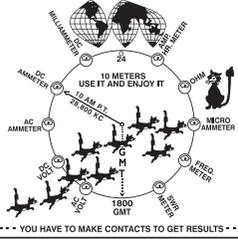


TEN-TEN INTERNATIONAL NET, INC.



TEN-TEN INTERNATIONAL NEWS

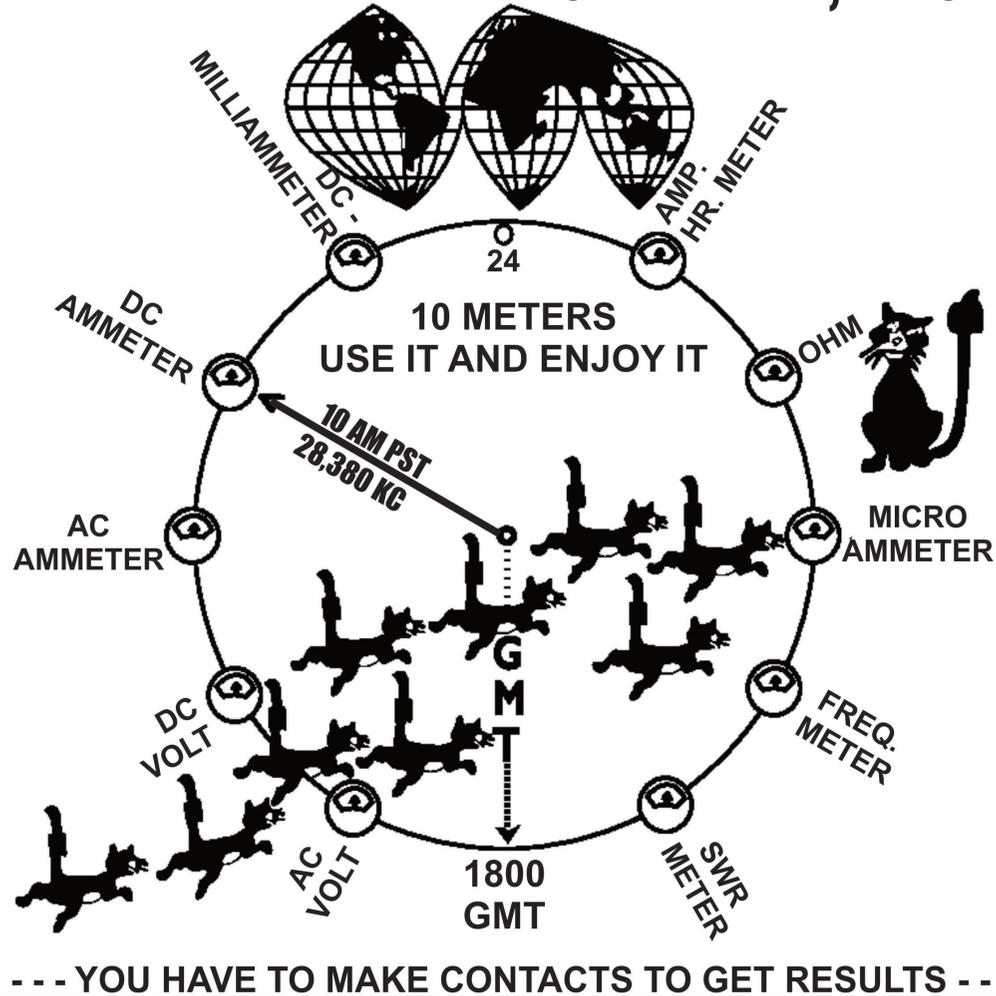


Member
AMATEUR RADIO
NEWS SERVICE

Volume 62 Issue 2

April 2024 (Spring)

TEN-TEN INTERNATIONAL NET, INC.



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.

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

News items should be sent to the Editor. Technical articles and information on all 10 meter activities or news are welcome and solicited. All copy submitted must be typed, 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 June 2024

PLEASE MAIL ALL ARTICLES AND PHOTOS TO:

EDITOR Ten-Ten News

E-mail: editor@ten-ten.org

10-10 CHAPTER ACTIVITY REPORTS: Should be sent to the Chapter Coordinator

ADDRESS CHANGES: All members should send address changes to the Data Manager

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

CONTENTS

[Net Officials..... 3](#)
[From the President..... 3-4](#)
[New Lifer Members..... 4](#)
[Chapter News..... 5](#)
[Ten-Ten Net Guide..... 6](#)
[The Amateur Code..... 6](#)
[DX News..... 7-9](#)
[10-10 Scholarship Foundation..... 9-10](#)
[10-Meter Beacons..... 10](#)
[10M Mobile with Cycle 25..... 10-11](#)
[QSO Parties..... 12-17](#)
[Net Report..... 18-19](#)
[Some Antenna Notes & Safety..... 19](#)
[Ten-Ten Awards/ Award Managers..... 20](#)
[Call for Elections..... 21](#)
[Electrions Time Line..... 22](#)
[Silent Keys..... 23-24](#)
[Meet the Volunteers..... 24](#)
[Short Elements and Loading..... 25-27](#)
[Membership Services and Information..... 28](#)
[QSO Party Rules..... 29-30](#)
[QSO Party Cover Sheet..... 31](#)

OFFICERS AND DIRECTORS

President

Dave Ruch, NF0J #19553 (2026)
 PO Box 1110, Elephant Butte, NM 87935
 (575) 495-9236 dave@nf0j.com

Past President

Mel Sojka, KD5DE #33513
 353 Atlantic Ave., Shreveport, LA 71150-2909
 (318) 286-2963 kd5de@ten-ten.org

Vice President/Secretary

Ronnie Hull, W5SUM, #02019 (2024)
 1855 Shady Lane Dr., Shreveport, LA 711118
 (318) 550-8269 w5sum@comcast.net

Treasurer

Keith Schlottman, KR7RK #63324
 6206 E. Pima St., Suite #2, Tucson, AZ 85712
 (520) 298-8488 keithschlottman@gmail.com

Directors

Stephen W Wagner, W7WHB #77836 (2024) - Daily Nets
 338 N Nevada Way, Gilbert, AZ 85298
 (480) 857-6518 w7whb@arrl.net

Larry Berger, WA2SUH #00407 (2024) - QSO Parties
 9 Nancy Blvd, Merrick, NY 01156-3119
 (516) 223-4611 wa2suh@aol.com

Mark Steele, KD2NOM #77569 (2024) - Publicity-
 1 Karen Court, Monroe Township, NJ 08831-4037
 (732) 213-0159 kd2nom@gmail.com

Marcus Lieberman, KM5EH #71103 (2026) - Awards
 2300 Hurley Dr. NW, Albuquerque, NM 87120-1013
 (505) 836-1724 buckml@lobo.net

George Davenport, KM4ODS #77504 (2026) - Publications
 201 Whitechapel Lane, Rockfish, NC 28376
 (910) 774-0444 km4ods@gmail.com

Chuck Dockery, N7UQ #72774 (2026) - Chapters
 112 S Rolling Meadows Dr. Wylie, TX 75098-5163
 (469) 829-5462 chuck@n7uq.com

General Counsel

Hugo Holland, KJ5SZ #77741
 10008 Bedlington Court, Shreveport, LA 71118
 No Phone dahugobrit@gmail.com

NET OFFICIALS

Chapter Coordinator

Chuck Dockery, N7UQ #72774 (2026) - Chapters
112 S Rolling Meadows Dr. Wylie, TX 75098-5163
(469) 829-5462 chuck@n7uq.com

Data Manager / Supplies

David Smith, K6RDK #65812
1349 Vernon Terrace, San Mateo CA 94402-3331
(650) 504-4962 membership@ten-ten.org

Editor 10-10 International News

Randy Mather, AJ7B #7675
9625 101st Ave NE
Arlington, WA 98223 editor@ten-ten.org

Historian

Phyllis Martin, K5PLH #77878
1855 Shady Lane Dr
Shreveport, LA 71118 Phillism06@gmail.com

Net Manager

Stephen W Wagner, W7WHB #77836
338 N Nevada Way, Gilbert, AZ 85298
(480) 857-6518 w7whb@arrl.net

QSO Party Manager/Certificate Manager

Dan Morris, KZ3T #41015
3162 Covington Way, Lenoir, NC 28645
(828) 728-5049 dbmorris315@gmail.com

IT Manager

Jeff Steinkamp, N7YG #65084
6765 E. Rosewood Cir., Tucson, AZ 85710
(520) 546-2290 n7yg@n7yg.com

Scholarship Manager

Larry Berger, WA2SUH #00407
9 Nancy Blvd., Merrick, NY 11566-3119
(516) 223-4611 wa2suh@aol.com

SK Manager/Social Media Manager

Mark Steele, KD2NOM #77596
1 Karen Court, Monroe Township, NJ 08831-4037
(732) 213-0159 kd2nom@gmail.com

Supplies Manager

Mel Sojka, KD5DE #33513
353 Atlantic Ave., Shreveport, LA 71150-2909
(318) 286-2963 kd5de@ten-ten.org

W6OI Station Trustee

Dave Ruch, NF0J #19553 (2026)
PO Box 1110, Elephant Butte, NM 87935
(575) 495-9236 dave@nf0j.com



From the President

David Ruch NF0J
#19553

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

In the last newsletter, I mentioned that I grew up in a military family. You have probably heard the term “military brat” to describe the children (dependents) of military families. Unless you were one too, you probably do not know what it was like growing up in a military family. If you are interested, read on.

In my last two years in high school, we were stationed at McGuire Air Force Base in New Jersey. There was a small detachment of Naval Air there (VR-3), and they were on loan to the Air Force to support mostly Viet Nam operations. The Navy fliers flew C-130 aircraft and typically each crew made two runs per month to Southeast Asia from the east coast of the United States. That’s a long haul in propeller driven aircraft.

While we never talked about it (not ever), the dangerous duty of the flight crews was always in the back of our minds. As kids (and yes, I was young once) we occupied ourselves with school, and during the summer the base offered many activities for us dependents. Sports like baseball and swimming were high on the activity list for me.

For the spouse of a flyer, it was very difficult. The constant loneliness and worry were extremely wearing. Some could tolerate it, but some turned to drinking or other unhealthy activities. Somehow, my family kept it together. I’ll forever be grateful for that.

All in all, my life as a military brat wasn’t that bad. We always had a place to live, and we always had food to eat. We sort of got used to the ever-present possibility that life could change at any moment. This brings me to one of those life altering moments that, when I think back, changed me forever.

I still love baseball. I love watching it, and I love playing it. My neighbor was a kid my age that I played catch with very often. (He was scouted by the Yankees, so he was a little better than me at it.) One day were out in my front yard tossing the ball around when a military staff car pulled up across the street and two officers got out. One was a chaplain. If you’ve ever watched the movie “We Were Soldiers” you probably know where I’m going with this.

We continued playing catch for a while, both of us knowing what was going on. We had seen this too many times before. About a half hour later, the two officers came out accompanied by a young mother and her two little boys. As they got in the car, we walked to the edge of the street and bowed our heads. We'd done this too many times before. We both lifted our heads slightly to see them off and that's when it happened. The oldest of the little boys (maybe 6 or 7 years old) was sitting by the window closest to us. He looked up at us, and with tears running down his cheeks waved goodbye, and they drove off. My friend and I both lost it. We had seen this scene many times before, but that little boy waving goodbye brought it all home.

Now back to ham radio.

Ten-Ten International Net will be represented at the Dayton Hamvention (May 17th-19th, 2024) by Keith, KR7RK, Chuck, N7UQ, and a volunteer this year. They'll be answering questions, handing out informational brochures, taking renewals, and selling pins to benefit the Scholarship Foundation. Please stop by and say hello.

There are two Ten-Ten QSO parties coming up this Spring. First, the Spring Digital QSO Party occurs on April 27th-28th. Next, the Spring CW QSO Party happens on May 4th-5th. Get on the air and make a few 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.

Don't forget that 2024 is an election year for Vice-President and three of our six directors. Mel, KD5DE, was gracious enough to accept the role of Nominating Committee Chair.

Best wishes for a healthy and safe 2024! CU on the air!

73 Dave NFØJ #19553

TAKE NOTE

This year we vote on directors for the board and a vice president. If you have a desire to fill one of these openings, and you qualify (see [page 21](#)), contact Mel Sojka at kd5de@nwla.com or kd5de@ten-ten.org.

NEW LIFE MEMBERS

08904	K7HYM	Richard S (Joe) Pinner III	WA
14231	WB5UZH	Jim S Smith	AZ
15376	W8DM	Donald J Martin	MS
18858	AA5HK	Ronald R Franklin	TX
23041	N6BWJ	Craig C Clifton	CA
45793	KJ6KE	Philip J Albanese	CA
48092	NI3V	Marc A Mugmon	MD
63990	KD1UA	John A Hawkins Jr	NH
68773	AD6AA	Michael G Germino	CA
78236	N4NJJ	William P Freeman	NV
78240	AF1E	Joseph Spears	NC
78270	KG5YEL	Emmett Spikes	TX
78281	WØFYX	Timothy T Garman	KS
78290	KB2AS	Karl G Sutherland	FL
78308	N9CXC	Carroll J Janisch II	WI



Were you first licensed 25 years ago and licensed today?

Then you should join the Quarter Century Wireless Association, Inc.

To Join or Renew, Visit:

<http://www.qcwa.org/join-renew.php>

For more information, please contact:

om@qcwa.org



Chapter Coordinator

Chuck Dockery, N7UQ
(#72774)

GENERAL NEWS

Great news, we have a new chapter, YEAH! The Mississippi 10-meter Society. The chapter head of this new chapter is Juarez "Rez" Johnson Jr. Their net will be on Wednesdays at 10:00 A.M. Local and 16:00 Zulu on 28.410 MHz. 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.

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 or copies of documents.

It is also recommended that the individual chapters do the same for their records. Jeff has and can give access to chapter officials for these FTP sites for storage of chapter documents. This is becoming more important as we now have folks asking about reviving old chapters that have gone away with no paperwork to pass on to someone who would like to take over. If you cannot scan documents for this purpose, please contact myself or Jeff for assistance in getting these important documents archived.

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): Down Under (last report 12/2021), Milwaukee (last report 07/2022) Hanse (Last report 09/06/2022). 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: Go to 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: Still looking and hoping for someone to take on this chapter to assist or possibly take this chapter over.

Branding Iron: This 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.

Major League Baseball: I have removed this chapter and placed it as QRT. We thought we may get some information from Bob's, unfortunately that did not happen.

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.

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 April 1, 2024

DAY	ZSUM	ZWIN	Chapter Name	Location	Freq	DAY	ZSUM	ZWIN	Chapter Name	Location	Freq
SUN	1300	1400	Arlington	Arlington, VA	29200	WED	0100	0200	Houston SHOT	Houston, TX	28488
SUN	1400	1500	Neanderthal	Euskirchen, DL	28355	WED	0200	0300	10-Bar-X	El Paso, TX	28445
SUN	1900	2000	Oregon Trail	Dallas, OR	28330	WED	1400	1500	EU DX/Branding Iron/ Hanse	Bergkamen, DL	28355
SUN	1930	1930	North Georgia	Atlanta, GA	28415	WED	1600	1600	Mississippi 10 Meter Society	Palahatchie, MS	28410
MON	0100	0100	Arizona Desert	Phoenix, AZ	28445	WED	1930	1930	Route-66	Apopka, FL	28370
MON	0100	0100	Lonestar	Arlington, TX	28460	THU	0100	0100	Cow Town	Arlington, TX	28460
MON	0100	0200	Milwaukee	Milwaukee, WI	28365	THU	0100	0200	Gateway	St. Louis, MO	28650
MON	0130	0230	Bauxite	Benton, AR	28470	THU	0100	0200	Milwaukee	Milwaukee, WI	28365
MON	1630	1730	Chief Seattle	Seattle, WA	28430	THU	0230	0230	Windfarms	Livermore, Ca	28485
TUE	0001	0100	Ft McHenry/Cornerstone/ Yodar Kritch	Arbutus, MD	28370	THU	0230	0330	Up the Crick	Eugene, OR	28450
TUE	0100	0200	CO Centennial/CO Frontier Gang	Lakewood, CO	28340	THU	1930	1930	Speedway	Rainer, OR	28350
TUE	0100	0200	City of Lights	Aurora, IL	28150 CW	FRI	0001	0100	Ft McHenry/Cornerstone/ Yodar Kritch	Arbutus, MD	28370
TUE	0130	0230	Bauxite	Benton, AR	28470	FRI	0001	0100	Possum Trot	Raeford, NC	28345
TUE	0130	0230	City of Lights	Aurora, IL	28720	FRI	0001	0100	Steamboat Plus	Shreveport, LA	28430
TUE	0300	0400	Bay Area	Hayward, CA	28475	FRI	0300	0400	Chief Seattle	Seattle, WA	28430
TUE	0430	0430	Aloha	Hilo, HA	28490	FRI	2230	2130	Down Under (Summer in NZ is winter in US)	Auckland, ZL	28530
TUE	1500	1600	New Mexico Mud Ducks	Albuquerque, NM	28835	SAT	1510	1610	Louisiana Pelican	Baton Rouge, LA	28450
WED	0001	0100	Castle Craig	Meriden, CT	28375	SAT	1730	1730	Tango	Buenos Aires, LU	28650
WED	0100	0200	Cincinnati Area Ten Tuners	Cincinnati, OH	28430						

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 Spring season of the DX News. The Sun is still producing Sun spots that keep the Solar flux high and maybe a maximum high for Cycle 25 may occur in 2024 or 2025! DX Propagation into Europe and Asia this past quarter has been better which may have given us a record Winter QSO Party event the first weekend of February. I counted 100+ logs received by Dan KZ3T #41015 who has posted the results on the 10-10 website where I came in 9th place.

I write about DX'ers that have helped us over the years to put 10-10 into our logs. Here is a recent member who is now SK. He was an outstanding DX op, a first class DX organizer and a big help to our hobby for 65 years as a ham:

He was Bob Allphin K4UEE #75256.

Bob and his DXpedition members have given out several new 10-10 countries. He has organized rare DXpeditions that have gone to the most wanted places on our planet.

Bob passed on February 10, 2024 at the age of 79.

Bob grew up in a military family with his father going to foreign assignments and he got his ham license at the age of 14. Teenagers have a way of being good CW ops and that was his preferred mode. He retired early in life and his passion for DXpedition became his new hobby. He has visited 131 DXCC entities and operated from 85, plus a few world records and WRTC events to his credit. RIP Bob.

<http://hamgallery.com/W1JR/>The big ARRL 10 Meter contest last December had a good showing with several big contest stations making over 3000 contacts! My station only had a few hundred with my vertical, but I did log several 10-10 friends that weekend.

Update on the replacement of the Win1010 program.

Jeff N7YG #65084, started re-writing the program several months ago and there are a few Beta testers helping. I was a Beta tester for Jim K4HAV/SK. So, I am helping with Beta testing on the replacement program. My 10-10 log contains 44 years of history, so I am using that data to help debug the

new program. My log has over 17000 members, a lot of DX countries, OM/XYL teams, VP numbers, counties and prefixes. I still have a few awards that I did not apply for in the old program, so I am hoping to make progress with a few new awards. I expect testing will take several more weeks to get the final version ready for release in 2024.

OK its time now to talk DX. The winter months have been better for Ten meter skip and I have listed two rare 10-10 sites below. The CQWW SSB contest had a good start to the fall DX season with over 100 countries worked on Ten by friends in Texas. When you work a DXCC in the Ten Meter contest in 48 hours, you have good antennas and skip was open for you to log over one hundred countries!

Many USA east coast stations have been talking into Europe for several hours each day this past Winter. The Winter QSO Party results are posted in this issue and the 10-10 Website. The ARRL Ten Meter contest gave me over 200 contacts with a dozen new 10-10 members in my log!

I hope some of you worked a new 10-10 country in Africa this past winter as Mike V51MA #64688 has been active many times this past winter on the 10-10 Daily net.

One of our members Joe W1JR #17912 has been writing a general summary of yearly DX activity for the past 21 years. His DX reports at: <http://hamgallery.com/W1JR/>.

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

Countries Award: There were no Countries Award applications submitted this past quarter. So I worked on my 10-10 log data and found more OM/XYL teams for another award for 275 Teams #1. Thanks Marcus KM5EH.

GENERAL 10-10 DX REPORTED IN THE PAST QUARTER:

4L Georgia. Alex K6VHF #77458 was in Georgia in February as 4L/K6VHG for a week. Alex was there in November 2022 for a longer stay and operated on Ten.

4U United Nations. The UN station 4U1UN #55555, in the New York, was heard in Dec/Jan/Feb on CW and in Oct/Nov 2023 on SSB. The beacon is on 28200 MHZ.

5A Libya. Abubaker 5A1A #69222 is using a new call 5A1AL in Libya, this callsign is not a 10-10 member and does not use LoTW! He was on CW in February.

6Y Jamaica. Rob VE4GV #8852 was using VE4GV/6Y from February 10-24th.

A3 Tonga. Al **K7AR** #2736 was on Tonga for a CW contest with a friend. He used call A31DL until Feb 27th.

CE0Z Juan Fernandez Isl. A DXpedition to the island was from February 10-23rd using CB0ZA by seven ops. Members: Ramon **NP4G** #36218 and Hal **W8HC** #12502.

JuanF Island is a rare 10-10 DX location!

DU Philippines. Tim **N4GN** has a new DX call 4G1G and he may build a new station in DU later this year.

ET Ethiopia. Ken **K4ZW** #18573 was back at the club station ET3AA no 10-10, helping club members operate in December. Ken and two friends operated from January 11- 20th. Ken likes CW so good luck for a new one.

FJ St. Barthelemy. Phil **K2LIO** #7746 now lives on St. Bart using call FJ4WEB. He returns to New York for visits when he is not on St. Barthelemy. Good luck.

H40 Temotu. A DX group of 8 ops were on Temotu from February 22 to March 7, 2024 using call H40WA. The only member was Paul **N6PSE** #68859.

<https://Swains2023.com>. **K US.** The Battleship Iowa **N16BB** #77115 was on in February when I worked the ship berthed in San Pedro CA.

OA Peru. Ed **OA4SS** #10802 was back on Ten on CW with his rig an dipole on 28017 MHz in February.

P4 Aruba. John **W2GD** #14109 was back in Aruba for another visit operating as P44W in February.

PJ7 St. Maarten. Ed **N2HX** #25435 was on for the ARRL Ten meter contest using call PJ7PL. He was on St. Kitts with a new DX call V49R last October.

Gary **KC9EE** #16977 started operating on February 21st and will leave on March 6th. Gary likes CW & SSB contest.

TF Iceland. Chuck **KC4KQE** #64759 was in Iceland from February 17-26th on SSB and FT8. Call TF/KC4KQE.

TX Clipperton Island. A big DXpedition to Clipperton in January used call **TX5S**. Members: Gene **K5GW** #15119, Paul **N6PSE** #68859 and Nodir **EY8MM** #52767.

V2 Antigua. Chuck **KG9N** #17038 used call V26CV from Antigua mostly CW mode until February 20th.

V3 Belize. Uwe **DL8UD** #70315, was expected to be active until March 6th as V31KO and V3O in contest.

V4 St. Kitts & Nevis. Jeff **K1ZN** #60508 used call V44/K1ZN from February 25 to March 4th.

V5 Namibia. Mike **V51MA** #64688, we 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 from January 11th to April 11th as VP2MDX.

VP6 Pitcairn Island. Miralda **VP6MW** #50434, is back on the air after fixing a problem at her station. She likes FT4 on 28180 or SSB 28555 MHz recently.

VP9 Bermuda. Darrell **AB2E** #9753 was mostly on CW and FT8 as AB2E/VP9 and VP9I for contest in February.

UPCOMING DX & NEW 10-10 ACTIVITY:

7P Lesotho. A big group of DX ops are going to Lesotho Africa from March 20-29th. The only 10-10 members are Thos **EI2JD** #73610 and Declan **EI9HQ** #71019 using callsign 7P8EI. They hope to setup eight stations for CW, SSB & Digi. **Don't miss this rare 10-10 location!**

CE0Y Easter Isl. Jorge **CE0YHF** #39382, maybe on Easter Island while helping at a hospital.

CY9C St.Paul Isl. A DXpedition for August 26th to Sept 25th may take place by ops that were on Sable Isl recently. More info will be coming soon. Good luck for a new one.

FO Austral Isl. Haru **JA1XGI** #55571 will be using call TX5G from March 25 to April 3, 2024 on Austral Island.

PJ2 Curacao. Andreas **DK5ON** #54260 will be on the island from March 11-27th as PJ2/DK5ON on all bands CW, SSB and Digi. LoTW.

VP9 Bermuda. Les **N1SV** #71546 will be on Bermuda for the ARRL DX SSB contest the first weekend of March using call VP9I and VP9/N1SV outside the contest.

YJ Vanuatu. A group of four ops will activate YJ0VK from March 29th to April 11. The only 10-10 member is Matt **K0BBC** #76064. The DX ops are from Australia.

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

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 various ways:

<https://Haminfo.tetranz.com/map>.

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

NEW: WM7D Solar Values:

<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 132-212 this Spring. The spring equinox is March 21st it's the day of the year that has the equal day/night times in both hemispheres. The Sun is over the equator giving an equal amounts of sunshine to both hemispheres. Remember, Cycle 25 started on November 17, 2019 almost five years ago but six more to go! This quarter saw a lot of sunspots visible with M and X class flares that increased the solar flux. Sunspots are found by looking at the Sun and the flux is measured at 2.8 GHz.

The 2023 monthly **max** solar flux: Jan 234, Feb 215, Mar 188, April 176, May 180, June 180, July 179, Aug 176, Sept 176, Oct 166, Nov 194 and Dec 195.

Average 188.

The 2023 monthly **min** solar flux: Jan 136, Feb 134, Mar 129, April 125, May 134, June 144, July 154, Aug 139, Sept 131, Oct 119, Nov 118 and Dec 126. Average 132.

On March 1st, the solar flux was 164, the A index was 4 and K index was 2. There have been more sunspots on the Sun over the past three years with increased solar flux up 25-60 points. This cycle 25 hit a high value of 208 on February 12th. The average flux for the past 6 months was 154.8. The previous solar peaks were in 2014, 2001, 1989 and 1979. The USAF forecast for March 1st to April 14th has a range of 155-180 with avg flux 169, which is up 19 points from the Dec 2023 quarter forecast.

My Prediction: Over the next four months, the best conditions on Ten could be: March 29-April 5th; April 29-31st, May 23-26th & June 19-23rd. For the USA, expect a 50% 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 and if it's closed for SSB, use FT8 on 28074 for a Q.

New DX members that joined in December to February 2024: Lawrence

VA7LTX #78237, Henry VE3GRX #78251, Jim M0HDX #78263 & Denise VE7QYR #78294 were the last calls issued. Rick **KG5CYA #78305** was the last member in February and about 125 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 130th of DXing reports for the past 32 years.

DX news to: Mike Davidson, 26274 Whispering Pines Ave, Denham Springs LA 70726 USA Email: N5MT@aol.com.

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 last July, 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. This quarter an employer match was received from Taras Sochan, K2ERD, #74082. 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 our website or send your check to me or the Data Manager. Our addresses can be found on [Page 28](#).

The members listed below became 10-10 Scholarship Foundation Supporters during the months of December, January and February and we appreciate their support.

Platinum (\$1000 or more)

None

Gold (\$500 to \$999)

*K2ERD Taras Sochan..... 74082

Silver (\$100 to \$499)

N7WLC	Michael Bass	63782
-------------	--------------------	-------

Bronze (Up to \$99)

NU1B	Stephen Claar	28974
NA3H	Aggie Reynolds	30502
W1AS	Alan Clair	73131
W1YSM	Edward Snyder	78142
K6KRG	Daryl Baird	78302

*Including employer match

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

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>

10M MOBILE WITH CYCLE 25

The last time I went 10M mobile was back in 1982, with my Midland CB, which I had converted to 10M. This was done so I might have some fun on my daily commutes to college. And indeed, it was fun with a 98" SS whip attached to a real steel bumper of my 1975 AMC Gremlin. Never once was that setup visited by Murphy.

Leaving that Sunspot Cycle 21 era, I now fast forward to cycle 25, and the improving conditions once again on 10M, and I decided it was time to re-establish 10M SSB operations from the mobile SUV. I decided I'd rather monitor, or even talk to hams at some distance vs. the locals on the VHF and UHF repeaters while the sunspot count stays high this cycle.

The first order of business was deciding on a suitable radio for mobile, and in the end my selection was a Radioddity QT60. This radio did all modes except CW, but I've never desired to operate mobile CW in my busy metropolitan area. The 60 in the radios' name matches the maximum power level of 60W. I liked the FM repeater capabilities, and the fact the radio could be programmed from a computer.

As in 1982, I would arrange for the new 10M mobile setup to target the SSB section of the 10M spectrum, as I was going to be using a shortened CB antenna. The antenna I used was going to attach to a fender mounted NMO mount that had been in use for a UHF DMR radio. As I discovered with that UHF setup, I could only clear my garage door if the antenna was 29" or less.

I already had coax runs to the fender NMO mount, and I had power runs established with the hookup of the prior DMR mobile radio. Even external speakers were mounted, and ready to plug into 1/8" speaker jack of QT60, although the internal speaker is plenty loud. That left the antenna as my remaining investment beyond the Radioddity QT-60.

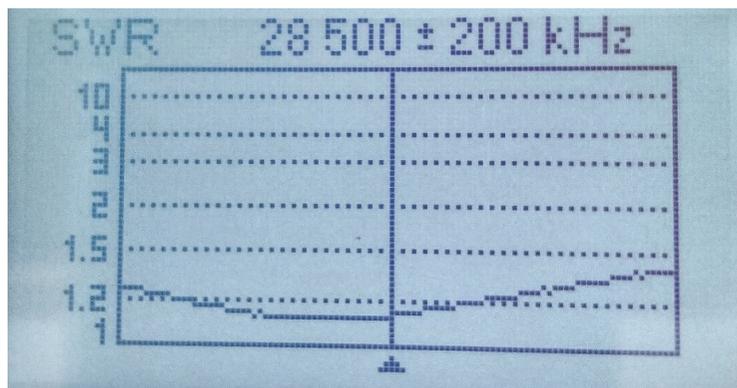
After searching on-line for an antenna that met my height requirements, I ended up purchasing the RoadPro RP-550. There are other 2' long offerings but I started with RP-550 as I liked the slim look, and a couple reviews conveyed it was tunable into the 10M band. There are two metal rings at the base which are a part of tuning the resonance of the antenna for good SWR. The rings can move the resonance frequency about 400Khz.

The mount on this antenna was 3/8"X24 screw in, and my existing mount was NMO, so I also found need of an NMO to 3/8" adapter sold by Tram. Once the adapter and antenna were mounted on the SUV NMO mount, I took the supplied hex wrench and removed the whip. With the antenna analyzer hooked up to the other end of coax, and heavy steel wire cutters, I removed 1/2" sections of the bottom whip each and every time, then stuck it back in and re-measured. In the end, I had to shorten my whip 3-7/16". [Caution: Do not just buy this antenna, and shorten this total amount, as your mount may be different, the

location on your vehicle may be different, and your coax run could all alter the impedance and resonance point. Go slow, and incrementally.]

With the antenna whip trimmed close to resonance, I then shifted to adjusting the two metal rings that move up and down the base, and do the fine tuning of SWR for 28.300 – 28.700 Mhz. After quickly attaining this match with the rings, I applied a 2" piece of heat-shrink tubing over the base and rings.

Following is a picture of the 10M mobile whip mounted with the UHF/VHF just visible on the far fender with the measured SWR readings.



At this juncture, I'm left with fine-tuning the programming of the QT60 that assists in my 10m mobile operation. I tend to leverage the SCAN function within a selected band, as well as turning off some beeps, echo, WX radio, and other features not desired on my radio. I can monitor both AM, and FM 10M signals with the radio, but the antenna SWR is not suitable for transmitting up that high in the band. If I had wanted 10M FM operation only, I believe the trimming exercise would have continued, only having to shift to the top of the whip, and continuing incremental cutting and measuring with the antenna analyzer. Yet, with the reasonable price of these whips, I may just buy another and tune it specifically for the FM section of the band. For now, I hope to work many of you as I return to 10M mobile.

Mark Gustoff WO7T #37055

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.





QSO Parties

Dan Morris, KZ3T
(#41015)

Meet the Volunteers

Jan 1 - Dec 31 2023

CALL	10-10#	CTX
1. KZ3T	41015	15
2. N1API	25468	12
3. N5MT	24949	6

61st Anniversary Results

Jan 1 - Dec 31 2023

TOP TEN

CALL	10-10#	CTX
1. N5MT	24949	12
2. N1API	25468	6
3. KZ3T	41015	4

2024 Winter Phone QSO Party

February 3-4

TOP TEN

CALL	10-10#	CTX W	CTX WO	TOTAL
1. N5XZ	4530	276	700	1252
2. NC0B	74875	124	254	502
3. KK6WCW	78247	156	150	462
4. KE6GFI	72986	129	200	458
5. WB7UOF	29034	152	135	439
6. KB5UNX	64337	140	143	423

TOP TEN (Cont.)

CALL	10-10#	CTX W	CTX WO	TOTAL
7. K8DEL	2978	100	169	369
8. KF5KWO	73879	85	94	264
9. N5MT	24949	70	93	233
10. WA2CNV	65510	74	78	226

CALL AREA ORDER

CALL AREA 0

CALL	10-10#	CTX W	CTX WO	TOTAL
NC0B	74875	124	254	502
N7WY	9565	56	52	164
KB0ARZ	48754	23	43	89
KA0HZZ	31562	21	35	77
KN0VA	77592	17	27	61
W0RTV	13962	18	9	45
KD0JLE	77996	16	10	42
K0GOB	69079	5	0	10

CALL AREA 1

CALL	10-10#	CTX W	CTX WO	TOTAL
N1API	25468	76	61	213
N1ROZ	78255	36	20	92
N1ZN	73599	33	16	82
N1BRL	77655	11	1	23
AI1G	77223	7	1	15
N1RLR	76619	4	0	8

CALL AREA 2

CALL	10-10#	CTX W	CTX WO	TOTAL
WA2CNV	65510	74	78	226
WA2SUH	407	39	9	87
N2LDV	59445	30	20	80
W2VTV	71275	16	5	37
N2LEC	58183	14	2	30

CALL AREA 2 (Cont.)

CALL	10-10#	CTX W	CTX WO	TOTAL
AC2ZZ	78198	11	3	25
KA2YDW	41937	9	3	21
WA3AFS	5662	8	0	16
KB2JES	78227	6	1	13

CALL AREA 3

CALL	10-10#	CTX W	CTX WO	TOTAL
K3TC	33876	56	103	215
K3BQ	53524	17	7	41
WA3PZO	7891	8	3	19
N3DUE	41066	5	0	10
KA3UIH	55744	4	1	9
WA3JXW	4377	3	1	7

CALL AREA 4

CALL	10-10#	CTX W	CTX WO	TOTAL
KM4ODS	77504	44	126	214
N1GNF	52418	20	46	86
KZ3T	41015	30	18	78
KO4PK	60883	25	24	74
K4BBH	77937	24	22	70
NC4GK	77965	15	10	40
WO4ROG	77815	5	30	40
KQ4FNO	78272	11	8	30
AK4YS	75328	12	4	28
KM4AEM	77309	8	10	26
KK4AMR	76031	5	6	16
N2YF	77843	6	2	14
KM4VI	51453	6	0	12
KA5VZG	46596	3	1	7
WA4JA	72743	1	3	5

CALL AREA 5

CALL	10-10#	CTX W	CTX WO	TOTAL
N5XZ	4530	276	700	1252
KB5UNX	64337	140	143	423
KF5KWO	73879	85	94	264
N5MT	24949	70	93	233
KD5ILA	77652	39	41	119
K5BOU	77940	37	37	111
N5KF	8798	38	32	108
KD5DE	33513	39	23	101
W5KJW	78249	35	20	90
N5VAV	59692	29	22	80
W5GUZ	69508	23	34	80
KG5ZMQ	77628	27	23	77
KI5KOI	77853	20	28	68
WA5RR	42167	23	5	51
N5EKO	77892	18	4	40
W5HRP	78218	10	14	34
NF0J	19553	15	0	30
W5TKZ	76490	14	0	28
W5SUM	2019	11	3	25
N5PTA	77891	7	6	20
KM5FF	50356	7	4	18
KI6KGC	74893	5	1	11
K5PLH	77878	5	0	10
AA5AH	78106	3	2	8
KM5EH	71103	3	2	8

CALL AREA 6

CALL	10-10#	CTX W	CTX WO	TOTAL
KK6WCW	78247	156	150	462
K6JBH	78101	35	19	89
N6GP	21149	34	10	78

CALL AREA 6 (Cont.)

CALL	10-10#	CTX W	CTX WO	TOTAL
N7WLC	63782	24	5	53
NN6U	78104	9	1	19
KA6ZTO	57208	7	0	14
WZ6ZZ	78093	3	0	6

CALL AREA 7

CALL	10-10#	CTX W	CTX WO	TOTAL
KE6GFI	72986	129	200	458
WB7UOF	29034	152	135	439
N7AME	27859	47	31	125
N7QOZ	62599	43	35	121
W6AGZ	78135	49	16	114
AG7QH	77887	45	21	111
K7CWS	50288	24	18	66
KA7RRA	74459	27	9	63
AJ7B	7675	19	1	39
W0FLZ	48658	13	11	37
AI7OZ	78111	16	0	32
WA7SKG	77548	13	1	27

CALL AREA 8

CALL	10-10#	CTX W	CTX WO	TOTAL
K8DEL	2978	100	169	369
KD8LU	38196	24	28	76
KE8WYY	78205	15	25	55
KF8UZ	63621	13	0	26
KI8DP	70421	9	2	20
KE8TZD	78144	4	0	8
NJ8J	77827	1	0	2

CALL AREA 9

CALL	10-10#	CTX W	CTX WO	TOTAL
NA9A	31121	40	31	111

CALL AREA 9 (Cont.)

CALL	10-10#	CTX W	CTX WO	TOTAL
KC9TQU	77157	20	12	52
WA9LJK	70789	14	14	42
KC9EOQ	74609	9	4	22
NK9Y	37014	5	1	11

QRP

CALL	10-10#	CTX W	CTX WO	TOTAL
NK9Y	37014	5	1	11

ARGENTINA

CALL	10-10#	CTX W	CTX WO	TOTAL
LU1BJW	39329	17	26	60

CANADA

CALL	10-10#	CTX W	CTX WO	TOTAL
VE9CZ	5750	28	30	86

GERMANY

CALL	10-10#	CTX W	CTX WO	TOTAL
DK5DQ	50473	65	67	197
DF3TE	69610	12	0	24
DH1PAL	69212	12	0	24

NAMIBIA

CALL	10-10#	CTX W	CTX WO	TOTAL
V51MA	64688	44	66	154

LOW POWER

CALL	10-10#	CTX W	CTX WO	TOTAL
KK6WCW	78247	156	150	462
WB7UOF	29034	152	135	439
KB5UNX	64337	140	143	423
KF5KWO	73879	85	94	264
WA2CNV	65510	74	78	226
K3TC	33876	56	103	215
KM4ODS	77504	44	126	214

LOW POWER (Cont.)

CALL	10-10#	CTX W	CTX WO	TOTAL
N1API	25468	76	61	213
V51MA	64688	44	66	154
N7AME	27859	47	31	125
N7QOZ	62599	43	35	121
KD5ILA	77652	39	41	119
AG7QH	77887	45	21	111
K5BOU	77940	37	37	111
N5KF	8798	38	32	108
KD5DE	33513	39	23	101
N1ROZ	78255	36	20	92
W5KJW	78249	35	20	90
K6JBH	78101	35	19	89
KB0ARZ	48754	23	43	89
WA2SUH	407	39	9	87
N1GNF	52418	20	46	86
VE9CZ	5750	28	30	86
N1ZN	73599	33	16	82
N2LDV	59445	30	20	80
N5VAV	59692	29	22	80
W5GUZ	69508	23	34	80
KZ3T	41015	30	18	78
N6GP	21149	34	10	78
KA0HZP	31562	21	35	77
KG5ZMQ	77628	27	23	77
KD8LU	38196	24	28	76
KO4PK	60883	25	24	74
K4BBH	77937	24	22	70
KI5KOI	77853	20	28	68
KN0VA	77592	17	27	61
LU1BJW	39329	17	26	60

LOW POWER (Cont.)

CALL	10-10#	CTX W	CTX WO	TOTAL
KE8WYY	78205	15	25	55
N7WLC	63782	24	5	53
KC9TQU	77157	20	12	52
WA5RR	42167	23	5	51
W0RTV	13962	18	9	45
WA9LJK	70789	14	14	42
K3BQ	53524	17	7	41
NC4GK	77965	15	10	40
WO4ROG	77815	5	30	40
AJ7B	7675	19	1	39
W0FLZ	48658	13	11	37
W2VTV	71275	16	5	37
W5HRP	78218	10	14	34
AI7OZ	78111	16	0	32
KQ4FNO	78272	11	8	30
N2LEC	58183	14	2	30
AK4YS	75328	12	4	28
WA7SKG	77548	13	1	27
KF8UZ	63621	13	0	26
KM4AEM	77309	8	10	26
AC2ZZ	78198	11	3	25
W5SUM	2019	11	3	25
DF3TE	69610	12	0	24
DH1PAL	69212	12	0	24
N1BRL	77655	11	1	23
KA2YDW	41937	9	3	21
KI8DP	70421	9	2	20
N5PTA	77891	7	6	20
NN6U	78104	9	1	19
WA3PZO	7891	8	3	19

LOW POWER (Cont.)

CALL	10-10#	CTX W	CTX WO	TOTAL
KM5FF	50356	7	4	18
KK4AMR	76031	5	6	16
KA6ZTO	57208	7	0	14
N2YF	77843	6	2	14
KB2JES	78227	6	1	13
KM4VI	51453	6	0	12
KI6KGC	74893	5	1	11
K0GOB	69079	5	0	10
K5PLH	77878	5	0	10
KA3UIH	55744	4	1	9
AA5AH	78106	3	2	8
KE8TZD	78144	4	0	8
N1RLR	76619	4	0	8
KA5VZG	46596	3	1	7
WZ6ZZ	78093	3	0	6
WA4JA	72743	1	3	5
NJ8J	77827	1	0	2

HIGH POWER

CALL	10-10#	CTX W	CTX WO	TOTAL
N5XZ	4530	276	700	1252
NC0B	74875	124	254	502
KE6GFI	72986	129	200	458
K8DEL	2978	100	169	369
N5MT	24949	70	93	233
DK5DQ	50473	65	67	197
N7WY	9565	56	52	164
W6AGZ	78135	49	16	114
NA9A	31121	40	31	111
K7CWS	50288	24	18	66
KA7RRA	74459	27	9	63
KD0JLE	77996	16	10	42

HIGH PORER (Cont.)

CALL	10-10#	CTX W	CTX WO	TOTAL
N5EKO	77892	18	4	40
NF0J	19553	15	0	30
W5TKZ	76490	14	0	28
KC9EOQ	74609	9	4	22
WA3AFS	5662	8	0	16
AI1G	77223	7	1	15
N3DUE	41066	5	0	10
KM5EH	71103	3	2	8
WA3JXW	4377	3	1	7

CHAPTER ENTRIES

CHAPTER	LOGS	PTS
HOUSTON SHOT	3	1718
CATT	2	871
POSSUM TROT	9	728
CASTLE CRAIG	3	508
LONESTAR	2	503
STEAMBOAT	7	394
GATEWAY	4	184
CITY OF LIGHTS	2	133
NEANDERTHAL	5	120
ARIZONA DESERT	1	66
TANGO	1	60
CHIEF SEATTLE	1	39
OREGON TRAIL	1	27
NM MUD DUCKS	1	18

CLUB ENTRIES

CALL	10-10#	CTX W	CTX WO	TOTAL	OPS
NM5H	68588	70	93	233	N5MT
K4MN	24874	44	126	214	KM4ODS

CLUB ENTRIES (Cont.)

CALL	10-10#	CTX W	CTX WO	TOTAL	OPS
W1NRG	29650	76	61	213	N1API
W5RRV	42114	39	23	101	KD5DE
DK0DWK	73418	12	0	24	DH1PAL
DK0HHC	73417	12	0	24	DH1PAL
DL0KAC	73416	12	0	24	DF3TE
WN5AIA	77623	6	0	12	W5SUM

CHECK LOGS

CALL	10-10#	CTX W	CTX WO	TOTAL	OPS
F5NBX	45882	80	70	230	0
VE6TL	10871	62	46	170	0
N6SPP	77685	40	35	115	0
W0IZ	0	36	30	102	0
WY7KY	26727	25	35	85	0
PY3TD	18372	28	20	76	0
AA0AJ	41653	28	14	70	0
VA7TU	0	28	2	58	0
KD6HOF	0	17	0	34	0
K6KTS	0	13	6	32	0
KB3ORR	74883	12	6	30	0
W6OI	109	15	0	30	NF0J
N2NKX	0	13	0	26	0
KB7AK	0	12	0	24	0
KN6OKY	0	12	0	24	0
W5RIR	0	10	0	20	0
WO1Z	0	10	0	20	0
AI5OM	0	5	7	17	0

2024 Ten-Ten QSO Party Schedule

Event	Dates	Postmark
Spring Digital	April 27-28	May 6
Spring CW	May 4-5	May 13
Open Season	June 1-2	June 10
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.





Net Report

Steve Wagner, W7WHB
 (#77836)

V51MA (Mike) and WA4GQJ (Augustine) are congratulated for the help and time given to the 10-10 International Net. We are short two Net Controllers. Mike and Augustine have been filling in on the Wednesday nets to cover for that day. Thank You, Mike and Augustine.

We are also looking for people to take on the duties of Net Control Operator. We need NCS operators for Wednesday and Friday. We also need someone for "stand-by" or "back-up" controller. If interested and have a desire to have fun running our Internationally renowned net, please contact Steve, W7WHB at W7WHBX@gmail.com. A telephonic interview will be required and if selected to the position a small amount of interesting training will also take place via Zoom or telephonically. It's really pretty simple and is a great way to make many contacts. You do not need hundreds of watts of power to be a Net Control Station. 100W will get you anywhere, if you have a good antenna. And you will join a group of Net Control people who are great guys to be associated with.

Pertaining to our daily Nets. In the recent past, there have been incidents where delays and confusion have interrupted the daily net. Per the 10-10 Operational Manual, each Net Control Station will designate a relay station(s) to assist with checking-ins. The Relay station(s) will not take other relays from other stations. The primary function of a relay will be to "extend the listening capability of the Net Control Station." In addition to the Relay Stations, we are also going to enforce the Operations Manual rule about third party stations relaying 10-10 numbers. The following is from the 10-10 International Operations Manual, available for viewing to all members of 10-10 International:

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 to relay a 10-10 number via a third station or copied from any other station.

These rules will be enforced to provide for more efficient operation of the Net and to make more time for check-ins and contacts for everyone in the 10-10

International Net, Inc. If anyone has any questions, comments, or suggestions concerning the operation of our Nets, please feel to contact me at any time at W7WHBX@gmail.com.

Steve - W7WHB #77836

Net Report for 4th Quarter 2023

Monday Nets			Wednesday Nets		
28.300 MHz			28.300 MHz		
DATE	TOTAL	NO 10#	DATE	TOTAL	NO 10#
2-Oct	28	4	4-Oct	28	8
9-Oct	XX	0	11-Oct	25	8
16-Oct	30	7	18-Oct	27	6
23-Oct	XX	0	25-Oct	30	7
30-Oct	22	6	1-Nov	26	3
6-Nov	XX	0	8-Nov	34	5
13-Nov	45	6	15-Nov	29	7
20-Nov	27	8	22-Nov	24	4
27-Nov	42	8	29-Nov	29	6
4-Dec	42	4	6-Dec	20	6
11-Dec	43	10	13-Dec	21	10
18-Dec	33	8	20-Dec	23	7
25-Dec	35	14	27-Dec	19	3

Tuesday Nets			Thursday Nets		
28.300 MHz			28.300 MHz		
DATE	TOTAL	NO 10#	DATE	TOTAL	NO 10#
3-Oct	14	0	5-Oct	31	11
10-Oct	10	3	12-Oct	23	6
17-Oct	16	3	19-Oct	22	7
24-Oct	14	1	26-Oct	30	6
31-Oct	18	2	2-Nov	29	5
7-Nov	16	2	9-Nov	28	8
14-Nov	19	3	16-Nov	26	5
21-Nov	25	3	23-Nov	8	3
28-Nov	12	1	30-Nov	30	5
5-Dec	9	0	7-Dec	25	4
12-Dec	16	2	14-Dec	1	0
19-Dec	6	2	21-Dec	23	5
26-Dec	20	5	28-Dec	37	13

Net Report for 4th Quarter 2023 (Cont.)

Friday Nets			Saturday Nets		
----- 28.300 MHz -----			----- 28.300 MHz -----		
DATE	TOTAL	NO 10#	DATE	TOTAL	NO 10#
6-Oct	29	8	7-Oct	31	6
13-Oct	32	7	14-Oct	21	4
20-Oct	28	9	21-Oct	1	0
27-Oct	35	9	28-Oct	2	1
3-Nov	31	6	4-Nov	19	8
10-Nov	30	4	11-Nov	15	4
17-Nov	24	5	18-Nov	10	0
24-Nov	30	8	25-Nov	10	1
1-Dec	24	3	2-Dec	15	5
8-Dec	27	5	9-Dec	10	2
15-Dec	32	10	16-Dec	17	4
22-Dec	22	6	23-Dec	23	5
29-Dec	31	3	30-Dec	21	3

XX NO NET CALLED
 XXX NO RPT RECEIVED

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		

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!!!

Some Antenna Safety Notes

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.

RF SAFETY: RF Hazards come in two varieties. One is radiation. Current FCC regulations provide standards for safe amounts. Use the worksheets and analyze your station, even if you think you may be exempt by virtue of power levels and spacing. Be sure.

A second hazard comes from direct contact with antenna elements carrying RF currents. Ground-mounted verticals and inverted Vee ends provide the greatest hazards, since both children and adults can come into contact with them – either directly or with some implement having a long metal handle.

Isolate ground-mounted verticals with fencing or other barriers which are effective especially in preventing children from touching a potentially active antenna. A vertical in or adjacent to a children's play area may mean station silence during periods when children are present: if contact is not a danger, radiation may be.

Elevate and insulate horizontal antenna ends above the level where anyone can touch them with a metal rod. Never underestimate the ingenuity of a child with a small mean streak or a large curiosity.

STATION GROUNDING: Everyone is familiar with the need for a common ground bus for all station equipment with as short a lead as possible to a ground rod outdoors. If you have a tower, it should also be ground rodded. All ground rods (including the house ground at the electrical service entry) should be connected together by the largest copper wire you can obtain. Some folks use copper flashing cut into long strips. These days, braid is not recommended because its very large surface area open to weather deteriorates it quickly. Use solid mechanical connections, not solder (which melts in the presence of lightning like a teenager in the presence of a rock start: (instantly).

If ground rods are widely separated, add ground rods in a row from end to end, spaced about the length of each ground rod apart. This is not over-kill—just the opposite. It is over-safe by holding the resistance between everything in your house and shack at the absolute minimum. Even a slight resistance may give a lightning surge an alternative path to ground through your “stuff.”

INSURANCE: Carry all you can afford that may be relevant to hazards that antennas may present. However, never let the existence of insurance be a substitute for the best possible practice in the installation and maintenance of antennas and their supports. The lives you preserve may include your own and those of your loved ones.

TEN-TEN AWARDS

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

TOP TEN HONOR ROLL

No.	CONTACTS	CALL	10-10#
1.	24600	WA5JDU	3017
2.	11700	K0PV	9902
2.	11700	N5XZ	4530
4.	11400	DL8YBM	36109
5.	10700	N1API	25468
6.	9800	N5DAS	35877
7.	8800	AC6FU	10937
8.	8200	K5FBS	48461
9.	8100	WB3FGU	16728
10.	6500	LU1BJW	39329

OM/XYL AWARD

275 PAIRS

NO.	CALL	10-10#
1	N5MT	24949

TOP TEN CLUB

No.	CONTACTS	CALL	10-10#
1.	4400	K6MQ	71487
2.	3700	DL0X	75555
3.	2100	W8PGW	74726
3.	2100	VE4WSC	50470
5.	2000	W1NRG	29650
6.	1300	WB2HIW	38770
7.	1200	NM5MD	72385
7.	1200	W4MNM	75450

1000+ MILESTONE BARS

6500 BAR

NO.	CALL	10-10#
60	LU1BJW	39329

AWARDS MANAGERS

BAR 100-900..	Dan Morris, KZ3T #41015	3162 Covington Way, Lenoir NC 28645	(828) 728-5049	dbmorris315@gmail.com
Bar 1000+	Rob Cromer, KE0MIZ #77647	12932 Palamino Place, Wellington, CO 80549	(970) 692-4421	rdcromer@rccomps.net
VP Bar	Thomas Cole, KI5ELV #77743	3238 Wagner St., Shreveport, LA 71108	(318) 617-0562	ki5elv@yahoo.com
VP WAS.	Charles (Chuck) Dockery, N7UQ #72774	112 S. Rolling Meadows Dr. Wylie, TX 75098	(469) 829-5462	chuck@n7uq.com
VP Lucky 13 . .	Dan Morris KZ3T #41015	3162 Covington Way, Lenoir NC 28645	(828) 728-5049	dbmorris315@gmail.com
WAC	Kevin Gilot, NZ1I, #72759	50 Cindy Lane Mystic, CT 06355-1404	(860) 572-6086	kevinemt@tvconnect.net
Counties	Mark Tatlor Murphy, KC4HIT #57488	PO Box 936, Conover, NC 28613-0936	(336) 561-3630	kc4hit@gmail.com
Countries	Mike Davidson, N5MT #24949	26274 Whispering Pines Ave, Denham Springs, LA 70726	(713) 417-4727	N5MT@aol.com
CW	Lee Zalaznik, KI6OY #50948	334 Olivina Ave., Livermore, CA 94551-6137	(925) 455-0361	lee.zalaznik@sbcglobal.net
Digital	Jeff Steinkamp, N7YG #65084	6765 E. Rosewood Cir., Tucson, AZ 85710	(520) 546-2290	n7yg@n7yg.com
Mobile	Paige Butler, W0FLZ #48658	21922 36th Ave NW, Stanwood, WA 98292	(425) 308-5561	w0flz62@gmail.com
OM/XYL	Marcus Lieberman, KM5EH #71103	2300 Hurley Drive NW, Albuquerque, NM 87120-1013	(505) 836-1724	buckml@lobo.net
WAS	Eva Donaldson, WB0CON #53964	12933 W Montana Drive, Lakewood, CO 80228-4244	(303) 989-0475	wb0con@comcast.net
WPX	Ed Bryant, KM5FF, #50356	9001 Sunbow Ave SW, Albuquerque, NM 87121-8851	(505) 934-2100	elbble@gmail.com

ELECTION 2024

CALL FOR NOMINATIONS

10-10 International holds an election every two years. In the year 2024 we will be electing the President, and three (3) Directors, whose terms will commence January 2025. The organization does not run itself, so if you have ever thought about participating in the running of our organization, this is a great opportunity to do so! Nominations must be sent to the Nomination Committee prior to May 1, 2024.

The Nominating Committee develops a slate of eligible candidates by May 15, 2024. The chairman of the committee will provide each potential nominee with information regarding eligibility and specifying the information required by the committee. The chairman of the committee will notify members selected by the Nominating Committee, in writing. Members not selected by the committee may petition for candidacy by having a petition signed by 50 full members and presented to the Secretary by June 15, 2024. A nomination information form is required and is available from the Nominations Committee Chairperson. Further questions concerning the election/nomination process may be addressed to Mel Sojka, KD5DE #33513 kd5de@nwla.com.

QUALIFICATION FOR NOMINATION TO BE AN OFFICER OR DIRECTOR OF 10-10

In accord with the bylaws, no member of 10-10 may qualify for nomination to be an Officer or Director of 10-10 unless he or she has been a full member for more than four (4) years immediately preceding his/her Nomination, and that he/she can show that their membership will remain current during the period of the office they are seeking. The Nominating Committee or Petition for Candidacy are the only methods to be used by members who wish to be nominated.

SELECTION BY THE NOMINATING COMMITTEE

The Nominating Committee is charged with the task of selecting from those who indicate a desire or willingness to serve as an Officer or Director and to form a slate of candidates who the committee believes represent the best qualified candidates from information submitted to the Committee.

PETITION FOR CANDIDACY

Members and nominees not selected by the nominating committee may petition for candidacy. Such petitions shall be signed by 50 current members and submitted to the Secretary by June 15, 2024.

BIOGRAPHICAL SKETCH

All Candidates, whether selected by the Nominating Committee or by Petition, must submit a biographical information form and biographical sketch. The Nominating Committee will use this information in the process of selecting a slate of Candidates. Those who petition for nomination must submit a biographical information form to be provided by and returned to the Secretary. This biographical outline, not to exceed 200 words of narrative, shall be printed in the July 2024 issue of the 10-10 News.

NOTIFICATION OF POTENTIAL NOMINEES

The chair of the Nominating Committee shall notify members selected by the Nominating Committee to be candidates in writing. The chair of the Nominating Committee shall also notify, in writing on or before May 15, 2024, members who are not selected by the nominating committee, and inform them of the proper method of placing their names in nomination by petition.

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.



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
02314	N8JC	Jerry Cook - New Martinsville, WV
02706	W9VA	William B. Smith - Riverwoods, IL
02776	WB9EBO	Gerald P. Swetsky - Milton, FL
03374	K9BJM	Lawrence W. Petry - Hooppeston, IL
05096	K4FJK	David G. Semones - Jeffersontown, KY
07610	WA7EYP	Michael Cobuccio - Mesa, AZ
08169	K5LAD	Jim C. Picket - Owasso, OK
12741	W2UDT	William W. Hudzik - Gillette, NJ
13200	W4CT	Benjamin S. Booth - Mentone, AL
14196	K5TD	Robert L. Tucker - Tulsa, OK
16955	KY4P	Charles L. Lewis - West Jefferson, NC
17039	WD9CKO	Gene A. Denick - Tucson, AZ
19447	KB0AJ	Daryl A. Cox - Corydon, IA
19874	KB3AP	Gerald A. Hofkin - Owings Mills, MD
21685	WA4RD	Stanley D. Ward - Leicester, NC
22477	W3NR	Edward S. Dout - Chickamauga, GA
26083	N4BBB	George S. Yates - Columbia, TN
28424	N5ATV	Richard E. Daze - Houston, TX
28445	NZ8J	Timothy K. Cook - Fairborn, OH
32819	WA8BIJ	Vincent L. Cuker - Chelsea, MI
33853	NI3P	Stephen P. Oksala - Exton, PA
43721	KB7BTH	Glen R. Fisher - Hayden, ID
43896	N4PNI	Franklin D. Grant - Woburn, MA
46771	N9TOD	Todd W. Skogen - Yorkville, IL
47559	AB5FG	Douglas M. Ream - Alamogordo, NM
49833	N8JIW	Donald E. Howard - Shaker Heights, OH

10-10#	Call	Name - City, State
50266	N7DNJ	James Fell - Phoenix, AZ
50846	WA7ETH	Hugh Empey - Marysville, WA
51658	N8KRT	Ray Abbey - Mount Pleasant, MI
55069	KA1UUX	George A. Cassidy - Stonington, CT
55926	K9EFX	John Harbeck - Valparaiso, IN
56507	KE4FL	Jose S. Barra - Palm Coast, FL
63064	N3NZ	Noel Zeibari - Swarthmore, PA
63258	AA5SK	Samuel H. Kirsch - Gulfport, MS
63398	K5YKD	Earnest G. Wolf - Oklahoma City, OK
67844	KC5FSC	Gaylon D. King - San Antonio, TX
68056	WE1H	Matthew T. Atwood - Merrimack, NH
70289	K2WO	George A. Sereikas - Orlando, FL
72068	K2IYE	Frank W. Camposano, Jr. - Whiting, NJ
72734	W9IM	Leslie J. Raffel - Mettawa, IL
73694	KR7R	Richard D. Vincent - Seattle, WA
73732	KN8KAZ	Franklin S. Sanders, Jr. - Buda, TX
75256	K4UEE	Robert C. Allphin, Jr. - Marietta, GA
76609	KK4IAJ	William E. Smith, Jr. - Rome, GA

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

Rob Ireland, VE9KM - SK

Our friend and long-time 10-10 Board of Directors member Rob Ireland, VE9KM, #69811 passed away on January 17, 2024.

Rob was born on July 14, 1952 in Birmingham, UK. After completing undergraduate and graduate studies in and around London, he emigrated to Canada in 1977, where he first worked at Queen's University, Kingston, then at Carleton University in Ottawa. 1979 he met Laurel and they wed in 1982. In 1984 they moved to Sackville, NB, where Rob took up a position as Professor of Biology at Mount Allison University where he was later a department head and a dean. Rob and Laurel had a son and a daughter. Teaching was Rob's calling. He was a born teacher and mentored many students and new faculty members over the years until his retirement in 2020. He enjoyed keeping in touch with former students, following their careers with interest.

Rob enjoyed a variety of hobbies – curling, stamp collecting, ham radio – and particularly gardening and growing orchids. Over 37 years he and Laurel built a

beautiful ornamental and productive garden. He was seriously into composting, and was ever so happy puttering around with the veggies. He was a licensed ham radio operator for over fifty years, keeping in contact with friends all over the world, and locally through the Westcumb Amateur Radio Club. He was first licensed as G3YXQ in 1969 while still in high school and he maintained that call throughout his life.

Rob was elected to the 10-10 Board of Directors in 2005 and served in various positions until he stepped down at the end of 2012. Rob was Contest Manager and later Publications Committee Chairman. At the Board Meeting in 2011, Rob

volunteered to take on the project of revising the unwieldy 107 page Operations Manual. Much to the amazement of everyone, we ended up with a Revised Operations Manual that was 42 pages in length. Mel KD5DE said that “Rob was very gifted when it came to his ability with the English language. He manned the table with me at the ARRL 100th Anniversary in Hartford.”

We thank Rob for all his many contributions to 10-10 and will remember his keen sense of humor.

Larry, WA2SUH #407

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
N5MT, Mike.....	Awards - DX
N7UQ, Chuck,	Awards - VP WAS
N7YG, Jeff	IT Manager
NF0J, Dave	President, W6OI Trustee
NP2MR, David.....	Committee Member
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

Short Elements and Loading

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.

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

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

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

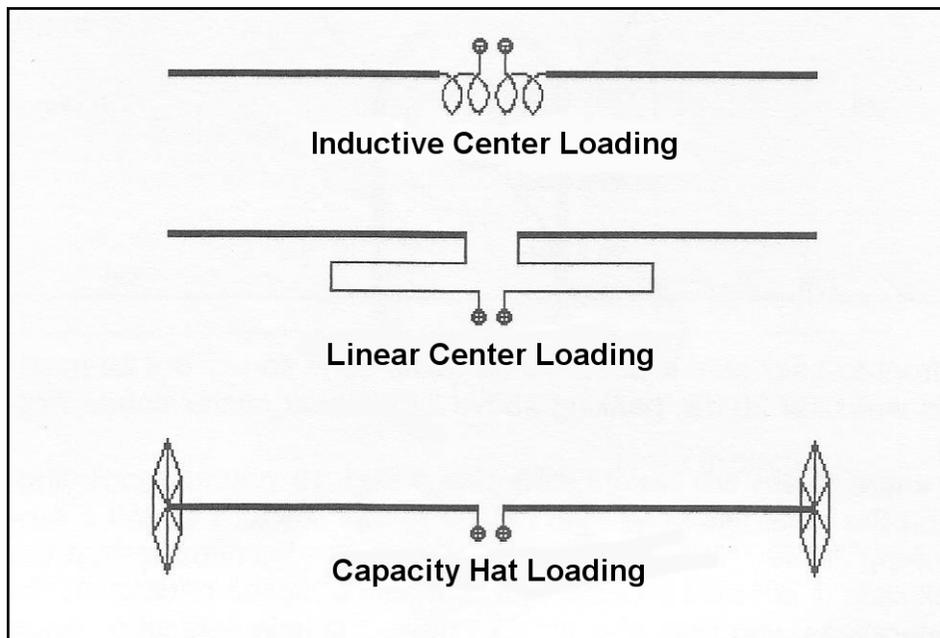


Figure 1. Loading Options for Shortened Elements

HOW SHORT SHOULD I GO?

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

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

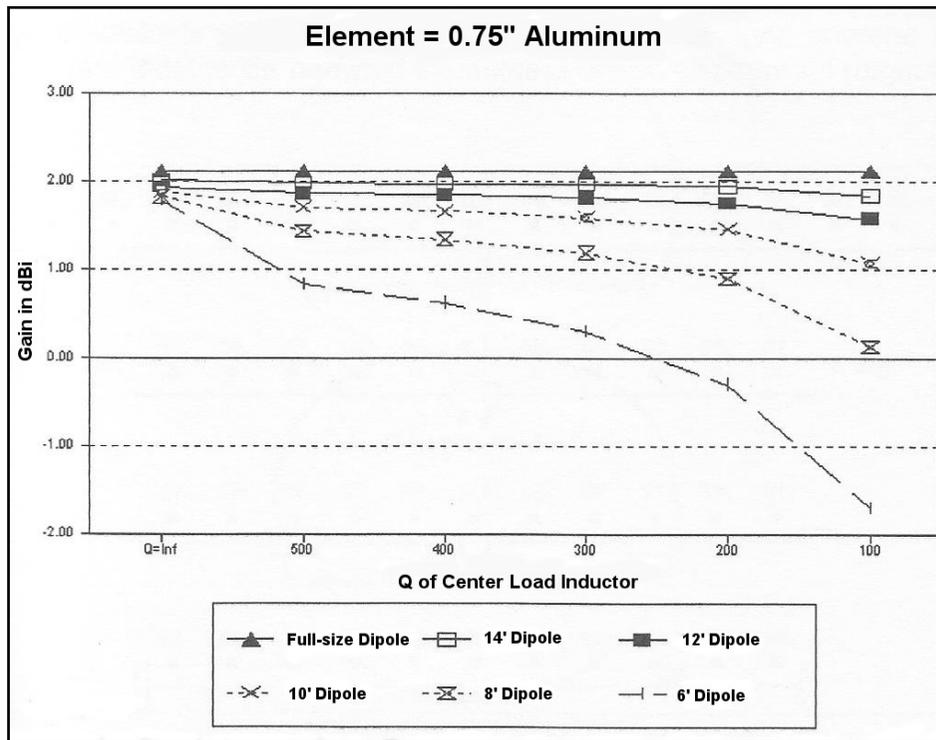


Figure 2. Gain vs. Q of Center-Loaded Dipoles

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

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

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

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

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

Compared to the full-size dipole, the two inductively-loaded antennas display sharp current drops beyond the loading point, in essence, the missing antenna segment made up for by the coil. The free space gain of the mid-element-loaded dipole is only marginally better than that of the center-loaded dipole: 1.84 dBi vs. 1.82 dBi. The free space gain of the full-sized dipole is 2.12 dBi. However,

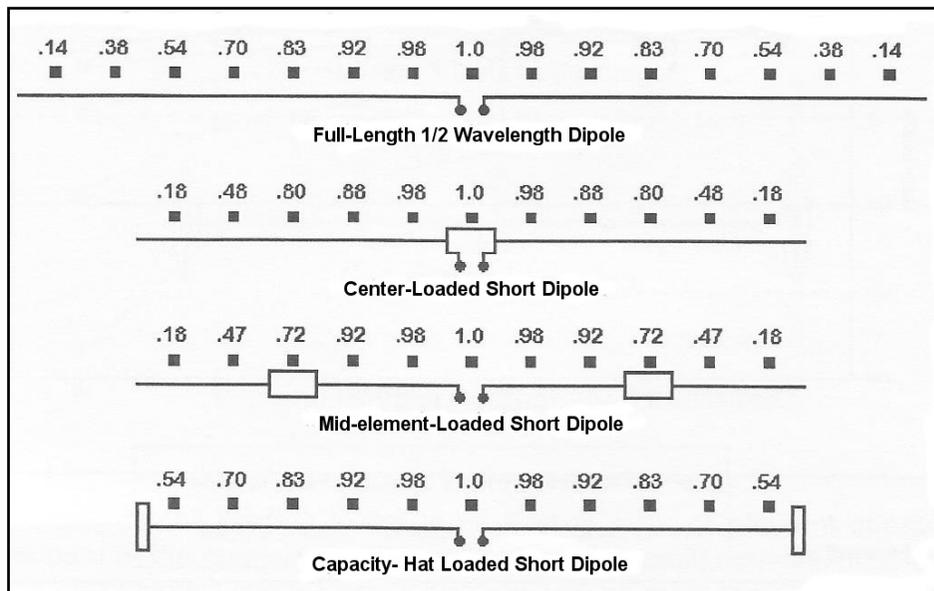


Figure 3. Antenna Currents Along Shortened Dipoles

notice that the current along the element parallels the values for the full-size dipole right up to that hat itself. The nonradiating structure at the end of the antenna uses only the lowest levels of antenna current. The other loads are placed in high-current regions of the element, but yield insignificant radiation in the tight fields of the coils.

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

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

Let me add a word about helical elements. A helical element is a continuous coil, like a slinky, wound in one direction, and fed in the middle. It radiates well because the turns are spread apart and the field is not as self-enclosed as

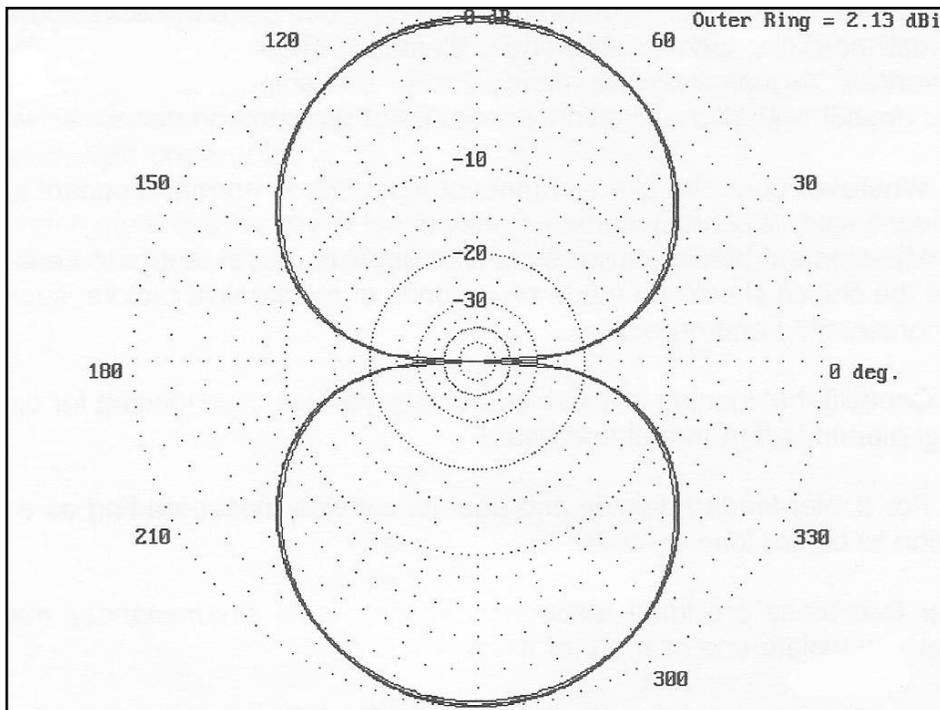


Figure 4. Azimuth Patterns for Full and Loaded Dipoles

with a normal coil. I have modeled a few, using simplified geometry (square and hexagonal turns). They perform well so long as the turns are not overly compressed. An 11 and a half foot model dipole of 12 turns with 6" diameter provided 1.94 dBi free space gain and a resonant feedpoint impedance of about 38 Ω . However, do not expect such performance if you wind the coil over a support structure, such as PVC. PVC is fairly good RF performer at HF for small lengths and supports, but it is not air, and it will reduce inductor Q. Moreover, using smaller turns and more of them will reduce gain. Compressing turns to further shorten the antenna element will begin to reduce gain radically, as the antenna begins to act more like a coil than a linear element. They may be more trouble than they are worth in Yagi applications.

The upshot of this investigation is a series of recommendations:

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

4. For center-loaded dipoles and beams, consider linear-loading as a higher-Q option to center loading coils.

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

APPLYING THE LESSONS TO YAGI BEAMS

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

1. **Center-loaded Yagis:** These antennas have the disadvantage of lower gain and narrower SWR bandwidths.

2. **Linear-loaded Yagis:** Similar to inductively-loaded Yagis in mechanical advantage, SWR bandwidth, and front-to-back ratio, linear-loaded Yagis have high gain figures due to a higher loading element Q.

3. **Capacity-hat Yagis:** Of all types of shortened Yagis, capacity hat models offer performance closest to a full size Yagi in terms of gain, SWR bandwidth, and front-to-back ratio (less than that of a center-loaded Yagi). Hats on the element ends can add to element stress and wind loading.

4. **General:** Shortened antennas with elements at least 2/3rds normal length offer good gain, good front-to-back ratios, and reasonable to good SWR bandwidths. When element lengths are less than 2/3rds normal, expect low gain and very narrow SWR bandwidths, although the front-to-back ratio can be sustained. For 2-element reflector-driver Yagis, it is unwise to use boom lengths less than 0.1 wavelength, with about 1/8th wavelength preferable.

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

WOULD YOU LIKE TO JOIN 10-10?

Here is what you need:

1. You must hold a valid amateur operator license.
2. Your valid amateur operator license MUST authorize or qualify you for unsupervised transmitting operations in the ten meter amateur band under your own personal call sign.
3. You must make contact with ten members of 10-10 and submit a log listing all contacts, their 10-10 number, call sign, name (as received 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 our website. 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 than 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.

© Copyright 2024 10-10 International