morristown, TN
26847	NI0F	Dwight E 'Bud' Stotler - St Louis, MO
29169	NT4W	David L Sargent - Pauline, SC
30565	WA3MMD	Robert M Kurtincz - Steelton, PA
31424	KC7NY	Kenneth A Campbell, - Havre, MT
33020	W0AXP	Lawrence P Dale - Colorado Springs, CO
34915	K0JH	Gerald L 'Larry' Hale - Deltona, FL

10-10#	Call	Name - City, State
35684	W7TSQ	Robert C Preston - Edmonds, WA
36210	KF4RV	Ronald G Munion - Milton, FL
36420	W4UVO	Fred R Charles - Charlotte, NC
37325	WD4CHS	Timothy A Webber - Spartanburg, SC
37493	N3DMU	Jay K Bell II - Lebanon, PA
37607	KA6TGE	Donald J De Groot - Santa Clara, CA
37651	W6ONO	Donald F Brice - Hollister, CA
39336	UA2FX	Igor P. Politov - Marburg, GER
39526	W3GH	Robert W King - Apollo, PA
40689	KF0DH	Alan R Diez - Bessemer, AL
41045	W0KWC	K Wayne Claybaugh II - Monument, CO
45033	KA0BHO	Terry A Hoss - Topeka, KS
45659	KJ5CS	William C Davies - Lubbock, TX
45820	4X6UO	Arie Surkiss - Herzlia, Israel
46814	KB8BOG	Steve D Sealey - Ostrander, OH
46819	W8REN	John D Benedict - Troy, MI
47824	N4SOJ	Joseph J Bednarz Sr - Pike Road, AL
48260	AB9BR	Ronald L Barnhart - Fort Wayne, IN
48699	N5MTR	Charles R Orsburn - Mesquite, TX
48958	N7FYU	Allen M Hart - Bellingham, WA
49235	AA0LU	Allura M Sortland - Valley City, ND
49241	KS4RL	Robert A Lohmar - Poinciana, FL
50798	W4OPJ	Russell E Cantrell - Smithville, TN
51840	KK6GN	Robert H Jensen - Marana, AZ
52041	W7OSQ	Frederick L Parke - Albion, ID
53356	N1AMX	Anthony Carlozzi - Brockton, MA
53864	AE2X	C Russell Brahn - Spring Lake, NJ
54446	N4XJT	Wendell J Bailey - Richmond, VA
55717	N3CYD	David A Fisher - Harrisburg, PA
55728	KA3VGH	Richard J Kunselman Sr - Templeton, PA
58609	W9QDK	Edward F Duy - Elgin, IL
63098	N3NOP	Robert Fulton Jr - Berwick, PA
63328	KA5TUF	William A Schumann - Temple, TX
63931	NX4W	Lloyd S Smith - Gainesville, FL
64246	KB2PAQ	James G Walker - Williamsburg, NY
64473	K4FZQ	D Wayne Love Sr - Tusculooosa, AL
65769	KB7UZN	Donn A Bate - Rigby, ID
65958	N8UPT	Robert L Mann - Hillman, MI
66205	AB5TZ	Alvin L Hand - Junction City, KS
67937	AB0EG	Joanne Law - San Benito, TX
68522	KE4KWE	Thomas H Burkhart - Smiths Station, AL
68616	KC5YTG	Nancy E Royall - San Angelo, TX
72025	N6JOX	Paul R Dickey - Danville, CA
72833	W1GWA	Dennis J Bird - Fairfield, CT
72981	K0RRW	Ellis V Lysne - Northfield, MN
74976	AE5PW	Patrick N Weatherford - Newport, AR

Thanks to Lee - K2HAT - #76138 for his efforts in helping me keep the sk column as up to date as possible.

Ruth 73/88, N0KDB #48715

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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](http://www.ten-ten.org)

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5.	10600	N1API	25468
6.	10000	K6PZE	1341
7.	9800	N5DAS	35877
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## THE AMATEURS CODE by Paul M. Segal, W9EEA (1928)

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## Three Ways to Skin a Quad Loop

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

A single quad loop makes a good compact and effective bidirectional array for 10 meters. It has somewhat more gain than a dipole, and most users note that it is quiet, that is, not as susceptible to local noise as an open-ended dipole. With some sort of supporting system, the loop is a good choice for many ham back yards.

A quad loop does its work with the antenna in the vertical plane, like a giant fly swatter. Maximum radiation is off the two broad surfaces and is minimum off the edges.

Now comes the hard part: deciding what kind of loop to use. There are at least three versions, each with advantages and disadvantages. Let's look at them in order of complexity.

### THE STANDARD SQUARE LOOP

The first sketch (See Figure 1) shows a standard quad loop made from #12 AWG copper wire. (If you use a different size wire, you may have to change the dimensions just a bit for resonance.) This antenna is a proven performer, with

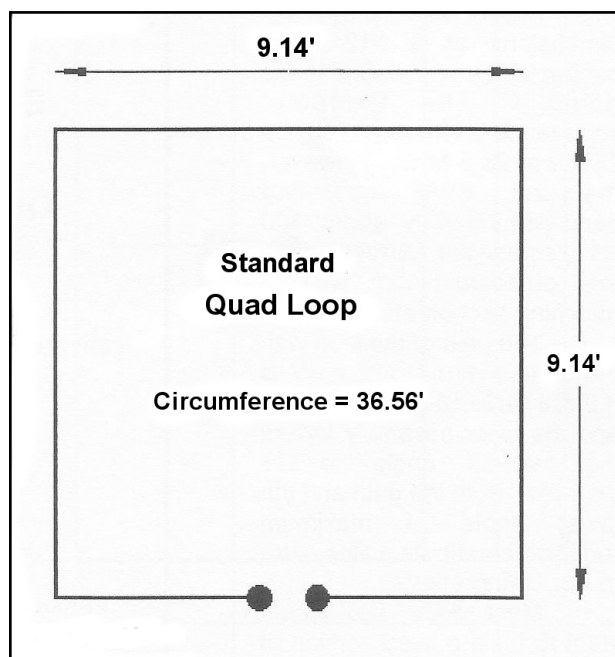


Figure 1. Standard Quad Loop

about 3.3. dBi free space gain, which translates into about 8.3 dBi gain at 1 wavelength above ground for the bottom wire (about 35'). The elevation angle of maximum radiation is about 19 degrees, which provides access to low-angle incoming DX signals.

The feedpoint impedance is about 125 ohms at the 28.5 MHz design resonance frequency. A quarter wavelength section of 75-ohm coax (about 5.7' of standard RG-59 with a velocity factor of 0.66) will provide a very low-loss match for the 50-ohm coax to the shack and provide less than 2:1 SWR over all of the first MHz of 10 meters, plus a little. With this set-up, the antenna has the broadest operating bandwidth of all of the loops we shall examine.

The old standard way of making a quad loop is to use criss-cross spreaders of bamboo, fiberglass, or – more recently – PVC. However, there are no rules that forbid you from stretching the quad loop from its corners to trees or other vertical supports. You can also use tubular horizontal members and wires vertical sides, although you may have to adjust the dimensions – most likely to enlarge them a bit.

### THE ENLONGATED LOOP

In July, 1996, K6STI wrote in QST of an old idea: by elongating the quad loop we can achieve a little more gain and, at the same time, bring the feedpoint impedance close to 50 ohms for a convenient match with our standard 50-ohm coaxial cables.

Figure 2 shows the dimensions of a #12 AWG copper wire loop meeting these goals. The feedpoint impedance is almost exactly 50 ohms at 28.5 MHz. However, the 2:1 SWR operating bandwidth is only about 800 kHz, somewhat narrower than the standard loop with a matching section attached.

The gain of the loop with the bottom wire at about 35' is 8.9 dBi (4.2 dBi in free space), and the taller assembly lowers the take-off angle to 17 degrees. Both the gain and the lower angle of maximum radiation contribute a little extra to our DXing efforts.

Most likely, you would want to build a fixed version of this kind of loop by supporting the wire from its corners by ropes running to adjacent supports.

As an alternative, you can build a rotatable version by using tubular horizontals and wire vertical sides (again, with dimensional adjustments that owe to the fat horizontal elements) attached to (but insulated from) a center mast. With a height about 3' taller than the normal quad loop, support requires a bit more work than the standard loop. Yet, if the top of this loop and the top of the standard loop are level with each other, this elongated loop loses some of its advantages in gain and lowered take-off angle.



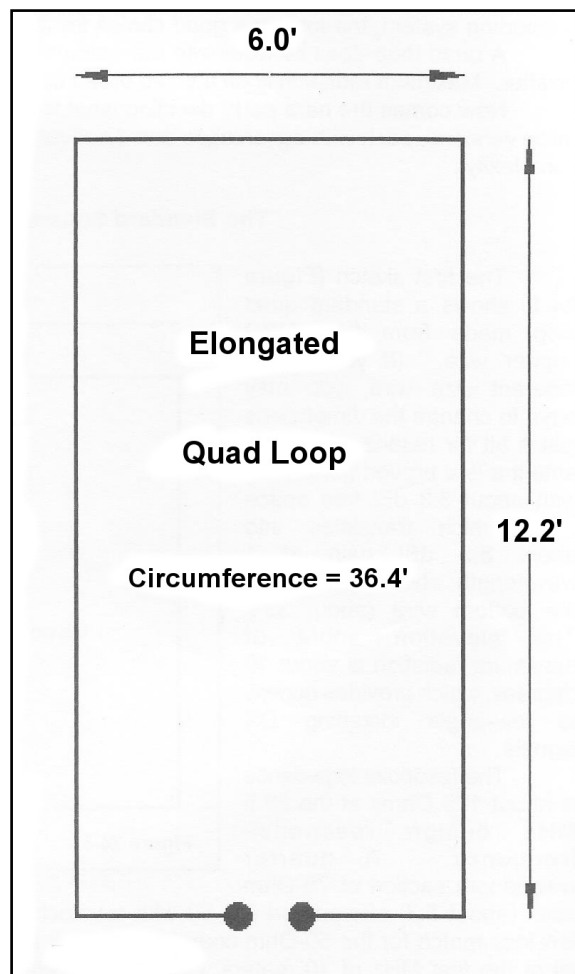


Figure 2. Elongated Quad Loop

### THE HENTENNA

The Hentenna is an invention of Japanese hams (and “hen” means “what is it?” – or so I am told). It consists of the full wavelength upper loop with an secondary lower loop that allows a close match to 50-ohm coaxial cable. See Figure 3.

The gain of this antenna, if the bottom wire is at the same level as the other two loops (1 wavelength of 35'), is about 9.8 dBi (5.0 dBi in free space), with a take-off angle of 15 degrees, making it a good DX antenna among loops. However, its performance depends very much on the added height of the upper wire, which is nearly 19' from the bottom. The antenna is 60% as wide but more than twice as tall as the standard square loop. If we lower the top wire to parallel it with the top wires of the other two loop designs, the hentenna turns out to be only a little better than

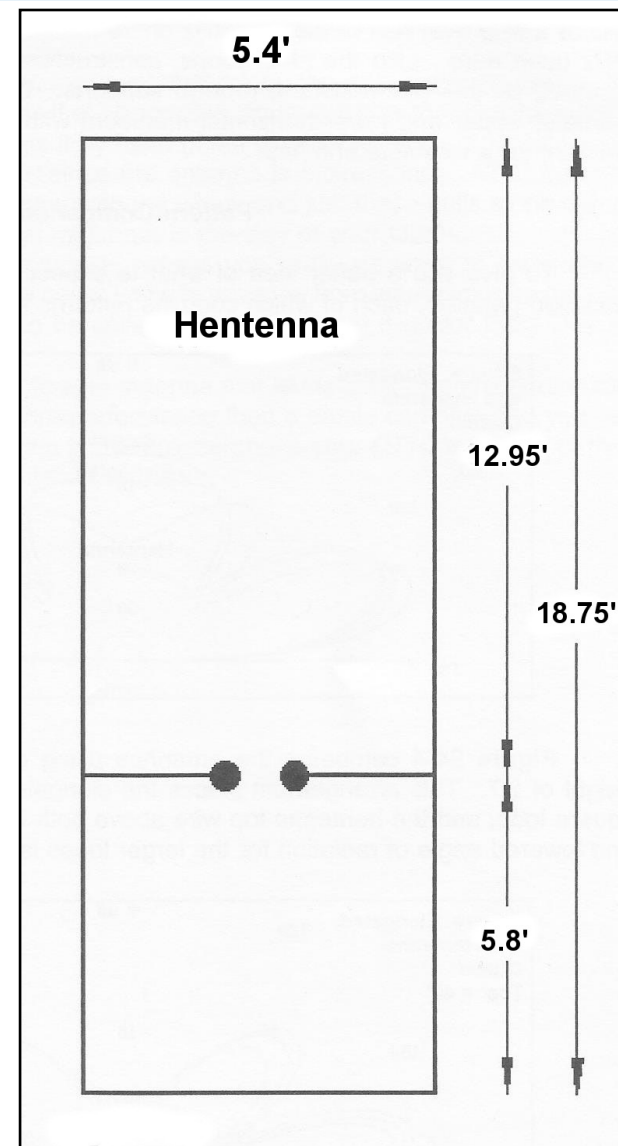


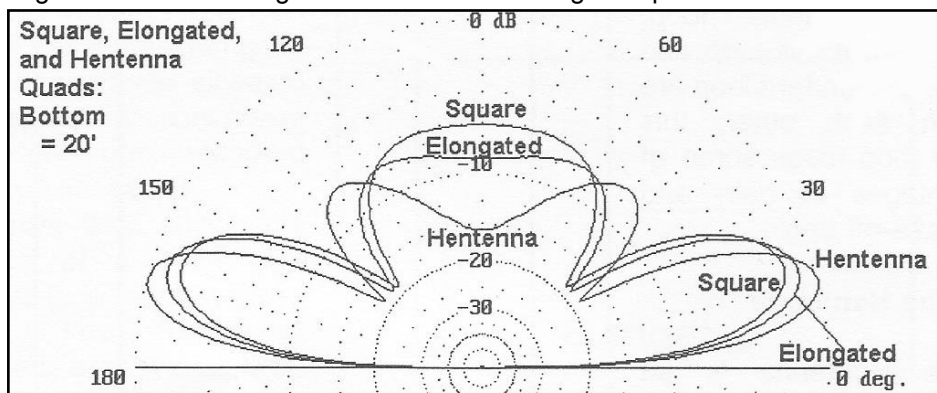
Figure 3. The Hentenna

they are. The operating 2:1 SWR bandwidth is the narrowest of the three loops, at about 600 kHz or a little over half of the first MHz on 10 meters with the design frequency of 28.5 MHz used here. Like other loops, construction can be all wire, with the corners attached buy thin (UV-resistant) rope to supports. Or, you can once more use larger diameter upper and lower horizontal members with wires sides and a wire feedpoint element for a rotatable antenna.

## PATTERN COMPARISON

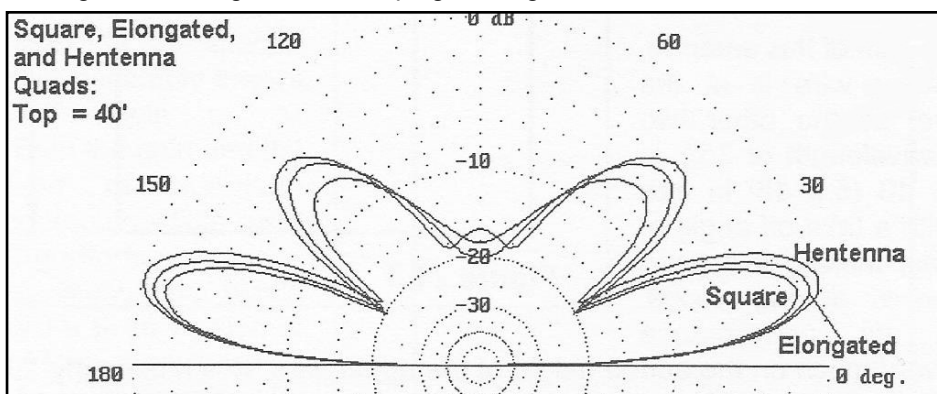
To give you a better idea of what to expect from each antenna, here are two elevation patterns, each of which contains patterns for all three loops.

Figure 4 compares the antennas using a common bottom horizontal wire height of 20'. This arrangement places the elongated loop top wire above that of the square loop, and the hentenna top wire above both the others. The advantage in gain and lowered angle of radiation for the larger loops is clear.



**Figure 4. Elevation Patterns for Three Loop Designs with bottom wire at 20'.**

Figure 5 reverses the procedure and places the top wires of all 3 antennas at 40' up. For many installations, top height is more absolute than bottom height. In this configuration, all three antennas have comparable TO angles, with only small gain advantages as the loops grow larger.



**Figure 5. Elevations Patterns for Three Loop Designs with Top wire at 40'.**

Whichever loop you choose, assuming that a loop fits your operating needs, give your best ingenuity to construction. If at all possible, figure out how to make the antenna free standing so that you can rotate it by hand (if not by a TV rotator). You will need to turn at most less than a half turn, since the antenna is bidirectional. All of the loops have very deep side nulls on a plane with the

wires, and just these nulls alone can get rid of more than half the QRM that might get in the way of your QSOs.

Loops are also handy in contests, where you really do want to hear what is happening in most directions. You never know in advance from where your next contact will come. If you build the loop to be collapsible, you can set it up for Field Day and other hilltopping exercises.

The basic quad loop is a versatile antenna that lends itself to many construction techniques. If you want a little more performance than a dipole can give and you think it is fun to have a fly swatter waving in the breeze above your QTH, then one of these three designs may be the next antenna to build.

## Short Elements and Loading

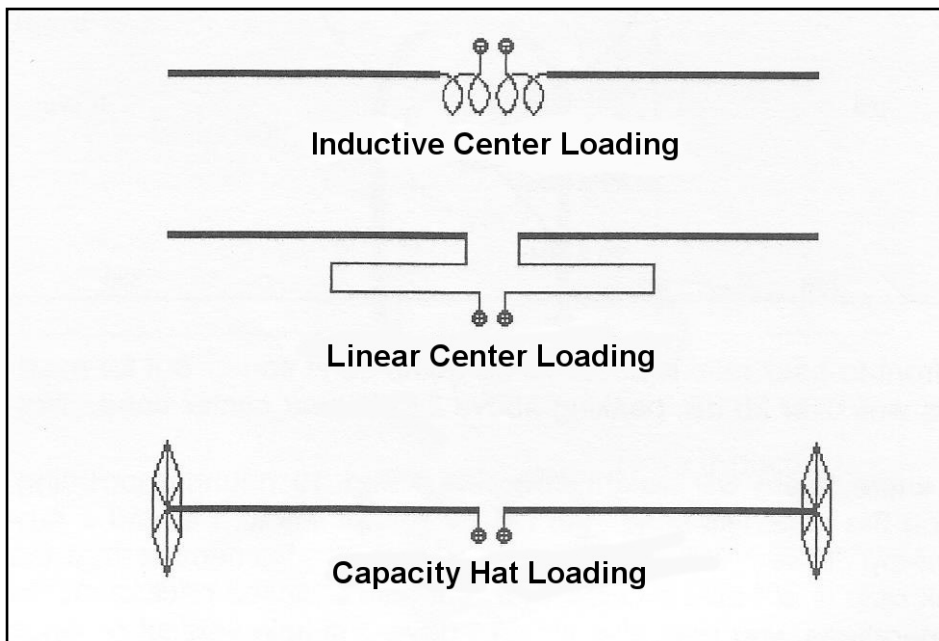
Many 10-10ers and other hams operate within limited spaces. Others simply do not want to erect or maintain full-size beams that span 35' or more on 20 meters, or even 17' on 10 meters. So there will always be interest in shrunken beams and other arrays.

In this overview of element loading, we shall compare the modeled performance of several size-reduction schemes. We shall focus on the effects of various loading schemes on the general performance of shortened radiators relative to resonant dipoles for a given frequency. How short does it make sense to go? If we know the answer to that question, we can then ask what is the best way to get there.

Inductive or coil loading is the most familiar form of element shortening, and placing the coils at the element centers is mechanically most convenient. However, we can replace the coils with linear loads, which are nothing more than shorted transmission line stubs. Finally, we can "load" the other end of the element with a capacity hat. For orientation, Figure 1 shows each of these options applied to dipole elements. Each scheme has certain advantages and disadvantages.

### HOW SHORT SHOULD I GO?

Everything begins with the half-wavelength dipole. As the dipole goes, so go the beams and arrays based on this fundamental antenna. So our first question is what happens when we shorten a dipole by loading it. Answers are not hard to come by if you do a little systematic antenna modeling with one of the numerous Method-of-Moments programs available. For our purposes, either MINIMEC or NEX will do, since we shall not come close to violating their limitations. Those unfamiliar with these programs should understand that when used within their limitations, they are exceptionally accurate, well beyond the abilities of home-built antennas to test.

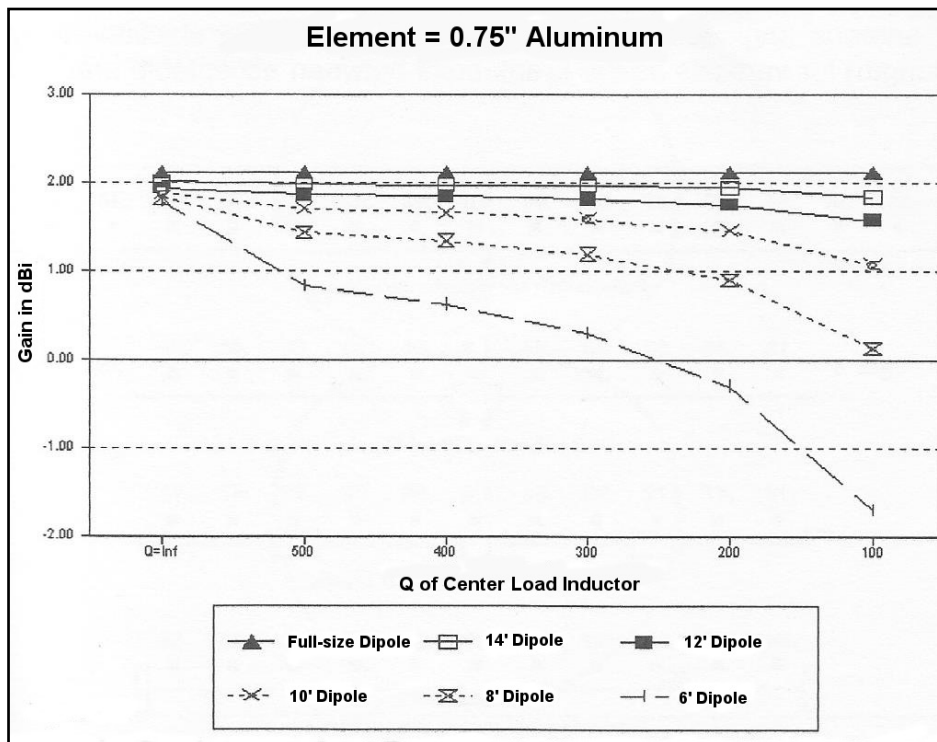


**Figure 1. Loading Options for Shortened Elements**

We shall look at center-loaded dipoles with inductive loads. Moving the inductors outward, up to about the middle of each quarter wave leg of the dipole, can improve performance, but somewhat marginally. For center-loaded dipoles, the element gain is a function of two factors: element length and load Q. Figure 2 is a graph of dipole gain in dBi in free space of shortened, loaded dipoles compared to a full size dipole at 10 meters (28.5 MHz). Virtually identical figures emerge at other frequencies by shortening the element by an equal percentage.

A full-size dipole for 10 meters is just over 16' long. That makes shortening in 2' increments a handy gauge of performance. If we assume a lossless load, needed to compensate for the shortened length, we uncover the amount of loss in gain directly attributable to element shortening. Although the graph does make the loss of gain look serious, there is about a 15% loss between the full size element and the exceptionally short 6' element. In contrast, the 12' element, about 3/4ths full-size, losses only about 9% gain.

However, no load is without some resistive loss: hence, the rest of the graph. The moment we assign a value of Q—the load's reactance divided by its heating resistance—differentials among the shortened elements grow more pronounced. Even at the unrealistic Q-value of 500, losses in the 6-, 8-, and 10-foot element grow serious.



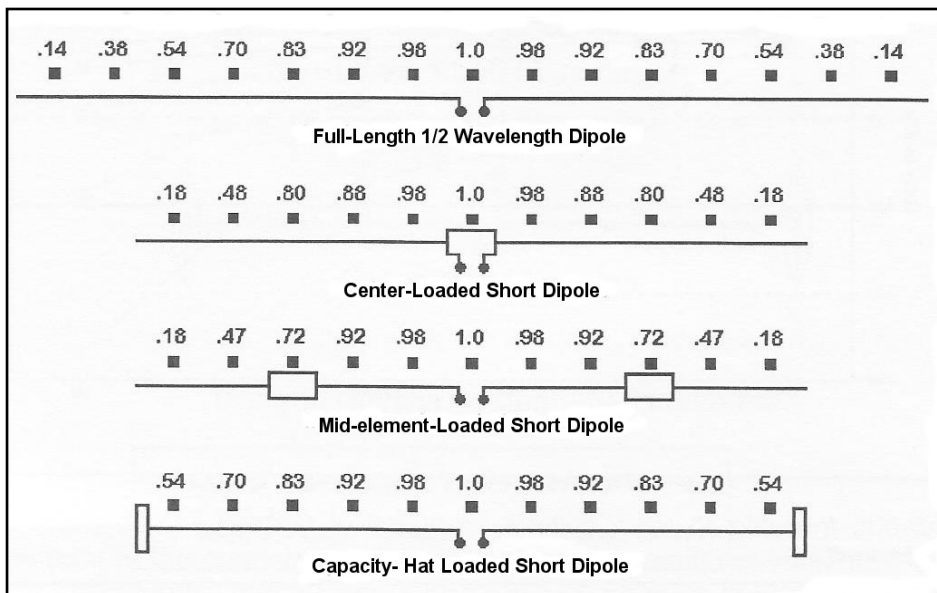
**Figure 2. Gain vs. Q of Center-Loaded Dipoles**

Do not overestimate the Q you may maintain in an antenna loading element, whether it is a coil or a linear load. Hypothetically, you might calculate Q's up to 300 for leadless coils of optimal length-to-diameter ratios of fresh, clean materials. When you add leads, connectors, and—especially—the action of the chemical soup we call our atmosphere, you will rarely achieve Qs above 100 in antenna coils. Even a perfect coil will weather down to that Q very quickly after you place the antenna in the air. Physically modeled linear-loading elements have Qs up to about 300, and they are nothing more or less than the touted ultra-low-loss transmission-line sections. So be very conservative in your estimates of inductor Q for antenna loads.

In real terms, that means going to the right-hand edge of the graph. Here we find a break in the gain-efficiency of our shortened dipole between the 10' and 12' models, 5/8ths and 3/4ths normal length respectively. That break coincides with longstanding broadcast antenna engineering rules of thumb that use 60° electrical length (2/3rds resonant length) for verticals as the break-point between acceptable and unacceptable efficiency.

What kind of load and where we put it do make some difference in the performance of a dipole element and any Yagi we make from such dipoles.



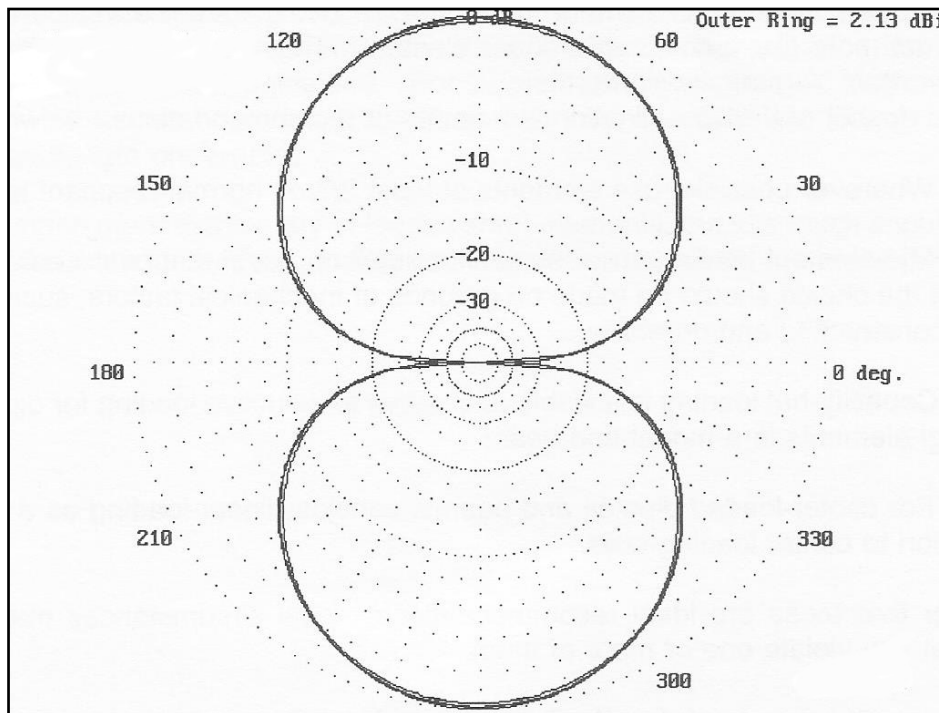


**Figure 3. Antenna Currents Along Shortened Dipoles**

Figure 3 gives us a basis for comparing short dipoles (12' long) using center loads, mid-element loads, and capacity hats. The strength of the electrical field is a function of the current along the element, which, for a dipole, is highest at the center or feedpoint and lowest at the element ends. The figure provides current levels in a 10-meter dipole with center loading ( $Q=300$ ), mid-element loading (same  $Q$ ) and capacitive hat "loading." All main elements are 0.75" diameter aluminum.

Compared to the full-size dipole, the two inductively-loaded antennas display sharp current drops beyond the loading point, in essence, the missing antenna segment made up for by the coil. The free space gain of the mid-element-loaded dipole is only marginally better than that of the center-loaded dipole: 1.84 dBi vs. 1.82 dBi. The free space gain of the full-sized dipole is 2.12 dBi. However, notice that the current along the element parallels the values for the full-size dipole right up to that hat itself. The nonradiating structure at the end of the antenna uses only the lowest levels of antenna current. The other loads are placed in high-current regions of the element, but yield insignificant radiation in the tight fields of the coils.

For reference, Figure 4 provides free-space azimuth patterns for a full-size dipole, along with 12' capacity hat, mid-element-loaded, and center-loaded dipoles, working downward in gain. The pattern differences are so slight that any of the 4 would make a working dipole. However, those differences will have a significant effect upon Yagis that use them.



**Figure 3. Azimuth Patterns for Full and Loaded Dipoles**

The feedpoint impedance of a shortened dipole will affect the feedpoint impedance of any Yagi in which it is used. A full-size 2-element Yagi has a feedpoint impedance of approximately 35  $\Omega$ , depending upon design, using a full size dipole with a natural impedance of about 72  $\Omega$ . A 12' center-loaded dipole has a feedpoint impedance of about 32  $\Omega$ , while a 12' mid-element-loaded dipole's feedpoint is about 44  $\Omega$ . The feedpoint impedance of a capacity hat dipole of the same length is nearly 60  $\Omega$ . Consequently, expected 2-element Yagis using inductive loading to have lower feedpoint impedances (10-20  $\Omega$ ) compared to Yagis using capacity-hat elements (30  $\Omega$ ).

Let me add a word about helical elements. A helical element is a continuous coil, like a slinky, wound in one direction, and fed in the middle. If it radiates well because the turns are spread apart and the field is not as self-enclosed as with a normal coil. I have modeled a few, using simplified geometry (square and hexagonal turns). They perform well so long as the turns are not overly compressed. An 11 and a half foot model dipole of 12 turns with 6" diameter provided 1.94 dBi free space gain and a resonant feedpoint impedance of about 38  $\Omega$ . However, do not expect such performance if you wind the coil over a support structure, such as PVC. PVC is fairly good RF performer at HF for small lengths and supports, but it is not air, and it will reduce inductor  $Q$ .



Moreover, using smaller turns and more of them will reduce gain. Compressing turns to further shorten the antenna element will begin to reduce gain radically, as the antenna begins to act more like a coil than a linear element. They may be more trouble than they are worth in Yagi applications.

The upshot of this investigation is a series of recommendations:

1. Whenever possible, use elements at least 2/3rds normal resonant length.
2. Mid-element loading provides such a small improvement over center loading that the choice should be made on grounds of mechanical factors, such as ease of construction and durability.
3. Capacity-hat loading is a viable alternative to inductive loading for dipoles and Yagi elements in a monoband beam.
4. For center-loaded dipoles and beams, consider linear-loading as a higher-Q option to center loading coils.

Remember that these are ideal recommendations: local circumstances may always dictate that you violate one or more of them.

### APPLYING THE LESSONS TO YAGI BEAMS

No one can make your antenna building decisions for you. Your specific situation has too many variables that only you can know and weight in the final summary. However, we can summarize some of the advantages and disadvantages of center-loaded and capacity-hat Yagis.

1. **Center-loaded Yagis:** These antennas have the disadvantage of lower gain and narrower SWR bandwidths.
2. **Linear-loaded Yagis:** Similar to inductively-loaded Yagis in mechanical advantage, SWR bandwidth, and front-to-back ratio, linear-loaded Yagis have high gain figures due to a higher loading element Q.
3. **Capacity-hat Yagis:** Of all types of shortened Yagis, capacity hat models offer performance closest to a full size Yagi in terms of gain, SWR bandwidth, and front-to-back ratio (less than that of a center-loaded Yagi). Hats on the element ends can add to element stress and wind loading.
4. **General:** Shortened antennas with elements at least 2/3rds normal length offer good gain, good front-to-back ratios, and reasonable to good SWR bandwidths. When element lengths are less than 2/3rds normal, expect low gain and very narrow SWR bandwidths, although the front-to-back ratio can be sustained. For 2-element reflector-driver Yagis, it is unwise to use boom lengths less than 0.1 wavelength, with about 1/8<sup>th</sup> wavelength preferable.

There is much more to the story of loaded short elements, but this much should give you a feel for the main methods of loading and their consequences for antenna performance.

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We encourage all of our members to support the 10-10 International Net Scholarship Foundation. Our goal has always been to fund our scholarships entirely through member donations. At the Scholarship Foundation meeting in November, the Foundation Board voted to guarantee the funding for five \$2000 scholarships to be awarded in 2018. 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. This quarter Larry Banks, W1DYJ, #65485 donated in memory of his dad Sam Banks, WA1INL, #43046. 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.

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N0QE .....	Scott Mentzer	68075

**10-10 SCHOLARSHIP APPLICANT INFORMATION**

Each year the 10-10 International Net, through our non-profit corporation, the 10-10 Scholarship Foundation, funds five \$2000 scholarships, which are administered on our behalf by the Foundation for Amateur Radio (FAR). It is suggested that every 10-10 member encourage qualified college-bound amateur radio operators to take advantage of this opportunity. The five most recent winners are featured in on the 10-10 website. Over the past 30 years, 10-10 has funded 113 scholarships valued at \$137,000.

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. Initial 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 beacon frequencies are coordinated.

I would appreciate a message from anyone with thoughts of activating a beacon. [wj5o@amsat.org](mailto:wj5o@amsat.org)

73 Bill WJ5O

IARU Region 2 HF Beacon Coordinator

<http://www.qsl.net/wj5o/bcn.htm>



## 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](http://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 years. 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](http://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](http://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](http://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 centering 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 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 8 days after the entry deadline, regardless of postmark, will be discarded. LOGS MAY BE SENT VIA Email and/or uploaded to the KJ4IZW contest scorer. Q95 files are not a proper format nor are they readable, therefore, they will not be accepted.

**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 8 calendar days (this will always be a Monday) after the close of the event. Entries for the Sprint (held on 10/10) shall be postmarked no later than October 18th, unless that day falls on a Sunday or holiday, then the postmark deadline shall be October 19th.

**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 8th 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 non-members. 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 0000 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 QSO Party event - name, call, QTH, and 10-10 number if one is available. As contacts are made, provide info on the 10-10 organization and where to find our website - [www.ten-ten.org](http://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.

# 2018 10-10 QSO PARTY COVER SHEET

Event	Dates	Postmark	Event	Dates	Postmark
Winter Phone	Feb. 4-5	Feb. 20	Summer Phone	Aug. 5-6	Aug. 14
Spring Digital	April 29-30	May 15	Sprint	Oct. 10	Oct. 18
Spring CW	May 6-7	May 22	Fall CW	Oct. 21-22	Oct. 30
Open Season	June 3-4	June 19	Fall Digital	Nov. 11-12	Nov 20
Spirit Of 76	July 3-9	July 24	Anniversary (56)	Jan. 1 - Dec 31	Jan. 8
			Meet the Volunteers	Jan. 1 - Dec. 31	Jan. 8

Name \_\_\_\_\_ Call \_\_\_\_\_ 10-10# \_\_\_\_\_

Address \_\_\_\_\_

City \_\_\_\_\_ State/Province/Country \_\_\_\_\_ Zip \_\_\_\_\_

Your e-mail address (for contest questions only) \_\_\_\_\_

## PLEASE LIST CONTEST EXCHANGE

Call \_\_\_\_\_ Name \_\_\_\_\_ 10-10# \_\_\_\_\_ QTH \_\_\_\_\_

### ENTRY TYPE

- ☐ **INDIVIDUAL**
- ☐ **QRP** 10 watts or less Phone,  
5 watts or less CW/ Digital
- ☐ **MOBILE** See QSO Party rules.
- ☐ **CLUB** Only for those operating  
as a Club Station. If Operating under  
a Club call, please list all operators and  
their 10-10 numbers (if any) on the log.

**US Call Area (W0-W9)  
Or ARRL DX Country  
You operated from**

**Chapter Assignment  
(Not valid for Sprint)**

### Claimed Score

Contacts WITH  
10-10 Number: \_\_\_\_\_ x2= \_\_\_\_\_

Contacts WITHOUT  
10-10 Number: \_\_\_\_\_ x1= \_\_\_\_\_

Total  
Contacts: \_\_\_\_\_ Total Pts \_\_\_\_\_

All submissions must contain this cover sheet (or a reasonable facsimile), the log in UTC Date/Time order,  
And a Dupe Sheet (if more than 50 contacts) in call sign order or in grid format.

**Mail to Dan Morris, KZ3T, 3162 Covington Way, Lenoir NC 28654, USA**

**Logs may be emailed to [tentencontest@ten-ten.org](mailto:tentencontest@ten-ten.org). Members are encouraged to upload logs at the KJ4IZW con-  
test scoring web site: [www.hamclubs.info/scorer](http://www.hamclubs.info/scorer).**