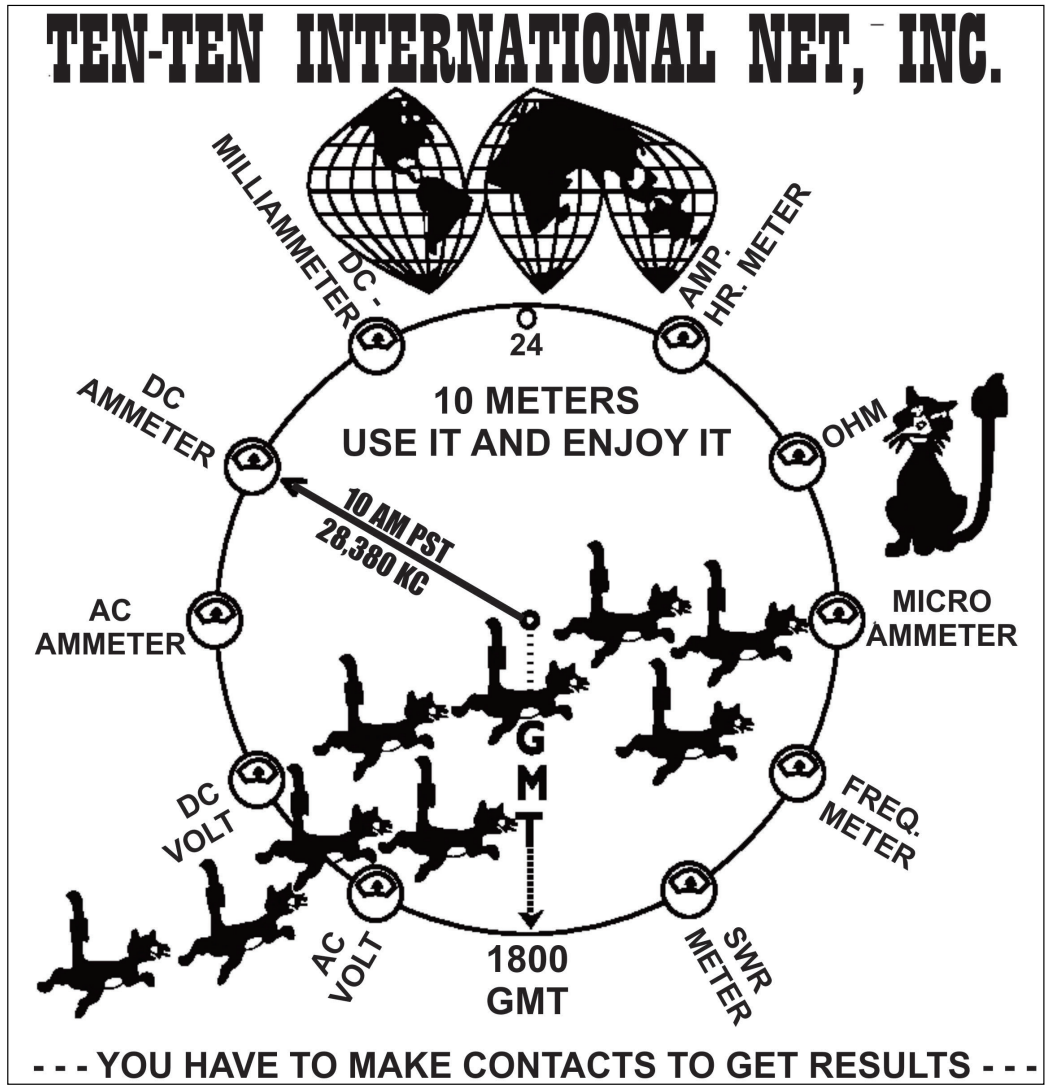
TEN-TEN INTERNATIONAL NEWS

Member
AMATEUR RADIO
NEWS SERVICE

Volume 62 Issue 3 **July 2024 (Summer)**



Official Publication of the Ten-Ten International Net, Inc. - www.ten-ten.org
Monitoring 28.380 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, and sent on computer disk or E-mail. Suitable formats will be provided upon request.

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

DEADLINE FOR NEXT ISSUE: 1 September 2024

PLEASE MAIL ALL ARTICLES AND PHOTOS TO:

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E-mail: editor@ten-ten.org
10-10 CHAPTER ACTIVITY REPORTS: Should be sent to the Chapter Coordinator
ADDRESS CHANGES: All members should send address changes to the Data Manager
NOTE: 10-10 IS NOT RESPONSIBLE FOR POSTAL SERVICE DIFFICULTIES

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From the President

David Ruch NF0J
#19553

Greetings from Elephant Butte in the high desert of southern New Mexico.

Summer is here! I remember looking forward to Summer after six months of Winter in Minnesota. Summer usually occurs on or about July 4th. By then, the snow had mostly disappeared, and the parkas were put away. B17-size skeeters buzz around you, and the lovely smell of fresh manure filled the air. In New Mexico, I look forward to 100-degree plus temperatures. But, as they say, it's a dry heat. (Try telling that to your hands just after they grab that 200-degree steering wheel.)

When I moved to New Mexico, I decided to start over getting WAS and DXCC on all three modes, phone, CW, and digital. My plan uses LOTW for confirmations. Nets like OMISS and 3905 CCN made phone WAS easy. Phone DXCC was accomplished mainly by contests. Using FT8, WAS and DXCC digital took about 30 days elapsed time (and took another 30 to get all the confirmations).

Having achieved WAS and DXCC for phone and digital, it was time to tackle CW. Back in 1984, I passed the FCC exam at 20 wpm, but now my CW skills have become rusty. The microphone was removed from the rig (too much temptation), and a new paddle was added.

To begin getting my speed back to the goal of 25-30 wpm, I started doing CW Parks On the Air hunting. The nice thing about POTA is that the park activations are posted online. The postings include the callsign and frequency of the activator. The typical formula for a contact is answering a CQ with my callsign. The activator will call me back with a signal report usually followed by BK. I answer with BK TU UR 599 (varies) NM BK. (If you are interested in the meaning of the abbreviations, email me). Using this formulated method, I can practice copying and sending. Activators generally send code between 15 and 24 wpm, typically around 20 wpm. This is a great way to practice.

I worked and confirmed at least half the states and a few countries using POTA. For the rest of the states and countries, I rely on state QSO parties and CW contests. If you have ever listened to these contests, you know that 25 wpm is on the slow side! For me, I typically send back at around 25 wpm regardless of their speed. When I spend a few hours in a contest, 20 wpm

sounds slow. I recommend contests to get your CW speed up.

The CW only activity started in mid-April and, at the end of May, I've worked all of the states and confirmed 45 of them on LOTW. I spent a couple of hours on the CQ WPX contest and put sixteen different countries in the log. (It is too bad that LOTW is down as I write this.) Anyway, if you want to get back into CW you might try my method to practice and build skills.

There are two Ten-Ten QSO parties coming up this Summer. First, the Weak Signal QSO Party occurs July 13th-14th. Next, the Summer Phone QSO Party happens August 3rd-4th. Check ten-ten.org for details. Don't forget the daily net at 1800z (except Sunday) on 28.380. Get on the air and make some contacts!

Since the early 1990s, Ten-Ten International has awarded college scholarships to amateurs around the world via the 10-10 Scholarship Foundation. I encourage you to consider a donation to the foundation. Small donations are welcome, and I especially encourage those with lifetime memberships to get on board! Details about the 10-10 Scholarship Foundation and making donations are found in each issue of Ten-Ten International News. A history of the scholarship program by Larry Berger, WA2SUH, can be found in the October 2021 issue on page 10.

Have a safe and healthy Summer! CU on the air!

73

Dave NFØJ #19553

10-Meter Beacons

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

I would appreciate a message from anyone with thoughts of activating a beacon. wi5v.be@gmail.com

73 Dennis Stice WI5V #35806

IARU Region 2 HF Beacon Coordinator

https://wi5v.net/author/wi5v

NEW LIFE MEMBERS

25833	WN8S	Thomas D Conrad	MI
46369	KT7AZ	Gary J Schmitz	AZ
46435	WA9B	William F Schauf	VA
66596	W3ZR	Robert D Montgomery	PA
68842	WØBM	Byron P Cahill	MN
73718	KD6CUB	Sean E Gardner	TX
75369	KO5T	George T Roberson	TX
78327	KK3XX	Kevin A Schnupp	MD

Chapter Coordinator

Chuck Dockery, N7UQ
(#72774)

GENERAL NEWS

Dayton/Xenia Hamvention: I had the honor to attend the Hamvention in Xenia Ohio again this year. I was joined by Keith KR7RK and Jeff N7YG which is a bonus as I know each of these fellas personally from my years in Tucson, AZ. In the ham community. We had a great time meeting members and non-members while taking turns visiting the other booths at the show. Keith did his annual presentation, this year about Summits On The Air (SOTA). We had 114 members sign in with us and 6 non-members. We were interviewed by a couple known as "Hikin n Hammin" (Lou and Pink) a YouTube channel that follows amateur radio, so look for that on YouTube.

Jeff N7YG has also begun an FTP folder where we will begin archiving our sign in books from the ham fests for our history. I will scan the books I have and upload to the folder then Jeff will archive them in a different format. If anyone has sign-in sheets/books and would like to have them scanned in and do not have a way to scan them, send them to me and I can do that.

Information: I have access to make changes to the chapter website when you send changes or are asking for special announcements to chapters. As the chapter coordinator I only receive chapter reports from the individual chapters, I then place them in a digital folder after scanning, if necessary, then I copy those documents to the FTP server that Jeff N7YG has set up for that purpose. If club officials need any of that information you may contact myself or Jeff for access for copies of documents.

Reminder: 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. Also, as I receive updates to your chapters I update the list on the website to reflect the latest correspondence. If you do not see the website updated after a couple days, be sure and wipe your cache in your browser so you have a clean updated page before visiting ten-ten.org.

Quarterly Reports at Risk of Termination: (no report in over a year): Arizona Desert last report 05/2023. City of Lights 06/2023. If anyone has contact with any of these chapter heads or coordinators, please let them know we would like to see these chapters continue.

Reporting: www.ten-ten.org/index.php/resources/ten-ten-documents/ten-ten-forms for a form to download or www.ten-ten.org/chapters/quarterly-report to fill out and submit electronically. Be sure to notify IT Manager Jeff, N7YG, before using this easy-to-use form so he can add you to the Chapter Management Group. If you do not have internet access, let me know and I will send you a blank form that you can copy and submit. A responsible chapter official must report to the Chapter Coordinator. This is done quarterly. If there are no changes to the previous report, then the chapter can go on for up to a year without reporting. A report must then be made even though no changes have been made. These reports may be made via the U.S. Postal Service or via email. One of the reasons listed for termination of chapter is failure to report four consecutive quarters (1 year).

Chapter Reports: I now copy all reports and other correspondence received from chapters to the chapter folders on the FTP site. If anyone needs access or copies of files you can ask Jeff N7YG for assistance or ask me for a copy. Main point is I am no longer keeping hard copies of anything related to chapters. As chapter heads and coordinators, you should be utilizing the FTP site to store your information that can be accessed by an official should the need arise.

CHAPTER NEWS

Chief Seattle: I have removed this chapter and placed it as QRT. Having not heard from Dan N7QHC since January of 2023.

Down Under: I have removed this chapter and placed it as QRT. Having not heard from Bob ZL1AFU since December 2021.

Milwaukee: I have removed this chapter and placed it as QRT. Having not heard from Ron KA9JCP since July 2022.

Branding Iron: chapter is still without a Chapter Head. Peter, DL6DK, has agreed to continue as CM, but we need someone to come forward to become CH. Anyone willing to do so, please contact Peter or me.

Aloha: Irene NH7PE of the Aloha chapter is asking for anyone in the area for help with the nets and maybe taking over the chapter duties.

All chapters are asked to plan for succession of leadership. I can't stress this enough. We have lost a few great chapters that cannot continue due to the record keeping not being shared. ***PLEASE!*** To aid in such planning, IT Manager, Jeff, N7YG, has been setting up FTP accounts on the 10-10 server where chapters can save their data. **All CH:** contact Jeff for the details if you wish to take advantage of this opportunity. This is a good idea, even for the redundancy of record keeping and in the event of a tragedy. I know there is redundancy in this message, but it really needs to be stressed if you wish the chapters to continue.

If any chapters accept email upgrades, please let me know so I can create a new list. Thanks.

chuck@n7uq.com or 112 S. Rolling Meadows Dr. Wylie, TX. 75098 469-829-5462

TEN-TEN NET GUIDE

As of June 1, 2024

DAY	ZSUM	ZWIN	Chapter Name	Location	Freq
SUN	1300	1400	Arlington	Arlington, VA	29200
SUN	1400	1500	Neanderthal	Euskirchen, DL	28355
SUN	1900	2000	Oregon Trail	Dallas, OR	28330
SUN	1930	1930	North Georgia	Atlanta, GA	28415
MON	0100	0100	Arizona Desert	Phoenix, AZ	28445
MON	0100	0100	Lonestar	Arlington, TX	28460
MON	0130	0230	Bauxite	Benton, AR	28470
TUE	0001	0100	Ft McHenry/ Cornerstone/ Yodar Kritch	Arbutus, MD	28370
TUE	0100	0200	CO Centennial/CO Frontier Gang	Lakewood, CO	28340
TUE	0100	0200	City of Lights	Aurora, IL	28150 CW
TUE	0130	0230	Bauxite	Benton, AR	28470
TUE	0130	0230	City of Lights	Aurora, Il	28720
TUE	0300	0400	Bay Area	Hayward, CA	28475
TUE	0430	0430	Aloha	Hilo, HA	28490
TUE	1500	1600	New Mexico Mud Ducks	Albuquerque, NM	28835
WED	0001	0100	Castle Craig	Meriden, CT	28375
WED	0100	0200	Cincinnati Area Ten Tuners	Cincinnati, OH	28430
WED	0100	0200	Houston SHOT	Houston, TX	28488
WED	0200	0300	10-Bar-X	El Paso, TX	28445
WED	1400	1500	EU DX/Branding Iron/ Hanse	Bergkamen, DL	28355
WED	1600	1600	Mississippi 10 Meter Society	Palahatchie, MS	28410
WED	1930	1930	Route-66	Apopka, FL	28370
THU	0100	0100	Cow Town	Arlington, TX	28460
THU	0100	0200	Gateway	St. Louis, MO	28650
THU	0230	0230	Windfarms	Livermore, Ca	28485
THU	0230	0330	Up the Crick	Eugene, OR	28450
THU	1930	1930	Speedway	Rainer, OR	28350
FRI	0001	0100	Ft McHenry/ Cornerstone/ Yodar Kritch	Arbutus, MD	28370
FRI	0001	0100	Possum Trot	Raeford, NC	28345
FRI	0001	0100	Steamboat Plus	Shreveport, LA	28430
SAT	1510	1610	Louisiana Pelican	Baton Rouge, LA	28450
SAT	1730	1730	Tango	Buenos Aires, LU	28650

THE AMATEURS CODE

by Paul M. Segal, W9EEA (1928)

The Radio Amateur is:

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

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

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

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

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

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

DX News

Mike Davidson, N5MT
(#24949)

Welcome to the Summer season of the DX News. The Sun is still trying to produce big Sun spots that keep the Solar flux high and a maximum high for Cycle 25 may have just occurred! DX Propagation into Europe and Asia this past quarter is still good which gave us record Winter QSO Party scores in February. Another record was set at Hamvention in Xenia OH with 35,877 hams as the official attendance. **Please remember Field Day 2024 is June 22-23rd which could have the best propagation in the month of June!**

I am sorry to report but the ARRL website has had serious problems about the time Hamvention started and I was finally able to log in today. There is still no access to LoTW which is still off line on June 1st.

Someone asked about my station antenna compared to what I had back in Houston TX. I moved to Louisiana after storm Harvey flooded my house and we decided to move close to relatives near where I was born in Louisiana. When I sold the house I had to take down the tower but I decided not to move it to the new house and use something smaller! So the new place has a multi-band vertical and I have talked with 31 DX countries with a 10-10 member the past six years. When I was in Houston the last six years, I worked 40 DX countries with 10-10 members and some of those were 1st countries! So yes I do miss the four element beam at 75 ft. If a new DX country comes up, I do have access to a remote station to work the far away DX.

Summer time is when you must do any repairs on problem antennas that you will be using in the winter DX season. The ARRL 10 Meter contest in December is popular and other DX contest, could give you more new countries and more 10-10 contacts, so fix up the antenna farm. My station has slowed down here as I try to fix a few items that are in need of repair, so you should be doing the same. Plus get rid of any old junk in the shack that can be a hazard!

Update on the replacement of the Win1010 program.

Jeff N7YG #65084, continues to add features to the replacement program and testing continues. My 10-10 log contains many years of history so I am using that data to help debug the new program. I am still working on a few awards that I did not apply for in the old program and I found some duplicate records that I have deleted. I expect more testing will take some time to get all the bugs out of this new program, so good luck.

Many USA east coast stations have been talking into Europe each day this past Spring. The next Summer QSO Party is scheduled for early August and it is a favorite upcoming event. Results will be posted on the 10-10 Website.

Joe W1JR #17912 has been writing a summary of yearly DX activity for a long time. At: http://hamgallery.com/W1JR/.

This year is the 62nd anniversary for 10-10, so try to find a members with a 62 in their 10-10 number and log them. Last year 2023, I logged 11 members with the anniversary date.

Be sure to look and follow the future 1010 DX events coming later this year listed below!

OK, its time to talk DX, the hot months of spring have been better for Ten meter skip and we had a rare DXpedition into Africa for you to read about.

A few SSB contest this year produced good scores and a few DX members may have increased your 10-10 DX count.

Countries Award: There were no Countries Award applications submitted this past quarter.

General 10-10 DX reported in the past quarter:

4U United Nations NY. The UN station **4U1UN** #55555, in New York city, was heard in February and March on CW. The beacon is always on 28200 MHZ.

5A Libya. Abubaker 5A1A #69222 is using a new call 5A1AL in Libya. This new call is not a 10-10 member and he was spotted on FT4 and FT8 in March & April.

7P Lesotho. A big DXpedition went to Lesotho Africa from March 20-29th call 7P8EI The two members were Thos **EI2JD** #73610 and Declan **EI9HQ** #71019. They used CW, SSB & FT4. **This is a rare 10-10 location!**

CE0Y Easter Isl. Jorge **CE0YHF** #39382, is now on Easter Island working at a hospital. He has been on Ten using FT8 in April and March, so good luck.

CE0Z Juan Fernandez Isl. A DXpedition to the island in February using call CB0ZA was a good event. Members were: Ramon **NP4G** #36218 and Hal **W8HC** #12502.

Note: Juan Fernandez Island is a rare 10-10 DX location!

DU Philippines. Tim **N4GN** #41856 has not used his new 4G1G callsign as yet from the Philippines.

ET Ethiopia. Ken **K4ZW** #18573 was at the club station in May. The club call ET3AA does not have a 10-10, so you will have to find Ken for 10-10 credit and he prefers CW.

FO/A Austral Isl. Haru **JA1XGI** #55571 was using call TX5XG from March 27th to April 3rd mostly on CW.https://AustralVacation.amebaownd.com

FJ St. Barthelemy. Phil **K2LIO** #7746 is now living on St. Bart and uses call FJ4WEB. He returns to New York for visits when he is not on the island.

H40 Temotu. A DX group of 8 ops were on Temotu from February 22 to March 5th using call H40WA. Paul **N6PSE** #68859 but I do not have info if Paul was on Ten.

KH0 N. Mariana Islands. Tom **KH0/KC0W** #67688 was on for a short contest in May from the island. He will erect a 6 band hexbeam up 70 feet soon, so good luck.

OA Peru. Ed **OA4SS** #10802 is back on Ten using CW with his dipole mostly around 28017 MHZ.

OE Austria. Rene **DL2JRM** #69623 was expected to use call OE7/DL2JRM until May 12th. No reports.

PJ2 Curacao. Andreas **DK5ON** #54260 was on the island from March 12-25th as PJ2/DK5ON on CW, SSB and FT8.

V3 Belize. Uwe **DL8UD** #70315, was active until March 4th as V3O and not V31KO. Mostly SSB this trip.

V5 Namibia. Mike **V51MA** #64688, and I have talked several times this year on SSB and he is the only DX net control operator that helps the 10-10 daily net on 28380 MHZ at 1800 UTC except Sundays when there is no net.

VP2M Montserrat. Thaire **W2APF** #50022 was on Montserrat until April 11th as VP2MDX on CW.

VP5 Turks & Caicos Isl. John **K4BAI** #45389 used call VP5/K4BAI in May on Providenciales.

VP6 Pitcairn Island. Miralda **VP6MW** #50434, is back and active on her fixed radio. She was on a lot in May mostly FT4 28074 about 2300 UTC & maybe 28555.

VP9 Bermuda. Les **N1SV** #71546 was in the ARRL DX SSB contest the first weekend of March using call VP9I.

Tom **KG9EE** #71139 was active as VP9/KG9EE from April 29th to May 16th from Bermuda.

Darrell **AB2E** #9753 operated as VP9I from Bermuda in late May 23-27th mostly CW and FT8. LoTW.

YJ Vanuatu. A group of four ops activated YJ0VK from March 29th to April 11th and Matt **K0BBC** #76064 was there.

YS El Salvador. Ray **YS1RR** #24381 has been on the band from 1200 -1700 UTC this quarter. Mostly FT8.

ZF Cayman Isl. Scott **K7ZO** #55678 and two friends, used call ZF1A during the DX SSB contest March 2-3rd.

Reports on March 30th for ZF1A may not have been Scott.

Upcoming DX & New 10-10 Activity:

CY9C St.Paul Isl. A DXpedition scheduled for August 26th to September 5th will take place by ops that were on Sable Isl recently. The ARRL has pre-approved the CY9C DXpedition for DXCC credit. Members are: Mike **K9NW** #29804, Larry **W0PR** #31559 and Dan **W4DKS** #5395.

3D Rotuma Island. A DXpedition set for November 15th to December 4th with 6 ops will use callsign 3D2Z. The only member is Hal **W8HC** #12502. They will use three stations and two remote Ribs on Robinson Crusoe Island. LoTW.

5U Niger. Elvira **IV3FSG** #54292 will be DXing in Niger as 5U5K. She will be multimode from June 6-20th. Website: https://www.qrz.com/db/5U5K.

JA Minami Daito Isl. Haru **JA1XGI** #55571 will be on the island for two days July 21-23rd. Daito is IOTA AS-047 which is 249 miles east of Okinawa and south of Japan.

KH0 Mariana Isl. Tom **KC0W** #67688 is going to operate with call KH0V from November 23-24th.

UN Kazakhstan. Uwe **DL8UD** #70315 will be on from September 10th to 19th using call UN/DL8UD. **RARE!**

Miscellaneous Items & Notes:

Ten-Ten Website: http://www.Ten-Ten.org.

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

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.**Https://Secure.Clublog.org/mostwanted.php**http://ebarc.org/pdf/dx-entity-history.pdf

Ham Lookup diff ways: https://Haminfo.tetranz.com/map.

Ham LoTW users: http://www.hb9bza.net/lotw-users-list.

NEW: WM7DSolar:https://www.wm7d.net/hamradio/solar/

FT8 Fox/Hound Video:

https://www.YouTube.com/watch?v=GcbtTKSRkus.

Propagation: I expect the solar flux to range from about 125-236 this Summer. The summer Solstice equinox is June 21st , and it's the day of the year that has the longest day in the northern hemisphere. The Sun is high over the 30 degree parallel and giving us lots of sunshine to N. America. Remember, Cycle 25 started five years ago on November 17, 2019! This past quarter saw bad sunspots and flares that increased the solar flux. Sunspots are counted by looking at the Sun but the flux is measured by radio at 2.8 GHz.

The 2024 monthly **max** solar flux: Jan 196, Feb 208, Mar 209, April 227, and May 233. **Average 214.6**.

The 2024 monthly **min** solar flux: Jan 126, Feb 137, Mar 127, April 112, and May 135. **Average 127**.

On June 1st, the solar flux was 179, the A index was 12 and K index was 2. There have been more sunspots on the Sun over the past four years with increased solar flux up 35-75 points. This cycle 25 hit a high value of 288 on April 21st. The average flux for the past 6 months is over 165. The previous solar peaks were in 2014, 2001, 1989 and 1979. The USAF forecast for June 1st to July 15th has a range of 160-225 with avg flux 191.1, which is up 20 points from the last quarterly forecast. **The high flux in June may be just about the time of the ARRL Field Day weekend.**

My Prediction: Over the coming months, the best prop conditions on Ten could be: **June 27-30th**; July 21-23rd, Aug 18-21st, Sept 14-16th & Oct 11-13rd. For the USA, expect a 60% chance of DX to Europe, Asia, S. America or Pacific. Use the beacons 28.175-28.300 MHZ to find if the band is open. If closed for SSB, use FT8 on 28074 for a QSO.

New DX members joining from March to May 2024 were: Chris **VA7TU** #78309, Rainer **DL8NCS** #78328, & Gisela **DF9NGO** #78329. Juan **N6VDR** #78333 was the last member in May and 39 members joined this past quarter.

Thanks to the Daily DX by Bernie W3UR #25731 and the ARRL DX Bulletins. This 10-10 DX News edition is my number 131st of DXing reports for the past 32 years. All DX news to: Mike Davidson, 26274 Whispering Pines Ave, Denham Springs LA 70726 USA Email: N5MT@aol.com.

THE AMATEURS CODE

by Paul M. Segal, W9EEA (1928)

The Radio Amateur is:

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

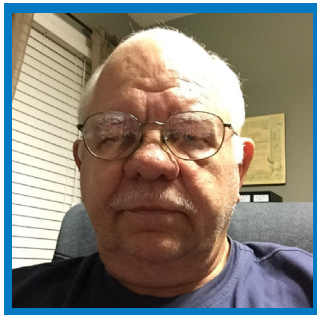
LOYAL..... offering loyalty, encouragement and support to other amateurs, local clubs and the American Radio Relay League, through which Amateur Radio in the United States is represented nationally and internationally.

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

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

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

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



QSO Parties

Dan Morris, KZ3T
(#41015)

2024 Spring Digital QSO Party

April 27-28

TOP TEN

	CALL	10-10#	CTX W	CTX WO	TOTAL
1.	N7WLC	63782	10	2	22
2.	KD5DE	33513	5	1	11
3.	KZ3T	41015	5	0	10
4.	KM5FF	50356	3	2	8
4.	N2LD	18241	3	2	8
5.	W2VTV	71275	3	0	6
6.	KK4AMR	76031	2	1	5
6.	W5KJW	78249	2	1	5
7.	N3GTY	50585	2	0	4
7.	W5SUM	2019	2	0	4
8.	KD5ILA	77652	1	1	3
9.	AA1CX	46677	1	0	2
9.	KA5VZG	46596	1	0	2
9.	KA9JCP	50609	1	0	2
9.	NC4GK	77965	1	0	2

CALL AREA ORDER

CALL AREA 1

CALL	10-10#	CTX W	CTX WO	TOTAL
AA1CX	46677	1	0	2

CALL AREA 2

CALL	10-10#	CTX W	CTX WO	TOTAL
N2LD	18241	3	2	8
W2VTV	71275	3	0	6

CALL AREA 3

CALL	10-10#	CTX W	CTX WO	TOTAL
N3GTY	50585	2	0	4

CALL AREA 4

CALL	10-10#	CTX W	CTX WO	TOTAL
KZ3T	41015	5	0	10
KK4AMR	76031	2	1	5
KA5VZG	46596	1	0	2
NC4GK	77965	1	0	2

CALL AREA 5

CALL	10-10#	CTX W	CTX WO	TOTAL
KD5DE	33513	5	1	11
KM5FF	50356	3	2	8
W5KJW	78249	2	1	5
W5SUM	2019	2	0	4
KD5ILA	77652	1	1	3

CALL AREA 6

CALL	10-10#	CTX W	CTX WO	TOTAL
N7WLC	63782	10	2	22

CALL AREA 9

CALL	10-10#	CTX W	CTX WO	TOTAL
KA9JCP	50609	1	0	2

LOW POWER

CALL	10-10#	CTX W	CTX WO	TOTAL
N7WLC	63782	10	2	22
KD5DE	33513	5	1	11
KZ3T	41015	5	0	10
KM5FF	50356	3	2	8
N2LD	18241	3	2	8

LOW POWER (Cont.)

CALL	10-10#	CTX W	CTX WO	TOTAL
W2VTV	71275	3	0	6
KK4AMR	76031	2	1	5
W5KJW	78249	2	1	5
N3GTY	50585	2	0	4
W5SUM	2019	2	0	4
KD5ILA	77652	1	1	3
AA1CX	46677	1	0	2
KA5VZG	46596	1	0	2
KA9JCP	50609	1	0	2
NC4GK	77965	1	0	2

CHAPTER ENTRIES

CHAPTER	LOGS	PTS
POSSUM TROT	4	21
STEAMBOAT	2	15
NM MUD DUCKS	1	8
MILWAUKEE	1	2

CHECK LOGS

CALL	10-10#	CTX W	CTX WO	TOTAL	OPS
VA3NFL	0	0	12	12	0
N1ME	69644	1	0	2	AA1CX

2024 Spring CW QSO Party

May 4-5

TOP TEN

	CALL	10-10#	CTX W	CTX WO	TOTAL
1.	KD5DE	33513	6	8	20
2.	KI4W	62657	3	6	12
3.	KM5EH	71103	2	0	4
3.	KM5FF	50356	2	0	4
3.	KZ3T	41015	0	4	4

TOP TEN (Cont.)

	CALL	10-10#	CTX W	CTX WO	TOTAL
3.	W5SUM	2019	2	0	4
3.	W8TOM	74496	1	2	4
4.	WB6IZG	55393	1	1	3
5.	WA3JXW	4377	0	1	1

CALL AREA ORDER

CALL AREA 3

CALL	10-10#	CTX W	CTX WO	TOTAL
WA3JXW	4377	0	1	1

CALL AREA 4

CALL	10-10#	CTX W	CTX WO	TOTAL
KI4W	62657	3	6	12
KZ3T	41015	0	4	4

CALL AREA 5

CALL	10-10#	CTX W	CTX WO	TOTAL
KD5DE	33513	6	8	20
KM5EH	71103	2	0	4
KM5FF	50356	2	0	4
W5SUM	2019	2	0	4

CALL AREA 6

CALL	10-10#	CTX W	CTX WO	TOTAL
WB6IZG	55393	1	1	3

CALL AREA 8

CALL	10-10#	CTX W	CTX WO	TOTAL
W8TOM	74496	1	2	4

LOW POWER

CALL	10-10#	CTX W	CTX WO	TOTAL
KD5DE	33513	6	8	20
KI4W	62657	3	6	12
KM5EH	71103	2	0	4
KM5FF	50356	2	0	4

LOW POWER (Cont.)

CALL	10-10#	CTX W	CTX WO	TOTAL
KZ3T	41015	0	4	4
W5SUM	2019	2	0	4
W8TOM	74496	1	2	4

HIGH POWER

CALL	10-10#	CTX W	CTX WO	TOTAL
WB6IZG	55393	1	1	3
WA3JXW	4377	0	1	1

CHAPTER ENTRIES

CHAPTER	LOGS	PTS
STEAMBOAT	2	24
POSSUM TROT	2	16
NM MUD DUCKS	1	4

CHECK LOGS

CALL	10-10#	CTX W	CTX WO	TOTAL	OPS
W6OI	109	6	8	20	0

OPEN SEASON QSO PARTY

June

TOP TEN

CALL	W/0 #	W/1 #	W/2 #	W/3 #	TOTAL
1. KD5ILA	1	6	1	1	20
2. KD5DE	0	3	0	3	18
3. N2LD	0	3	0	2	14
4. W2VTV	0	6	0	0	12
4. WD0ETG	0	0	0	3	12
5. KA5VZG	0	1	0	0	2

CALL AREA ORDER

CALL AREA 2

CALL	W/0 #	W/1 #	W/2 #	W/3 #	TOTAL
N2LD	0	3	0	2	14
W2VTV	0	6	0	0	12

CALL AREA 4

CALL	W/0 #	W/1 #	W/2 #	W/3 #	TOTAL
WD0ETG	0	0	0	3	12
KA5VZG	0	1	0	0	2

QRP

CALL	W/0 #	W/1 #	W/2 #	W/3 #	TOTAL
WD0ETG	0	0	0	3	12

LOW POWER

CALL	W/0 #	W/1 #	W/2 #	W/3 #	TOTAL
KD5ILA	1	6	1	1	20
KD5DE	0	3	0	3	18
N2LD	0	3	0	2	14
W2VTV	0	6	0	0	12
KA5VZG	0	1	0	0	2

2024 Ten-Ten QSO Party Schedule

Event	Dates	Postmark
Weak Signal	July 13-14	July 22
Summer Phone	Aug. 3-4	Aug. 12
Sprint	Oct. 10	Oct 18
Fall CW	Oct. 19-20	Oct. 28
Fall Digital	Nov. 9-10	Nov. 18
Anniversary (62)	Jan 1 - Dec 31	Jan 8, 2024
Meet the Volunteers	Jan 1 - Dec 31	Jan 8, 2024

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.

10-10 Scholarship Foundation Supporters

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 June, the Foundation Board voted to guarantee the funding for three $2000 scholarships this year. The Foundation was created in 2001 and is a qualified 501(c)(3) tax exempt organization and contributions are tax deductible. Why not consider a donation as a Chapter or an individual in memory of a fellow ham or loved one? **If you have an employer matching program, please let us know.** 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 make a donation of $25 or more, you are eligible to receive one of the historic 10-10 pins. As more and more members have told me not to send a pin and want the maximum amount of their donation to go to the students, ***if you have made a qualifying donation and would like a pin, please contact me at wa2suh@aol.com.*** To pay by credit card see payment information on Page 27 or send your check to me or the Data Manager. Our addresses can be found on Page 26.

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

Platinum ($1000 or more)

None

Gold ($500 to $999)

WB0CON	Eva Donaldson	53964

Silver ($100 to $499)

None

Bronze (Up to $99)

KB6BLD	Joyce Pike	52648
W5CRY	Charles Young	73003
KL1QQ	Monte Handy	77190
VA7TU	Chris Pires	78309

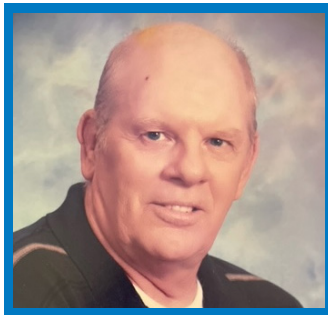
10-10 Scholarship Applicant Information

Each year the 10-10 International Net, through our non-profit corporation, the 10-10 Scholarship Foundation, funds three $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. ***Over the past 35 years, 10-10 has funded 133 scholarships valued at $177,000.***

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 the

FAR website:http://www.farweb.org or request an application from:

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



Net Report

Steve Wagner, W7WHB
(#77836)

Congratulations to all of the 10-10 Net Control Station operators for the great job performed in the 1st quarter of 2024. There were over 2,084 check-ins during the quarter.

The following are the volunteers who keep our net running every day of the week except Sundays:

Monday	Doc	WB6OJB	California
Tuesday	Ray	K7CWS	Arizona
Wednesday	Rotating with current NCS operators.		
Thursday	Mike	V51MA	Namibia, Africa
Friday	Steve	W7WHB	Arizona
Saturday	Augustine	WA4GQJ	Florida

We are still looking for someone to fill the Wednesday time slot. If interested please contact Steve, W7WHB at W7WHB@arrl.net

We are still hearing some stations that are trying to be helpful in relaying 10-10 members into the net. Effective last quarter and per the Operations Manual for 10-10 International, only Net Control operators will designate what stations are to be relay stations. Any random station trying to be a relay will only be recognized as “relay station” by the Net Control Station operator for the particular day.

We are emphasizing again per 10-10 Operations Manual Rule. 6.3 (1) 1. A legal 10-10 contact must be a direct, two-way contact exclusively on ten meters, and must consist of the exchange of call sign, 10-10 number, name, date of contact and QTH (state or country).
At no time is it acceptable for a 10-10 number to be relayed via a third station or copied from any other station.

If there are any concerns, comments or suggestions, please bring it to the attention of the 10-10 Net Director: Steve Wagner, W7WHB by email to: W7WHB@arrl.net

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

Monday	Doc, WB6OJB	#70675	CA
Tuesday	Ray, K7CWS	#50288	AZ
Wednesday	(OPEN)		
Thursday	Mke, V51MA	#64688	NAMiBIA
Friday	Steve, W7WHB	#77836	AZ
Saturday	Augustine, WA4GQJ	#78026	FL
Alternate	Tim, K1IEB	#74965	TX
Sunday	**NEVER ON SUNDAY**		

Net Report for 1st Quarter 2024

Monday Nets

|---------- 28.300 MHz ----------|

DATE	TOTAL	NO 10#
1-Jan	XX	0
8-Jan	36	11
15-Jan	52	12
22-Jan	37	7
29-Jan	29	4
5-Feb	29	8
12-Feb	37	7
19-Feb	42	8
26-Feb	40	12
4-Mar	42	10
11-Mar	43	14
18-Mar	43	11
25-Mar	49	12

Wednesday Nets

|---------- 28.300 MHz ----------|

DATE	TOTAL	NO 10#
3-Jan	25	8
10-Jan	21	3
17-Jan	27	13
24-Jan	40	10
31-Jan	23	4
7-Feb	25	6
14-Feb	83	34
21-Feb	23	6
28-Feb	7	0
6-Mar	27	7
13-Mar	20	2
20-Mar	23	2
27-Mar	16	1

Tuesday Nets

|---------- 28.300 MHz ----------|

DATE	TOTAL	NO 10#
2-Jan	20	5
9-Jan	20	4
16-Jan	27	2
23-Jan	24	5
30-Jan	28	2
6-Feb	15	1
13-Feb	26	3
20-Feb	33	10
27-Feb	26	7
5-Mar	24	5
12-Mar	17	0
19-Mar	22	2
26-Mar	23	1

Thursday Nets

|---------- 28.300 MHz ----------|

DATE	TOTAL	NO 10#
4-Jan	23	3
11-Jan	26	10
18-Jan	17	4
25-Jan	27	10
1-Feb	27	4
8-Feb	25	7
15-Feb	33	4
22-Feb	XX	0
29-Feb	38	14
7-Mar	35	9
14-Mar	24	3
21-Mar	25	5
28-Mar	20	3

Net Report for 1st Quarter 2024 (Cont.)

Friday Nets			Saturday Nets		
|---------- 28.300 MHz ----------|			|---------- 28.300 MHz ----------|		
DATE	TOTAL	NO 10#	DATE	TOTAL	NO 10#
5-Jan	29	6	6-Jan	19	4
12-Jan	29	3	13-Jan	13	6
19-Jan	31	6	20-Jan	14	1
26-Jan	33	8	27-Jan	22	4
2-Feb	26	1	3-Feb	XX	0
9-Feb	22	2	10-Feb	33	11
16-Feb	31	8	17-Feb	28	8
23-Feb	26	8	24-Feb	25	4
1-Mar	33	7	2-Mar	10	1
8-Mar	28	6	9-Mar	33	5
15-Mar	31	4	16-Mar	27	10
22-Mar	24	2	23-Mar	11	0
29-Mar	30	9	30-Mar	12	1

XX NO NET CALLED

10-10 Has One Official Daily Net
28.380 MHz
Net Starts At 1800z
Every Day Except Sunday
Listen And If You Can Hear Us Join IN!!!

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.

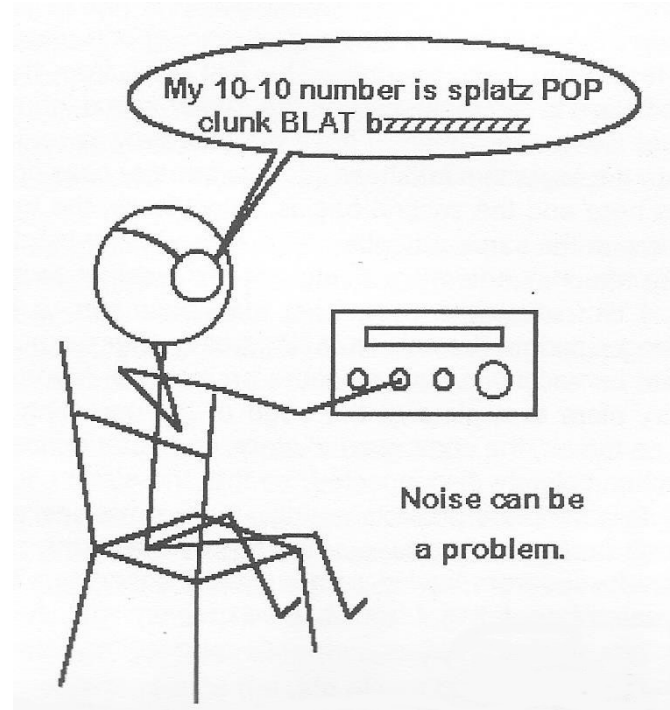
ANTENNA NOISE

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

We often hear reference to "noise" in antenna work, but often we are not sure what kind of noise is being talked about. So let's talk about noise and antennas. "Noise" comes in a wide variety of styles, but here is one way to divide the group into usefully smaller chunks:

1. Man-made noise: This category includes the usual machinery sparking, faulty signs, auto engine sparking, etc. As you can see from thinking about the sources, it largely derives from spark generation and hence produces useless RF over a wide frequency range. Most human-made noise is vertically polarized and of ground wave propagation. Hence, ground-mounted verticals are most susceptible to this category of noise. A horizontal antenna generally shows an immediate significant noise reduction. Additionally, antenna elevation also helps reduce the noise level.

Finally, a narrow-band antenna also reduces the total amount of noise energy in this category from reaching the receiver. A parallel feedline-ATU arrangement sometimes shows improvement over the same antenna fed with coax by filtration action, i.e., narrowing the bandwidth of the energy allowed to reach the receiver.



One technique that has been the subject of recent articles is the use of a short vertical noise sensing antenna (long enough to pick up local noise but too short for effective reception of propagated signals), inverting its signal, and combining the result with the regular antenna signal. With proper adjustments, local human-made noise can be cancelled quite effectively, with only slight reductions in received signal strength. The benefit lies in the large improvement in signal-to-noise ratio, the truer mark of effective reception.

Except for very nearby sources, such as an arcing pole pig, Man-made noises create the most problems on the lower HF bands.

2. Atmospherics: There are two sources of “atmospheric” noise and energy coupling to antennas:

a. Sparks: Nature also generates wide-band sparks in the form of lightning. There are other atmospheric noise sources, but especially on the lower HF bands, QRN is largely propagated lightning signals. As with all spark energy, the energy decreases as the frequency increases, hence, the quieter high bands. There is little difference in the reception of propagated spark energy between vertical and horizontal energy, since the polarization is lost in the skip refraction. Narrow-banding the pre-receiver reception system can reduce the total energy from such signals that reaches the receiver front end.

b. Charges: the more that air molecules strike each other, the more they lose electrons and become charged. The thinner the atmosphere, as at high altitudes, the longer molecules can stay charged before recombining with lost electrons. It is from phenomena such as these that we get the static charge build-up on antennas. For most home antenna systems, charge build-up was no real problem with tube grids, but a real problem with solid-state front ends. The longer the antenna wire, the windier the location, and the drier the air, the more likely that static charge can build to damaging proportions. At the very least, static charge collection on an antenna is an additional noise source and problem.

For some antennas mounted very high, the energies involved could not be drained effectively before damage occurred to antenna elements. At the extreme, the development of the quad loop was to solve HCJB’s end coupling problem with its Yagi: at high altitudes of Quito, Ecuador, the energy coupling was burning the ends off the antenna elements.

Loop antennas have no ends: hence, for a portion of the incoming energy, there is a reduction in the amount of energy coupled to the antenna from wire-end capacitance. Where the high voltage region is distributed across a wire length, whether vertical or horizontal, capacitive coupling is minimized. For this reason, some operators find quads and other loop antennas quieter than Yagis and dipoles.

Regardless of antenna type, static charge is simple to drain away. One technique is to have the antenna at DC ground. Some antenna designs are naturally at DC ground. Loops go from the coax center to coax braid, and if the braid is well grounded, the charge does not build up. Placing an RF choke across the antenna terminals or from the hot terminal to a ground line can continuously drain charge build-up. In some multi-band antenna systems, parallel feed lines can carelessly omit this protection, but a pair of RF chokes, one from each line to ground where the feedline enters the house, can protect equipment. However, remember that the impedance level at that point can be high, requiring a very high value of RF choke to ensure that significant signal energy does not go through the choke.

3. Mixing products: Two signals, neither of which is on the frequency to which we are tuned, can be mixed and produce a third signal (or a bunch of signals) that may fall on a frequency we want to use. The cure for mixing products begins by locating where the mixing occurs. If the mixing occurs in the receiver, then filtration of the unwanted frequency (or frequency range) is the best solution. If the mixing occurs externally to anything one’s receiving and antenna system can control, then there is no cure immediately at hand. However, such problems often involve violations of technical standards by one or both of the signal generators involved as the sources of the mix, and patient bureaucratic pressure can sometimes alleviate the problem. If the mixing occurs within one’s antenna system, then there is usually something wrong with the system—bad connections, unwanted couplings, less than optimal tuning set-ups: all of these are correctable and should be part of one’s routine periodic maintenance on the antenna system.

These are not all the noise sources. Power company equipment problems, such as arcing pole pigs, require a simple procedure: locate the problem transformer, keep reporting the situation until you get action, and hope there is a ham on the technical staff that handles such complaints. RFI from light dimmers and other home products that use AC waveform chopping to control a voltage level has been noted in many articles and requires that we locate the source and cure it individually. Likewise with noise from computer timing circuits.

Finally, some folks are condemned to live in areas where noise is beyond control and even beyond the ability of the best noise blanker to handle. The solution, short of illegally de-powering these sources, is to save money and move to a quiet location—or to concentrate on portable operation. However, antenna choice, feed system choice, filtration, noise cancelers, and noise blankers can go a long way toward reducing currently unlivable noise to a mere constant irritation.

ELECTION TIME LINE

- ☑ Call for Nominations will be printed in the January and April 2024 edition of the 10-10 NEWS.
- ☑ 1 May 2024 - Candidates must have names and bios to Nominating Committee.
- ☑ 15 May 2024 - Nominating Committee will develop slate of candidates and notify members who applied but were not selected.
- ☑ 15 June 2024 - Deadline for Petitions for Candidacy to Secretary.
- ☑ Ballots and all Candidates' bios to be printed in July 2024 edition of the 10-10 NEWS.
- ☐ 1 October 2024 - "**In Hand**" Deadline for return of Ballots.
- ☐ 1 November 2024 - Election results posted on 10-10 Web Site.
- ☐ 1 January 2025 - Newly elected officers take office.
- ☐ Election results posted in January 2025 edition of the 10-10 NEWS.

2024 Election Candidate Bios

Larry Berger, WA2SUH, #00407 – Vice President/ Secretary (UNOPPOSED)

I have been involved with 10-10 for 55 years and have been one of its biggest supporters. Over the years I have served in the following positions: Second District Manager (1979-1997), 10-10 Director (1998-2007), Vice-President (2008-2016) and again as a 10-10 Director (2021-2024). I am currently the Director focusing on QSO Parties and I have been working closely with Dan KZ3T, the QSO Party Manager. I have been the Scholarship Manager since 2001 and have worked hard to ensure that our scholarships are funded entirely through member donations.

In addition to checking into the daily 10-10 and chapter nets when we can, we should all try some of the following to ensure the continued health of 10-10: encourage people to get on the band: call and answer CQ's, in our QSO's tactfully let people know about the opportunities that 10-10 affords and plug our website; volunteer to speak about 10-10 at radio club meetings; set up a 10-10 table at hamfests; and set a good example as an operator and encourage others to do the same. The digital modes should be attractive to young hams and we can let them know that these can be used to exchange 10-10 numbers. I look forward to serving again as a Vice President/ Secretary , working with our excellent Board of Directors and other committed volunteers.

Stephen Wagner, W7WHB, #77836 – Director (UNOPPOSED)

It is my goal now, and in the future, to make 10-10 International truly "International" by recruiting Net Control operators from different countries around the world. I have already recruited a station in Namibia, Africa who performs and volunteers exclusively for 10-10 International. Monitoring the statistics from previous daily nets, I can say that the addition of the Net Controller from Africa has increased our check-ins on daily nets.

I have made available to all current net control operators vital information in the conduct, policy and operations procedures of the daily Nets.

I have also changed the procedures as to how and when net reports are submitted. The change has made reporting of daily nets almost instantaneous or at least upon request.

My military service enables me to provide leadership for our volunteers as well as serving as a role model for what 10-10 International officers and membership expects from our net Control Operators.

I strongly believe new membership depends a great deal on how professional our Net Control Volunteers conduct their individual nets.

With the changes I have already put in place and the changes that still need to be undertaken, I am sure that it will raise the awareness of the Amateur Radio World that 10-10 International is a well known professionally run and fun organization.

Martin Jordan, KB1MJ, #67175 - Director (UNOPPOSED)

I have been an amateur radio operator since 1996 and I hold an extra class license. I joined 10-10 just after earning my license, proudly holding member number 67175. My steadfast commitment to amateur radio communications began through my long career in management in the fire service and I have also been a paramedic. I recognized immediately the value of amateur radio in emergency communications and disaster scenarios, with the amateur radio operators vital to building resilience and readiness of the local community. I oversaw our 911 Dispatch System and included amateur radio operators in all of our activities and drills. Upon my retirement, I became more involved in amateur radio and have been able to more fully embrace the versatility and fun side of amateur radio. I currently own and operate a full mobile Em Comm Van which is fully sustainable. It has twelve radios, and I am authorized to use all frequencies allowed. I am an ARRL Examiner, Instructor, Field Examiner, Field Instructor for the ARRL Em Comm Courses, AUXCOMM Certified, and I participate in many Emergency Nets.

With my experience as a dedicated leader in facilitating effective communication and collaboration within the amateur radio community, I decided to run for the 10-10 Director position. I aim to uphold the organizational mission of fostering a welcoming and inclusive environment for international networking and learning while advocating for the advancement of amateur radio communications and 10-10 International. Thank you for your support.

Mark Steele, KD2NOM, #77569 – Director (UNOPPOSED)

I currently serve as the SK Manager as well as the Director of Publicity. I am an advocate of digital modes in the hobby and am always testing new technologies that will be appropriate for 10-10 International members and prospective members.

I advocate for the organization in many ways including promotion when making 10-meter contacts and by running a near 24 x 7 live stream of my station in which I showcase 10 meter operations.

I would be honored to continue serving 10-10 for the next Board cycle.

When Should I Use a Vertical on 10?

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.

Most of the antennas we have discussed in this column have been horizontally polarized. There are some good reasons for this fact. First, 10-merter horizontal antennas are fairly compact, with a half wavelength being about 16-17' long. Second, the shortness of a wavelength on 10 meters (35') generally simplifies the process of supporting a horizontal 10-meter antenna at a good height (at least ½ wavelength, with over 1 wavelength preferred for best performance). Third, even 3-element 10-meter Yagis are fairly light-weight, for easy support, even in field or hilltop operations.

Nevertheless, there are some good reasons for using a vertically polarized antenna on 10. Although the gain of such antennas may not usually compete with a well-installed horizontal antenna pf the same size, this factor is rarely a problem when the band is open. So let's look at the question of when to use a vertical.

1. Mobile in Motion: The standard these days for mobile-to-motion operation is the short, center-loaded, magnetic mount vertical set on the car roof. Although the least efficient of almost any antenna used on 10, these antennas acquit themselves well. Full size ¼ wavelength whips have gone out of vogue, especially with the increased use of plastics in autos. When auto bodies themselves become universally plastic or fiberglass, we may have to rethink the center-loaded mag-mount vertical for mobile operation.

2. Lunch-Time Operation: With small rigs, short antennas, and an open band around noon, 10-meters lunchers are more numerous than we imagine. Since the lunch hour (or half-hour) is all too brief, operators want a system that wastes no time in set-up and take-down. The vertical—again, usually a mag-mount antenna in the parking lot—fills the bill.

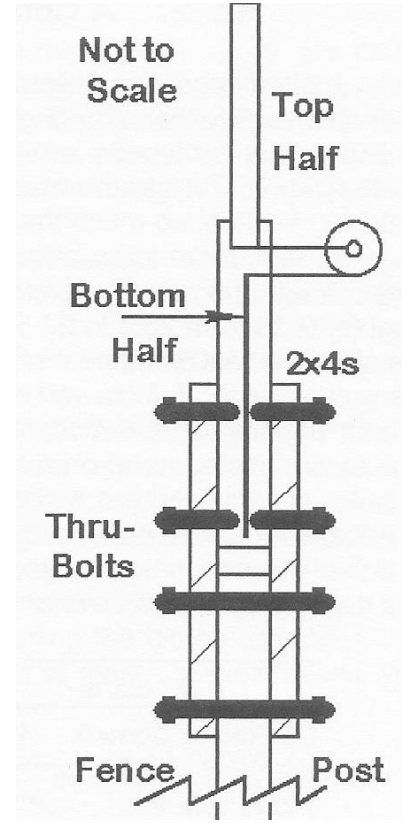


Figure 1. Vertical Design

3. Local Convention: In some towns and cities, most of the locals may use vertical antennas. Sometimes, this represents a lot of mobile work; sometimes it represents former citizen's band operators who have joined the amateur ranks and cut down their old antennas to resonate on the higher frequencies. Since local work is mostly point-to-point, as in VHF operation, cross-polarized antennas result in major losses in signal strength. So if the local group is mostly vertical, then it will pay you to have a vertical at home (as well as on the car) to join the fun full strength.
Since the path through the ionosphere generally skews signal polarization, distant stations will not suffer from being cross polarized relative to your antenna.

4. Lack of Space: Many hams live in homes without large yards. So space for antennas must compete for space with play equipment, patio furniture, and flower gardens. A vertical may be the only antenna type the home owner can erect.

The question here is not whether to use a vertical, but what kind of vertical to use. There are a number of multi-band verticals now on the market that will open many of the ham bands. They come in two major types.

If the roof top is the mounting area of choice, then one of the ¼ wavelength trap vertical may be best. The heaviest part of the antenna is mounted near the roof top or chimney mounting system for maximum support. The necessary radials, installed according to the antenna maker's instructions, can run along the roof top. If the antenna is at the end of the house, radials in the open direction can be run to trees or fence post, well out of reach of children or adults.

Where space is too restricted for an elevated radial system, one of the half-wavelength verticals may be more fitting. Some demand an elevated mounting point and may rest well on top of a fence post, short flag pole, or even a mast attached to a deck post. Other models call for ground mounting and can be placed in the most clear usable place in the yard with buried coax.

In all such installations, safety to children, family members, visitors, and neighbors is a top requirement. These antennas are rarely large enough to cause damage to neighboring property if they fall. Of course, they should be well clear of any utility lines crossing the yard. Finally, they should be isolated so that no one can get an RF burn by touching the antenna while in use. For some models, we achieve this last safety measure by elevating the antenna above reach, even by fence-climbers. Ground-mounted models require some extra thought. Setting up a flower bed and small fence around the antenna can keep most folks away. Sheathing the lower portion of the antenna in large-diameter black plastic down-spout drainage pipe for about 8' up is quite effective in preventing children from touching the antenna and has been found not to adversely affect performance. The protective sheathe can be attractively painted (with non-metallic paint) to call attention away from the antenna.

Whatever the safety measures we take, we would also insure that they meet FCC requirements regarding RF exposure to other people.

Even hams with room for a host of horizontally polarized antennas may wish to consider installing one of these multiband verticals. They make good (even if not great) low-band antennas, provide back-up service in case the main beams collapse in high winds or ice, and allow the operator to match the polarization of locals using mobile whips or other vertical antennas. So even if you can afford the highest, the biggest, and the best, one of these simpler antennas makes good sense as part of the antenna farm.

5. Home Brewers: Some of us like to build antennas. Some of us have to build antennas to save the cost of commercial versions. Whatever the reason, a vertical dipole for mounting at least 20 to 25 feet up at the center on a non-conducting mast is a good starter project. I suggest a vertical dipole, since it saves a lot of grief over where to run the radials for a quarter-wavelength ground-plane model. The vertical dipole also takes less space than a horizontal dipole and requires no turning for maximum signal.

You can construct a vertical dipole from hardware store materials: aluminum rod or tubing (a little over 8'), PVC, and wood are the main ingredients. Figure 1 shows in bare outline a vertical dipole I once used to capture Worked All Continents in about an hour at the height of a long-ago sunspot cycle. The 4x4 fencepost was the main support, with underground bracing from bagged concrete. The side rail 10' 2x4s supported a good quality 2x4 mast, with the 4" side running between the rails. Two long galvanized bolts braced the mast. Removing the lower bolt permitted tilt-over operation.

The antenna itself began with an 8' length of aluminum tubing for the top extension. The lower part of the antenna consisted of insulated #12 house wire, purposely cut long. I tuned the antenna to frequency by trimming the lower wire for minimum SWR. Many local hams seemed initially horrified by the idea of a dipole made from unequal diameter elements and trimming only on end. They thought that terrible things would happen to performance, since the antenna was obviously as unbalanced as its builder.

Actually, virtually nothing happens except for a bit of building and adjusting convenience. Half-wavelength antennas lose nothing in performance by being fed slightly (or even radically) off-center. The feedpoint impedance does not begin to change noticeably until the feedpoint is well off center. The only precaution was for safety: the dipole end is a high-voltage point on the antenna, so it had to be inaccessible to human touch when in operation.

There you have it: some good reasons for using vertical antennas on 10 meters, whether they are commercial multi-band antennas or home brew specials. There are other reasons of a specialized nature that we could add. For example, if you live by the seaside, expect an exceptional increase in performance over the same antenna placed on a rocky hillside in the Smoky Mountains. Verticals have proven to be more than good enough in some island contesting locations. Some operators even prefer the wider beam width of a vertically oriented Yagi to one that is horizontal. Whatever the reasons, verticals have and will always have an important place in 10-meter operation, even if we never mention FM and repeaters at all (which I just did).

Meet The Volunteers

A year-long event to find and make contact with all of the people who devote time to keep 10-10 an active organization!
The goal? Make contact with each of the following volunteers during 2024

AJ7B, Randy	Editor
G4BLH, Mike	Awards - GB
K1IEB, Tim	Net Control
K5BKT, Peg	Committee Member
K5PLH, Phyllis	Historian
K6RDK, Dave	Data/ Membership Manager
K7CWS, Ray	Net Control
KC4HIT, Mark	Awards - Counties
KD2NOM, Mark	Director
KD5DE, Mel	Past President / Supplies Mgr
KE0MIZ, Rob	Awards - 1000+
KF4WKY, Mike	Net Control
KG5RJ, Greg	Committee Member
KI5ELV, Thomas	Awards - VP Bars
KI6OY, Lee	Awards-CW
KJ5SZ, Hugo	General Counsel
KM4ODS, George	Director
KM5EH, Marcus	Director
KM5FF, Ed	Awards-WPX
KR7RK, Keith,	Treasurer
KZ3T, Dan	QSO Party Manager
N1API, Al	Committee Member
N3GTY, Bill	Committee Member
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N7UQ, Chuck,	Awards - VP WAS
N7YG, Jeff	IT Manager
NF0J, Dave	President, W6OI Trustee
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NS6X, John	Committee Member
NZ1I, Kevin	Awards – WAC
VA7GY, Garry	Committee Member
V51MA, Mike	Net Control
W0FLZ, Paige	Award - Mobile
W5DJT , David	Committee Member
W5SUM, Ronnie	Vice President / Secretary
W7WHB, Steve	Director
W9HT, Joshua	Committee Member
WA2SUH, Larry	Director
WA4KUP, Brad	Committee Member
WB0CON, Eva	Awards – WAS
WB6OJB, Arnold	Net Control

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

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

The Radio Amateur is:

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

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

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

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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 at www.ten-ten.org

TOP TEN HONOR ROLL

No.	CONTACTS	CALL	10-10#
1.	24600	WA5JDU	3017
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6.	9800	N5DAS	35877
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VP Bar	Thomas Cole, KI5ELV #77743	3238 Wagner St., Shreveport, LA 71108	(318) 617-0562	ki5elv@yahoo.com
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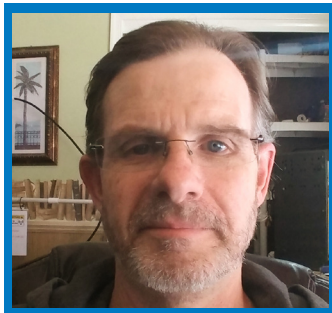

Silent Keys

Mark Steele, KD2NOM
(#77596)

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
10463	VE1AI	Richard Ernest Grantham - Dartmouth, NS
02512	WB0BNN	Richard E. Levandowski - North Oaks, PA
04913	W4CBM	Richard D. Shupe - Dublin, VA
06364	KR2E	Paul J. Plache - Scottsdale, AZ
06707	WB5FQJ	Mel T. Rinn - Hockley, TX
06893	VE3BW	Joseph C. Adams - Stevensville, ON
07977	W8LRO	Frank D. Adams - Dayton, OH
07989	AA0GU	Floyd J. Abrames - Grand Junction, CO
11259	WA8Y	Steven A. Linley - Midland, MI
11366	N9BE	William C. McLane - Hendersonville, NC
11395	W9KUW	Nyles A. Priest - Fond Du Lac, WI
14110	K2JAO	Joseph A. Reid, III - Basking Ridge, NJ
14561	WB8NEU	John J. Barta - Oregon, OH
16496	WB4MTK	William F. Raines - Taylor, AL
17051	K9AKU	Harold R. Cowan - Fishers, IN
17764	N4QH	Lyle T. Dysinger - Toccoa, GA
18775	K4CMS	Larry R. Smith - Alvaton, KY
20197	WB2EJG	James V. Martin, Jr. - Oneida, NY
22300	K9EID	Robert G. Heil - Fairview Heights, IL
23206	K1BO	William B Walker, III - Hickory, NC
23845	KD0E	Ralph E. Giesman - Carroll, IA
25705	KR3J	Leonard E. Heffner - Summit Hill, PA
31033	N0EOP	David Sloan - Richmond, IN
34074	K8LEN	Patrick M O'Brien - Orleans, IN
37343	AB4OT	James E. Whitener - Gastonia, NC
37745	KF4YP	Vergil A. Morton - Berea, KY
41039	NN3AS	Norman L. Walker - Waynesboro, PA
42050	VE2QK	Jacques Dube - Trois-Rivieres, QC
42101	WA5AC	Jay E. Whitehurst - Austin, TX
44933	N7RD	Ron D. Smith - Sun City West, AZ
46864	N8JGG	Dennis E. Eagan - Sturgis, MI
49339	N5NMX	Jerry L. Knight, Jr. - Redfield, AR
53721	AE7BM	Charles R. Smith - Shreveport, LA
59113	KC1BT	Allan R. Machell - Barre, VT
59539	KK6WO	Michael J. Reagan - Pasadena, CA
61487	N9KMW	Harold D. Howard - Fayetteville, NC
62665	W2ZMZ	Cono A. Delrosso - Wayne, NJ
65578	N2KUD	Gustav E. Hansen - Modena, NY
66572	K3GEV	James H. Yoder - Hilton Head Island, SC
66854	WL7LZ	Mark A. Newby - Topeka, KS
67111	W1CGI	Anthony Peronne, Jr. - Pawcatuck, CT
67112	N1PVT	Jane K. Oliver - Sutton, MA
68531	KB0WAK	John K. Edmundson - Overland Park, KS
69811	VE9KM	Robert J. Ireland - Sackville, NB
72153	K4HJH	Harry J. Holmes - Lilburn, GA
72821	K1GB	Gordon T. Bello - Waltham, MA
72961	K9BIF	Charlie M. Short - Goshen, IN
73284	W2XOY	William L. Continelli - Fuquay Varina, NC
74164	KB1I	James L. Tourigny - Warwick, RI
74569	W7JY	Gerald P. Lillie - Eugene, OR
75927	NX4TT	Edward L. Campbell - Rockledge, FL

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

Mark 73, KD2NOM #77596

THE POOR OLD ZL SPECIAL

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.

Because the ZL special is such a mechanically simple and cheap antenna, it has spent its nearly half century of life misunderstood. Rightly understood, it has a place in the 10-10 inventory of antennas. It will not cure the blues on a rainy day or make DX in the absence of sunspots, but it may make a very useful attic or field antenna.

ZL3MH (later ZL2OQ and recently a silent key) brought the antenna to ham attention in 1949, giving credit to W5LHI and W0GZR for basic information on the design. G2BCX. Who has developed variations on the design from the earliest days to the present, dubbed it the "ZL Special," and the name stuck.

The basic idea is deceptively simple: take a driven element and a slightly longer reflector and space them between a tenth and an eighth wavelength apart. Next, connect the elements with an eighth wavelength of transmission line (adjusted for velocity factor of the line) with a half twist, and feed the former driven element with ladder line to an antenna tuner. The result is a 135-degree phase array. In the early 1950s when hams had difficulty building Yagis at home, the antenna seemed to outperform 3-element Yagis and give almost miraculous front-to-back ratios. The claims are almost embarrassing today.

First, the ZL special, in any form, will have the gain of a 2-element Yagi at best. In fact, most decent designs show about 1.6 dBi forward gain in free space, about the same as the broadband Yagi described in the last column and about 4 dB better than a similar sized and placed dipole.

Second, the front-to-back ratio can range from great to mediocre depending upon design care, luck, and Murphy. Figure 1 shows two patterns of the version we shall physically describe below. They are taken over real medium earth at a height of 20' (for reasons we shall also note below). Casual building can achieve the broader pattern, while extensive design and experimental work might approach the "perfect" pattern.

The perfect pattern might not be more especially useful that the casual pattern, since it is so pinched. Any rear QRM just off center line will not feel the effects of the high front-to-back ratio, since it will fall within the off-center lobes. The casual pattern is only slightly worse than the lobes of the perfect pattern. Looking at the entire rear section of an azimuth pattern is somethings called analyzing the "front-to-rear" ratio.

The casual pattern is still useful for certain kinds of applications. It provides a better than 15 dB front-to-rear ratio across the entire backside. If the mechanical features of the antenna fit your building needs, then it may pay to try a ZL Special.

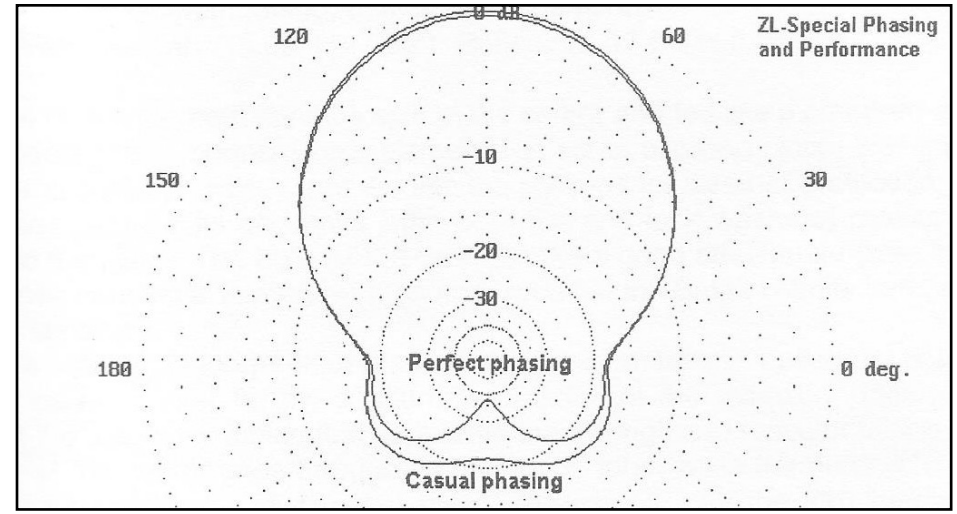

Figure 1. Two Radiation Patterns of ZL Special Antenna

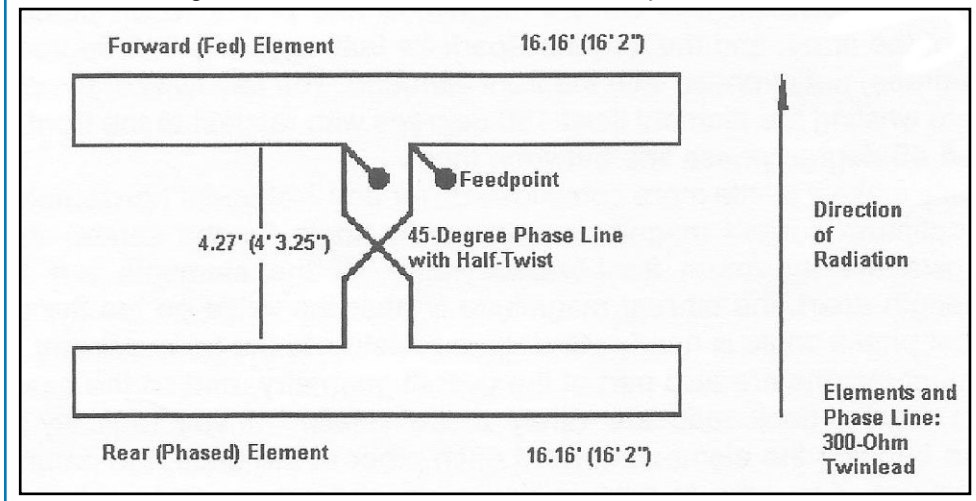

Figure 2. - Scaled Version of ZL Special for 10 Meters

Most of ZL3MH's designs used unequal elements. A few years back, W7EL published a Field day Special version of the antenna using equal length elements. Hence, I tend to call unequal element versions ZL Specials and equal element versions FD Specials. W7EL's antenna is made (like some predecessors) from 300-ohm good quality TV feedline. The general configuration appears in Figure 2, scaled for 10-meter use.

The elements are folded dipoles 16'2" long. The 300-ohm phasing section is 4'3" long with a half twist between the front and rear elements. The phase line here is designed to be the same length as the distance between elements, this

producing a taut assembly.

You can feed the antenna in two basic ways. One way is to place capacitors in series with each feedpont to compensate for some remaining inductive reactance at the feedpoint. The 1:1 choke balun links the feedpoint to regular coaxial cable. If finding the right amount of capacity to place at the feedpoint is a bit too much trouble, then feed the antenna with more 300-ohm ribbon brought to an antenna tuner. The feedpoint compensation will have a bearing on the basic properties of the antenna.

Heavy plastic squares with stress-relief slots and small machine screws as tie-point anchors should make easy work of the mechanical connections, front and rear. You can tape the antenna to bamboo and simulate a Yagi, but that is probably not the best use of the antenna. Better applications are as an attic antenna or an antenna strung between trees on Field Day and similar operations. A spacer bar at each end of the antenna and some rope ties will hold the antenna in place. These applications prompted the 20' height patterns, since they rarely permit very high antennas.

W7EL also noted a convenience: he attached half-wavelength sections of twin lead dangling from both the front and rear junctions. One just dangles (without touching the ground) while the other is connected either to the antenna tuner or the coax feedline. Swapping leads reverses the direction of the array. The dangling open-end half-wavelength line acts like a very high impedance, which affects antenna performance very little, if at all. Adjust these lines for the velocity factor of the ribbon cable, about .9 for most common 300-ohm twinlead.

Sounds simple, doesn't it? Mechanically, it is simple, but electronically, things get a little more complex. Some call the ZL Special a 135-degree phased array because they think of the rear element at 180 degrees minus the 45 degree twisted phase line out of phase with the front element. This is true with respect to impedance values found at each element. However, it is current magnitude and phase which determine the performance of the array, and the target ballpark for the current is 315 degrees (which is also -45 degrees) out of phase with the front element. The half twist of the phase line is equivalent to twisting the element itself 180 degrees with respect to the front element, with an added 45-degree phase line between them.

Now let's make it a little more complicated: for any 2-element horizontal antenna, there is an optimum current magnitude and phase angle for the center of the rear element to give the maximum front-to-back ration are rarely these ideals. If you radically alter the geometry, like bending the elements toward each other at the ends, the natural values (or parasitic values, if you like to think in Yagi terms) change considerably from those found with straight elements at the same spacing.

Finding the exact dimensions for a perfectly phased ZL Special can be daunting and unrewarding, especially since the values also change with the antenna height above ground. (The "perfect" pattern in Figure 1 required a modeled rear element current of 1.01 times the current on the forward element and a phase angle of -40.8 degrees and those values differ from the free space model values.) ZL1LE has developed a "lumped constant" matching network that permits him to tune his antenna to the deepest rear nulls as he feeds both junction points with half-wavelength feedlines.

However, there is a big difference between a usable antenna and a perfect antenna. Most ZL Special designs will show little loss in gain and at least 15 dB front-to-back ratio up to 5% above or below theoptimal current level and up to 8 or 10 degrees off optimal phasing. Hence, even casual ZL Special designs get the job done, even if they are not perfect. That is why most antenna analysts (who are usually perfectionists) tend to hate the ZL Special, while many a poverty-level or teenage ham has learned to love the antenna.

Like the hams of the 50s, I prefer to use an antenna tuner with the ZL Special because I do not have to recompensate for the feedpoint reactance every time I move the antenna. And tuning one up to acceptable performance is a matter of adjusting the length of the phasing lines, usually making it longer and a bit more saggy than most of the magazine designs show. Twin lead is cheap enough to experiment with almost endlessly—or at least until the sunspots return.

If your needs fit the mechanics of this antenna, try one. If you love it, you will love even more for the savings. If you hate it, at least you won't be out much money, and the twinlead is reusable.

Some Larger 10-Meter Yagi Designs

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.

Occasionally, I am asked to recommend some larger Yagi designs that one might build for 10 meters. I can do little better than recommend the designs by Dean Straw, N6BV, that appear in the program, YA, which has been distributed with *The ARRL Antenna Book*. The next edition will carry a Windows update and upgrade of the program called YW. In past columns, we have noted other designs originating from YA. We have also featured various 2-element and 3-element Yagis of interest.

The present designs use 4, 5, and 6 elements. Each has been optimized for stable gain, front-to-back ratio, and impedance across the first MHz of the band. I have cross-checked each of them on other antenna modeling programs to confirm the numbers, and all appear to be very promising designs for the home builder.

The gain of a Yagi depends more on the boom length than on the raw number of elements. Therefore, each design will use a longer boom in conjunction

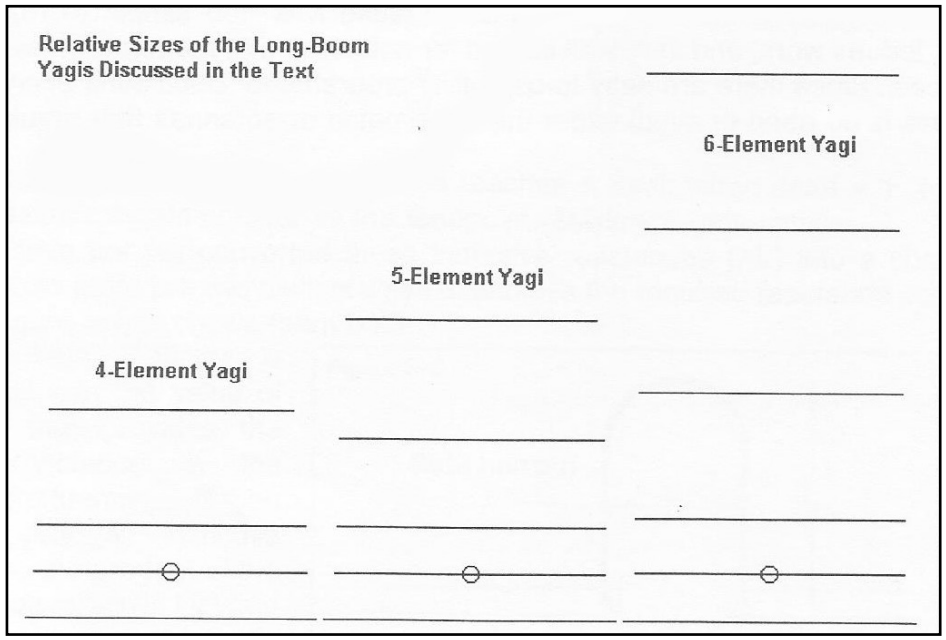

Figure 1. Relative Sizes of the Long-Boom Yagis

with the increasing number of elements to achieve its objectives, as shown in Figure 1. Merely adding more elements within the same boom length will rarely produce any significant additional gain.

The element listings use a combination of 5/8" (0.625) and ½" (0.5) diameter tubing. Only one side of the antenna, relative to the boom, is listed, with the other side being a mirror image. Both the outer segment length and the total half-element length is listed for convenience. The smaller diameter element sections should be at least 3" longer than the lengths listed for insertion into the larger diameter element sections. All dimensions will be in inches. The decimals in the tables correspond to 1/8" increments of length.

The element assemblies are considered medium duty for maximum winds just over 90 miles per hour. For structural details of large Yagi construction, consult one of more of the many handbooks on antenna building. These beams are not casual projects, since they represent a considerable outlay for materials and result in large structures. Their weight may require a larger rotator and other improvements to your tower. Even the smallest of them should not be mounted on something so light as a telescoping mast.

Table 1. 4-Element 14' Boom Yagi

Distance from Reflector	Length of 0.625"	Length of 0.500"	Total (1/2) Element Length
0.000	36.000	70.000	106.000
36.000	36.000	63.875	99.875
72.000	36.000	62.250	98.250
162.000	36.000	53.125	89.125

The mid-band free-space gain of this antenna is about 8.4 dBi, with an excellent (greater than 20 dB) front-to-back ratio.

Table 2. 5-Element 20' Boom Yagi

Distance from Reflector	Length of 0.625	Length of 0.500	Total (1/2) Element Length
0.000	36.000	71.375	107.375
36.000	36.000	63.375	99.375
72.000	36.000	62.750	98.750
140.000	36.000	61.500	97.500
234.000	36.000	56.375	92.375

The mid-band free-space gain of this antenna is about 9.7 dBi, with an excellent (greater than 20 dB) front-to-back ratio.

Table 3. 6-Element 36' Boom Yagi

Distance from Reflector	Length of 0.625	Length of 0.500	Total (1/2) Element Length
0.000	36.000	70.875	106.875
37.000	36.000	62.875	98.875
80.000	36.000	62.375	98.375
178.000	36.000	60.125	96.125
305.000	36.000	59.250	95.250
426.000	36.000	55.250	91.250

The mid-band free-space gain of this antenna is about 11.6 dBi, with an excellent (greater than 20 dB) front-to-back ratio.

Figure 2 provides free-space azimuth patterns for each design at mid-band for comparative purposes.

All of these antennas have feedpoint impedances that are designed for a beta or similar matching systems. The resistive part of the impedance is in the low-20s, with a comparable amount of capacitive reactance. You may lengthen the driven elements to resonance without adversely affecting antenna performance.

A resonant driven element of about 25 Ohms can be matched to a 50-Ohm coaxial cable with a quarter wavelength section of 35-Ohm coaxial cable. Such cable can be purchased for a $3.00 per foot. You may also fabricate a satisfactory line using parallel lengths of 75-Ohm cable with the braids and the center conductors each soldered together at each end.

The smallest of these monoband 10-meter beams will generally outperform the 10-meter section of all but the very largest tri-banders. The longest of the beams is a serious DX-hunting machine. To obtain the maximum performance from any of these beams, place then at least 1 wavelength above ground and preferably closer to 2 wavelengths.

Installing large beams at considerable heights above ground is not a casual process. First, there may be zoning and other legal restrictions or permissions to consider. Second, proper tower installation may cost many times more than the materials in the beam. Safety for yourself, your family, your property, and your neighbor's property are of paramount importance. So too is durability of the performance of the whole system, including tower, coax, rotator, guys, grounding system, and the antenna.

Before moving to large beams and complex tower installations, learn all that you can about every aspect of the task. If you have any doubts, consult professional tower installers for answers and for help. Do not violate or ignore applicable laws and ordinances. Do not settle for any installation that does not measure up to good engineering standards. And, for heaven's sake, do not rely on luck to keep your antenna in the air and lightning in someone else's yard.

As you can see, a big antenna – even for 10 meters – is only the beginning and not the end of a much larger enterprise. If you have all the other pieces in place, then one of the N6BV designs may be the answer to the antenna part of the puzzle. Other designs, some with feedpoint impedances in the 35 to 50 Ohm range are also available from various ham magazines. Collect lots of designs and ideas before you start cutting aluminum. The more design articles you read, the more you will learn about the art of building big beams.

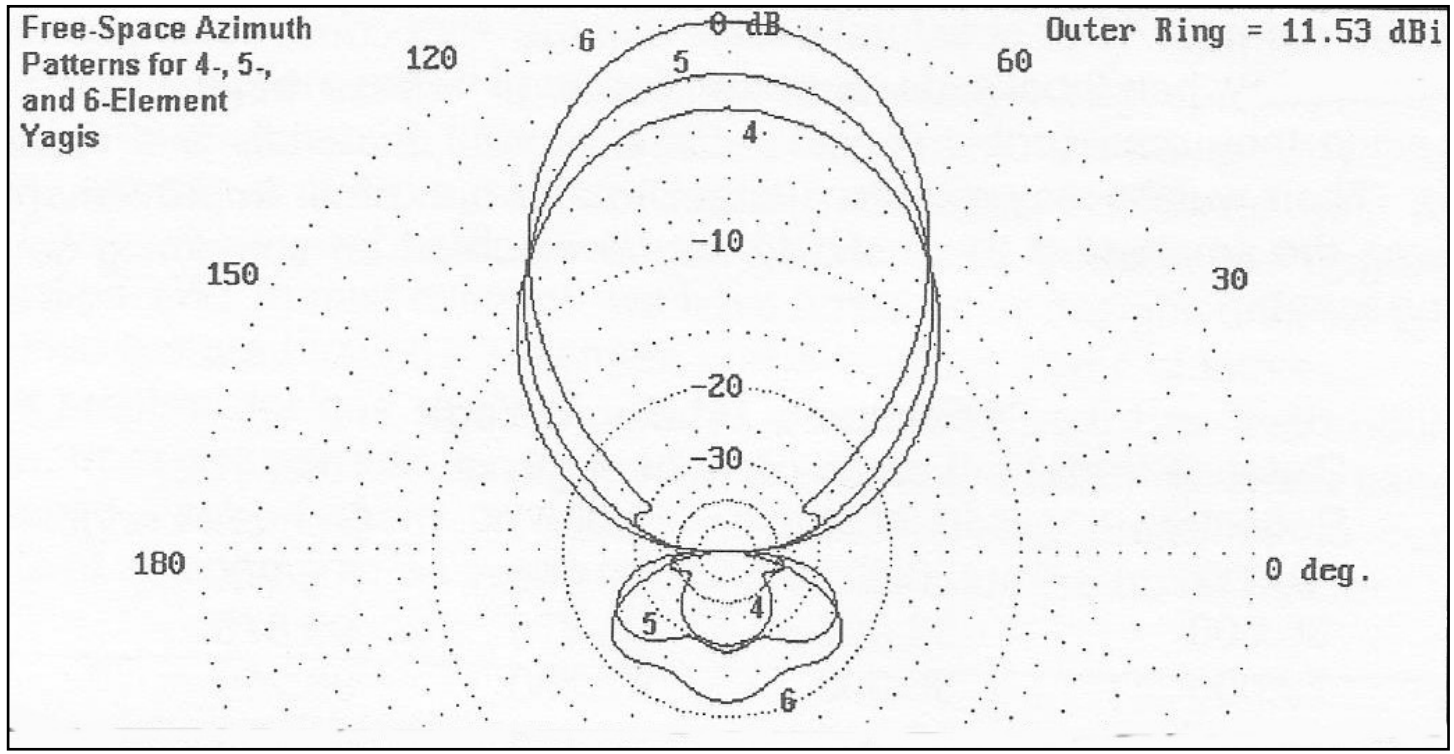

Figure 2. Free-Space Azimuth Patterns for 4-, 5-, and 6-element Yagis

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/handle (as received on the air), date of contact, and QTH (state/province/country). The contact form and membership application is provided on the page that follows.
4. You must remit dues for one or more year's full membership. Fee schedule and payment information can be found in Section 2 of the page that follows.

TYPES OF MEMBERSHIPS

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

Primary Membership

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

Family Membership

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

Life Membership

Life membership is available and may be paid in one lump sum or spread across two or three 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 and follow the links from 'membership' to 'renewals' and select the membership category.

DATA MANAGER SERVICES

Call/Name/Address Changes

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

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

Mail to:

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

SCHOLARSHIP DONATIONS

Donations to the 10-10 Scholarship Foundation are encouraged by our members to help fund three $2,000 10-10 Scholarships to be awarded. For donations of $25 or more you are eligible to receive a current year's lapel pin as a thank you gift. To pay by credit card, see the payment information on page ??. 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.
Weak Signal - held on the second full weekend in July - 0001 UTC Saturday 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.

5.2.4 ENTRY CLASSIFICATION

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

QRP: 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. CW/Digital/RTTY operations max 5 watts and Phone operations max 10 watts during the entire event.

LOW POWER: Same as QRP listed above except that output power for CW/Phone/Digital/RTTY operations is max 150 watts during the entire event.

HIGH POWER: Same as QRP listed above except that output power for CW/Phone/Digital/RTTY operations is greater than 150 watts during the 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. No matter your physical location, your QTH is the location of the transmitting antenna.

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 his/her score to that chapter. QSO Party chapter scores for the Sprint and Open Season may not be assigned.

TEN-TEN QSO PARTY RULES

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 to tentencontest@ten-ten.org. 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, than 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, LOW POWER, HIGH POWER, 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: 2022 is the 60th anniversary year of 10-10 International Net, Inc. Contact with members containing a “62” in their membership number (i.e., 72062, 69625,66254, 62126, 00627) 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 WEAK SIGNAL QSO PARTY (WSQP)

This event was added to help promote digital activity on the ten-meter band. The event in no way affects or modifies the policies for other scheduled Ten-Ten events. All weak signal modes for this event include: FT/JT/JS8/JS8CALL and any future weak signal mode. No repeater, cross-mode or cross-band contacts allowed.

FT4 (28.180)	FT8 (28.074)
JT65 (28.076)	JS8/JS8CALL (28.078)

Entry categories: QRP – Maximum 10 watts output.
Low Power – Maximum 150 watts output.

Exchange: 10-10 members should send call sign, name, 10-10# and QTH (ST/Prov/Country). Received exchange should include normal exchange for FT/JT/JS8/JS8CALL modes and for extra points name, QTH and 10-10#. Scoring will be 1 point for contacts without a 10-10 number and three (3) points for contacts with a valid 10-10# exchange. NO MULTIPLIERS! 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 SPECIAL EVENT

This event has been CANCELED.

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.

10-10 QSO PARTY COVER SHEET

QSO Party *(select one)*:

❑ WINTER PHONE ❑ SPRING CW ❑ SPRING DIGITAL ❑ 10-10 SPRINT
❑ SUMMER PHONE ❑ FALL CW ❑ FALL DIGITAL ❑ WEAK SIGNAL

Contest Exchange:

Callsign: _____ Name: _____ 10-10#: _____ QTH*: _____

** if operating FROM mobile, enter number of counties operated from in QTH field - counties must show in log*

Entry Information:

Name: _____

Mailing address: _____

City: _____ **Zip:** _____

State/Province/County: _____

Your e-mail address (*for contest questions only*): _____

Call Area (W0-W9) or ARRL DX Country you operated from: _____

Chapter Assignment, if any (*not valid in Sprint*): _____

Entry Type *(check one only)*:

❑ LOW POWER ❑ HIGH POWER ❑ QRP ❑ MOBILE
❑ CLUB (*if Club station, please list all operators below this line*)

Claimed Score:

Contacts WITH 10-10 number: _____ **X2 =** _____

Contact WITHOUT 10-10 number: _____ **X1 =** _____

Total Contacts: _____ **Total Pts:** _____

Submitting Logs:

MAILED ENTRIES: All submissions must contain this cover sheet (or reasonable facsimile), the log in UTC Date/Time order, and a dupe sheet in callsign order or in grid format (if more that 50 contacts).

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

EMAILED ENTRIES: All submissions can be in most formats and must additionally include all information from this cover sheet either in separate summary or as summary at head of log. Many contest programs do this for you. Dupe sheets are **NOT** required with an e-mail entry. **Q95** formats **ARE NOT** acceptable.

EMAIL to: tentencontest@ten-ten.org.