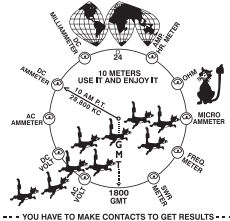


TEN-TEN INTERNATIONAL NET, INC.



TEN-TEN INTERNATIONAL **NEWS**

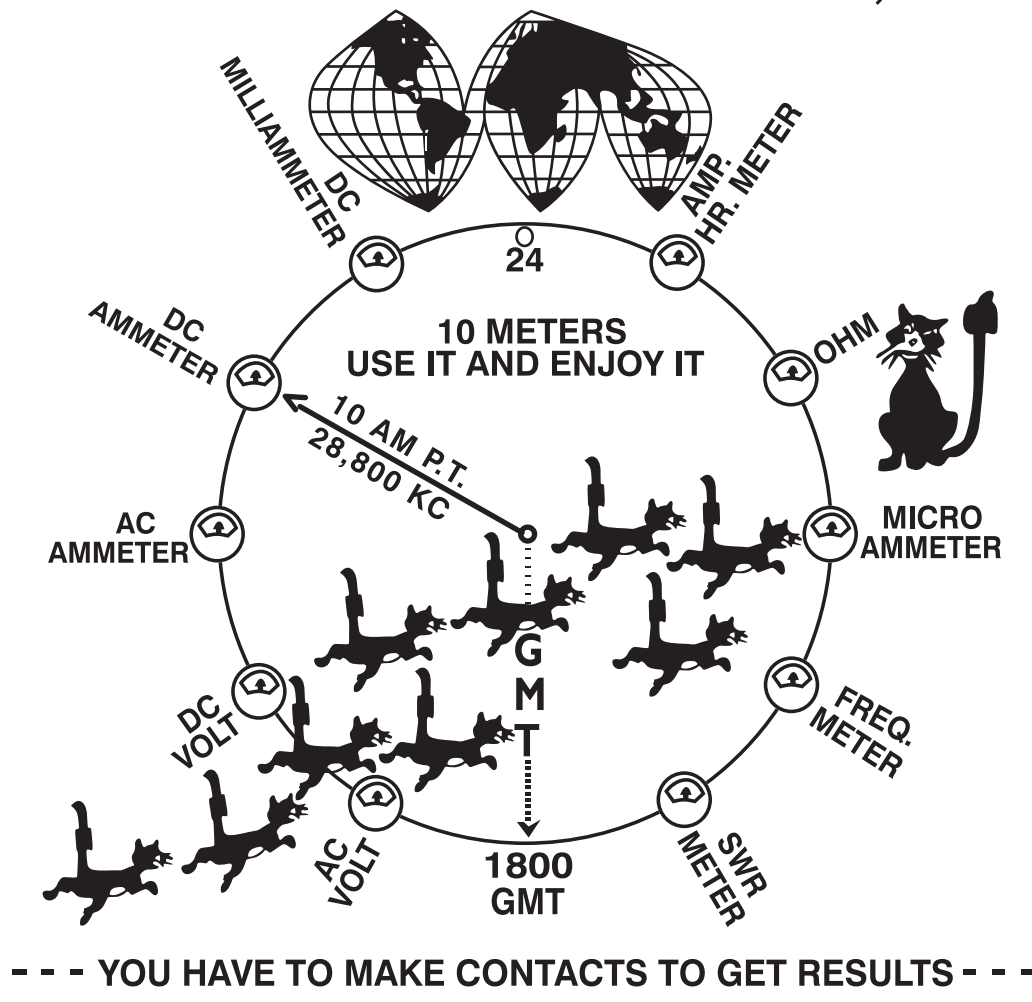


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The Ten-Ten International News

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

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

DEADLINE FOR NEXT ISSUE: 1 June 2019

PLEASE MAIL ALL ARTICLES AND PHOTOS TO:

EDITOR Ten-Ten News

E-mail: editor@ten-ten.org

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

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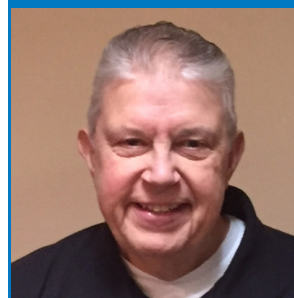
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From the Editor

Randy Mather, AJ7B
 (#7675)

Well, spring has sprung and it is beautiful up here in the Pacific Northwest. Record breaking temperatures and more sun than I have ever seen in March. More time to get out and do maintenance on antennas and feedlines. Most times March is too cold and wet to get outside and work. Too bad all that sun doesn't come with more sunspot activity.

In this issue we have something that I have been asking for in every issue. A Do-It-Yourself (DIY) project. Yep, thanks to Bill KB5BIL #77692 we have an article from him explaining how he built an interesting version of a loop antenna. He took a basic antenna design (loop antenna) and built it in such a way as to fit his needs budget and location. Take a look at the "Decagon Loop" in this issue. Thanks Bill. You help make my job of filling pages much easier.

As you can see from Bill's article, it doesn't take much to write something up and have it published here. I am quite sure many of the 10-10 members enjoy reading about the different activities we all do to help keep the RF flowing around the globe. And my offer always stands: I will help you get your article ready for publishing. You give me the rough information and I will work with you to get to a final form.

Besides setting up, upgrading, and operating my station, I really enjoy teaching pre-hams and hams just starting out about the different aspects of the hobby. My biggest project right now is leading a team of experienced hams in the development of a General License class. More than just spending time going over all the questions in the question pool, this class will have hands-on labs and real-time demonstrations to help each student get a better understanding about Amateur radio. We are going beyond the questions. If you have experience doing this kind of class, please drop me a line at editor@ten-ten.org.

Hope you get the most out of your spring this year. Don't forget about those spring QSO parties (CW and Digital). The Open Season QSO party starts June 1 this year. I hope to meet you on the air.

Randy – AJ7B #7675



From the President

Mel Sojka KD5DE
#33513

Don't know if these times can be described as exciting or challenging. Just got the results of the Spring Phone QSO party and they were a surprise. I will admit that I had to put forth an effort to make contacts, but in some locations there was much more activity. One thing I noticed was that if you paid attention to social media and the mailing list, the outlook was sad. If you depended on these sources you probably did not even get on. No matter, the results exceeded participation in 2018 which is on the positive. I encourage you to get on during the QSO parties and make contacts.

Most are aware that I am a big fan of local nets and chapters. For many years we held the Steamboat net here on Saturday Mornings. This was really great since it was the first stateside net. When we had Europe in, the net was quite large and very popular. We had moved from Thursday evening local to encourage this. Some of the locals asked me to move the net back to Thursday night. So I did so around the first of the year. Wow, we are averaging 15 check-ins and have qualified 5 brand new members with consecutive 1010 numbers. Now that is really cool. An added bonus is that the band has been opening to the north and east around net time and we are getting visitors. Check 7 PM central time on 28.430. In UTC time that is Friday at 0001 Summer or 0100 winter. We will be looking for you.

Hamfests are an integral part of Amateur radio. Whether you are into the swap tables or the latest and greatest gear, it seems like everyone enjoys these events. During my last term I attempted to encourage the Directors to be hamfest active. I still encourage them to make hamfest within a 250 radius of the home QTH. Most events like to have club tables in the mix. The QCWA, OMISS, and ARRL are among the norm here in the south. Club tables are normally inexpensive and 1010 will supply handouts. Sometimes members have been known to set up stations allowing for 1010 contacts and often folks can get the required 10 contacts. I just returned from a very hard two-day drive to Orlando for Hamcation. Really need another Amateur to share the time behind the wheel. 888 miles is a rough drive and it is the same to Hamvention in May. This year at Orlando, the good weather kept folks out of the main buildings and in the massive swap area. We were down considerably from last year. Many other vendors and clubs did comment on the lack of visitors at their locations. Some major vendors even pulled out early on Sunday. If you are a current member and wish to have materials for a table or club meeting, contact either WN4AMO or myself,

I would like to thank WA2HMM Charles #40510 and AJ7B Randy #7675 for their work on defining the FT8 protocol as a 1010 contact mode. First of all, we are not the only organization with issues using this automatic QSO mode. Some clubs want the operators name, or state, or zone and the list goes on. Because changes in WSJT-X version 2 and the work of Charles and Randy, my success rate of getting the required exchange has gone up considerably. 1010's policy is to trust the membership and that includes not using external resources to complete a contact. If you can't understand that, then you damage 1010 by not passing the number on the air. I encourage you to view the FT8 video on the website, and make the effort to pass your information when I send you "mel la 33513". I and others will be grateful.

1010 Chapters is one of my favorite topics. At the bottom of solar cycle 21 in 1987 there were between 245 to 250 active 1010 chapters on 10 meters. I will admit that solar activity at the bottom of that cycle was not as bad as current conditions. With that many chapters holding weekly nets, there were a lot of surprise openings. During the QSO parties, things were exciting with the Possum Trot, Republic of Texas, and Houston Shot chapters trying to take first place in the chapter category. Many of these chapters offered certificates and a points upgrade program. Along came the Internet, cell phones, and cable TV. These distractions began to claim the interest of the amateur community. Currently there are 55 chapters active and continue to hold weekly nets. These nets create activity and with deteriorating solar conditions, this type of activity is much needed. You can find the Chapter Affiliation Form in the Forms section of the web page. You are required to have 7 current members as well as a chapter official. You need to hold weekly nets at a time and on a frequency that is coordinated through the Director assigned to the chapter manager position. Certificates and an upgrade program are not necessary. With interest growing in CW, I would like to see more CW nets on 10 meters. Kit building has also become popular. Maybe more QRP and Homebrew activity could be promoted. Local activity can offset these long minimum solar cycles, since it is doubtful that most of us will ever see the peaks of 1960's, 1980's, or even the 1990's. Cycle 24 is predicted to have a long extended minimum similar to cycle 23 and cycle 25. Maximum is predicted to be lower than cycle 24.

There is hope. I talked to two of the solar experts from Titusville while at Orlando. First of all, they assured me that they were just glorified meteorologist. This brought a smile. But unlike the doomsday prophets, they stated that looking at the last 200 years, that the cycles will return in intensity. The sad part was, not in my lifetime, and maybe not in my grandchildren's lifetime, but most likely in my great grands.

I encourage each of you to spend some time on 10 meters this quarter, Check 28.300 or 28.8 at 18:00 UTC, listen for the beacons between .2 to .3 or FT8 on 074 , but foremost call CQ.

A little added note. Those of you familiar with print technology realize that it cost 1010 more to print a 28 page newsletter than a 32 page newsletter. This is due to a fold charge that is accessed to every copy. This can be resolved by supplying the editor with content. We are not the daily planet and I am not Clark Kent so it is up to you.

God Bless & 73
Mel KD5DE #33513

Ten-Ten Top Operator Award

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

The Top Operator and Net Control for Q3 are:

Operator - **W5SUM Ronnie #2019**

Net Control - **N0TW Terry #36547**

TOP OP EXPLAINED

Just a little note to explain the Top OP award. There has been some misunderstanding on this award. It is based solely on the number of times that a member's information appears on new member applications. Because the majority of our members cannot be on 10 meters weekdays at 1800 UTC, there are two categories: members at large and net control operators. This year, for the first time, the annual Top Op award is a cup instead a plaque.

The Top Op award has nothing to do with Net operations. The Net Control operators have their own award based on net ops and is decided among those operators.



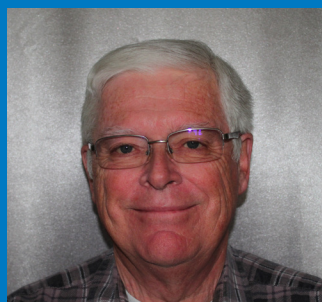
Terry Webb N0TW (#36547) with his Top Op award cup.



Mike Davidson N5MT (#24949) with his Top Op award cup.

NEW LIFE MEMBERS

02019	W5SUM	Roland E Hull Jr	LA
28384	K4WFP	Wayne F Poole	FL
32061	WA4TMW	Nathan Clark Roach	SC
35510	NJ3T	Jim R Crowley	PA
40405	W1CRO	Arthur R Whittum	VA
50900	KJ6MO	Charles F Trentacosti	TX
65262	WA1INC	Roland T Hamel Jr	CT
68129	N3TGB	Doris T Slye	MD
73921	KC6ILH	Gerald J Fuge	NV
76724	WB9MXX	Nicholas F DiDomenico	WI
76733	KC9YL	Anne L Dirkman	WI
77350	K2POW	LtCol Ronald A Mertz	NY
77466	WD6Y	Carlos A Lemmi	CA
77701	WB8BZK	Michael P Metroka	IL



Chapter Coordinator

Jim Fox, KA0ZPP
(#43428)

GENERAL NEWS

1) **All CH/CM:** Please double check the TEN-TEN Net Guide to be sure your net(s) are listed correctly. If there are changes, be sure to let me know so I can update the list.

2) If your chapter is planning a special during the months of July, August or September, please let me know before June 1st so I can include the details in the July newsletter.

3) Reminder of Quarterly Reports Due: **In Extremis** (no report in over a year): Bauxite, Channel Islands, Down Under, Major League Baseball, South Central Illinois Ten Meter Club. **Past Due** (no report received during the prior quarters when due): Fort McHenry/Cornerstone/Yodar Kritch, New Mexico Mud Ducks, Sky Blue Waters/Tin Lizzie, Twin Cities. Reports received after February 28 (date of this report) are not included here and will be acknowledged in the Chapters section of the 10-10 website.

Chapter Reports **Due during second quarter:** Chesapeake Bay (Apr), Route 66 (Jun). Note that Quarterly Chapter Reports may be sent any time. The months indicated here are the dates in 2018 in which the last report was received.

4) I thank **ALL CH/CM** who sent me a complete report during 2018 so I have up to date contact and net information. Other chapters, please send me a **complete report** in 2019. See www.ten-ten.org/index.php/resources/ten-ten-documents/ten-ten-forms for a form to download or fill out and submit electronically.

5) Poor propagation in recent years has certainly affected Chapter Net activity. If any of you have ideas on ways to increase participation in our Chapters, please contact me at the address given below. One of the primary purposes of Ten-Ten International is to promote activity on this band, especially in such times as these. I welcome your input.

CHAPTER NEWS

1) **Steamboat Plus** chapter has changed its net times to Fridays at

0001/0100, still on 28.430, and has attracted 8 new 10-10 members. Other chapters might consider a change in net time or frequency if there is no/little activity on an existing net.

2) **K7QXG**, Bob, is now both CH and CM for **Oregon Trail** chapter. He reports that no seals other than the Lone Rider (mobile or portable) will be issued or collected by the chapter.

3) **Gold City** chapter has dual nets held: K4HQQ is net control for the US net, averaging 2 check-ins, while DL6DK is net control for the EU net and averages 20 check-ins.

4) **City of Lights** reports they have completed 2206 consecutive nets, as of mid-February, since the chapter began.

5) **Santa Fe Trail** chapter has become **QRT** since CH Larry, K9PCU, has moved to a facility that does not allow antennas. **Minuteman/Old Ironsides** chapter has become **QRT** since CH Sonny, K1SVP, became SK. **10-Bar-X** chapter is declared **unaffiliated** since the chapter is way past due in quarterly reports and has not responded to queries.

6) Chapters below accept email upgrades as of August 30. All the listed chapters generally need previous, new and total points and seals claimed. Any transaction with the CM that requires that a certificate be issued, and most worksheet specials, should still be handled via US Mail. Also, it is good practice to keep a detailed listing of the upgrade in the event that the CM should require verification. Requirements peculiar to a particular chapter are noted.

(** indicates change)

Alti – CM WH6S, wh6s@outlook.com. Use form available from the CM.

Bauxite – CM K5BKT, k5bkt@nwla.com. Bauxite and Arkansas Visitor numbers only.

Bay Area – CM K6RDK, k6rdk@arri.net

Branding Iron – CM DL6DK, bic-cm@voits.de

Castle Craig – CM N1API, n1api@cox.net

Chesapeake Bay – CM N3TGB, n3tgb@aol.com

Colorado Centennial/Colorado Frontier Gang – CM WB0CON, wb0con@comcast.net

Cradle of the Confederacy – CM K4PO, pcsalley@gmail.com

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

Fort McHenry/Cornerstone/Yodar Kritch – CM K3TUJ, k3tuj@juno.com

Gold City – CM K4QHH, rabisch@hotmail.com

Hanse – CM DL5HAN, dl5han@t-online.de

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

Louisiana Pelican – CM N5MT, n5mt@aol.com

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

Minuteman/Old Ironsides – Now QRT **

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

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

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

Oregon Trail– CH/CM K7QXG, k7qxg2@gmail **

Santa Fe Trail – Now QRT **

Sky Blue Waters/Tin Lizzie – CM KA0ZIA, sbwtl1010@gmail.com

Speedway – CM W7CAR, w7car@arrl.net

Steamboat Plus – CM KD5DE, kd5de@nwla.com

Twin Cities – CM K0DBK, kzerodbk@gmail.com

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

Jim Fox, KA0ZPP, PO Box 135 Mayhill NM 88339, email: ka0zpp10ten@gmail.com

TEN-TEN NET GUIDE

As of March 1, 2019

DAY	ZSUM	ZWIN	Chapter Name	Location	Freq		DAY	ZSUM	ZWIN	Chapter Name	Location	Freq	
SUN	0001	0100	Chesapeake Bay	Chestertown, MD	28345	CW	WED	0001	0100	Castle Craig	Meriden, CT	28375	
SUN	1300	1400	Arlington	Arlington, VA	29200		WED	0100	0200	Cincinnati Area Ten Tuners	Milan, IN	28430	
SUN	1400	1400	Neanderthal Chapter	Leichlingen, DL	28355								
SUN	1630	1730	Possum Trot	Raeford, NC	28345		WED	0100	0200	Houston SHOT	Houston, TX	28488	
SUN	1700	1700	Major League Baseball	Gilbert, AZ	28380		WED	1400	1500	EU DX/Branding Iron	Bergamen, DL	28355	
SUN	1800	1900	Portland 500	Portland, OR	28350		WED	1700	1700	Gold City	Rutherfordton, NC	28425	
SUN	1900	2000	Oregon Trail	Dallas, OR	28330		WED	1930	1930	Route-66	Boonville, IN	28370	
SUN	1930	1930	North Georgia	Atlanta, GA	28410		THU	0001	0100	Cradle of the Confederacy	Pike Road, AL	28350	
SUN	2100	2200	Possum Trot	Raeford, NC	28150		THU	0100	0200	Gateway	St. Louis, MO	28650	
MON	0100	0100	Arizona Desert 10-10 Net	Phoenix, AZ	28445		THU	0100	0100	Cow Town	Arlington, TX	28460	
MON	0100	0200	Milwaukee	Milwaukee, WI	28365	THU	0100	0200	Milwaukee	Milwaukee, WI	28365		
MON	0100	0100	Lonestar	Arlington, TX	28460	THU	0230	0230	Windfarms	Livermore, CA	28450		
MON	0100	0100	So. Illinois Ten Meters Club	Centralia, IL	28405	THU	0230	0330	Up The Crick	Eugene, OR	28450		
						THU	1930	1930	Speedway	Rainer, OR	28350		
MON	0130	0230	Bauxite	Benton, AR	28470	FRI	0001	0100	Fort McHenry/Cornerstone/Yodar Kritch	Arbutus, MD	28370		
MON	1630	1730	Chief Seattle	Seattle, WA	28430								
MON	2330	2330	Sky Bl Wtr/Tn Lzz/Twn Ct	Inver Grove Heights, MN	28380	FRI	0001	0100	Steamboat Plus	Shreveport, LA	28430	**	
						FRI	0300	0400	Chief Seattle	Seattle, WA	28430		
TUE	0001	0100	Ft McHenry/Cornerstone/Yodar Kritch	Arbutus, MD	28370	FRI	1400	1400	Hanse	Hamburg, DL	28355		
						FRI	2230	2130	Down Under (Summer in NZ is winter in US)	Auckland, ZL	28530		
TUE	0100	0200	CO Centennial/CO Frontier Gang	Lakewood, CO	28340								
						SAT	1710	1610	Louisiana Pelican	Baton Rouge, LA	28450	**	
TUE	0100	0200	City of Lights	St Charles, IL	28150	SAT	1730	1730	Tango	Buenos Aires, LU	28650		
TUE	0130	0230	City of Lights	St Charles, IL	28720	SAT	2200	2200	Alii	Lihue, HI	28730		
TUE	0130	0230	Bauxite	Benton, AR	28470	** = Change							
TUE	0300	0400	Bay Area	Hayward, CA	28475								
TUE	0430	0430	Aloha	Hilo, HI	28490								
TUE	1500	1600	New Mexico Mud Ducks	Albuquerque, NM	28835								



DX News

Mike Davidson, N5MT
(#24949)

I would like to thank all of the new members that joined in 2018 who used my information as their first ten contacts to become a 10-10 member. I received my Top Operator 2018 coffee cup in the mail during early January 2019 and was surprised that with the poor conditions during last year that I was able to make enough contacts to be in the Top Op spot for 2018. Now all I want to do is find those that joined and put them into my log as new 10-10 numbers, hi.

This edition of the DX News makes my 115th issue and another quarter has passed as we get closer to the next Solar Cycle. I try to listen to the daily net on 28380 at noon time here in the middle of the US but the propagation just does not help finding an opening to the daily net.

The preliminary results of the ARRL Ten Meter contest have been posted. All results will be in the July issue of QST. There were 17% fewer logs in 2018 vs. 2017 with only 1,495 submits. Band conditions in N America were better than the previous year as the QSO count was up 26% for a total of 123,873 Q's. Improved conditions only helped the USA as Europe had an average log of 17 Q's. There were only a few Q's from S America to Europe in 2018. The only 10-10 member I saw in the high scores was Victor **N8OO** who was in class: single op, mixed mode, high power.

I was not looking forward to the 2018 ARRL Ten Meter contest last December. I always try to find 10-10 members during this contest but poor skip last year gave me fewer Q's in my log. The 2018 Ten Meter contest was my first big contest using my vertical antenna here in Louisiana. I used my HF amplifier to boost my signal but without skip and DX to work, made for a slow weekend on Ten.

I keep looking at the SILSO website for clues about the Sun making new spots. The Sun stayed spotless a lot this past quarter as no trend changes were seen, as the trend is still almost a flat line with the solar flux staying in the low 70's. The SILSO website is: www.Side.Be/SILSO/Spotless.

It is time to recognize two 10-10 members who were good CW ops and chased DX. Buzz Loeschman NI5DX #45645, died of colon cancer in February and Dave Paperman W5WP #40058, died in January. Both of these guys chased DX and had nice home stations that could find the weak DX and get them into

their log.

Countries Award: There were no Countries Awards submitted this quarter. A DXCC Most Wanted list can be found at: <https://secure.clublog.org/mostwanted.php>.

The new OS version of the old Countries Award DOS program is now installed on this computer. Some testing has been performed by Gerry WA6POZ and me. Gerry converted the DOS program so it will run in Windows 10. Thank you Gerry for doing the work and the computer magic! Some minor updates will be requested soon to give it additional functions and to fix a condition that was never detected in the old DOS version.

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

GENERAL 10-10 DX REPORTED IN THE PAST QUARTER:

4U1UN United Nations NY. The **4U1UN** #55555, club station is still not complete and the remote station is still being worked on. More later in 2019.

4U1ITU United Nations Geneva. An ITU meeting in Geneva is under way during the 3rd week of February. The ham station #11111 was very active so good luck.

GM Scotland. Doug **GM0ELP** #58991, was in the DX CW contest in February with friends using call GM5A.

HC Ecuador. Bill **K5YG** #65573, was active as HC5MWT from February 18-23rd. He likes CW but operates SSB and RTTY on HF. LoTW.

HC8 Galapagos Island. James **WB2REM** #48365, was with friends using call HD8M running CW, SSB and FT8 from February 27th to March 6th. LoTW.

HH Haiti. William **KO7SS** #8631, used call HH2AA for the ARRL DX CW contest in February. LoTW.

HR Honduras. Gerard **F2JD** #63443, will be back in Copan from February 22nd to May 15th using HR5/F2JD on CW, SSB and Digital modes and on all bands. Good luck.

J6 St. Lucia. Osiel **NG7E** #77665, was on vacation with a ham friend from February 7-13th. His call was J6/NG7E on FT8, RTTY, SSB and CW. LoTW.

PJ6 Saba Island. Bob **K4UEE** #75256 operated PJ6/K4UEE after using the contest call PJ6A in the ARRL DX CW contest in mid February. LoTW.

TI Costa Rica. Matt **K0BBC** #76064, arrived in Costa Rica on February 27th and will leave on March 5th. His call is TI7/K0BBC and is traveling with two other hams. They will be in the ARRL DX SSB contest as TI7/W6PNG.

V3 Belize. Olli **DH8BQA** #64672, was in Belize for the CQ WPX RTTY contest in February using call V37DX. There were no spots for this call on Ten Meters in Feb.

V3 Belize. Will **AA4NC** #15774, came from El Salvador to Belize on February 21st and will stay until March 13th. He is using call V31NC again and he will be in the ARRL DX SSB contest on March 2nd. LoTW.

V47 St. Kitts and Nevis. Bernie **W3UR** #25731 and his wife Becky N3OSH, were at Calypso Bay from January 8-20th. Bernie used a K3 running low power to a vertical antenna and his call was V47UR. LoTW.

VP2M Montserrat. Four USA ops were on Montserrat from November to early December and each op had a different call. The 10-10 members were Rich **NS7K** #69767 using call VP2MSK and Charlie Brown **WM7Z** #42156, was using call VP2MMZ. Look on QRZ.com for QSL instructions. LoTW.

XX9 Macao. A large group of Germans were in Macao from February 11-26, 2019 using call XX9D. The only 10-10 member is Uwe **DJ9HX** #22877. All bands/modes with several stations on 24/7 with FT8 and RTTY. <http://XX9D.mydx.de>. So far no USA station has heard them on Ten Meters as reported by DXSummit.FI.

YS El Salvador. Will **AA4NC** #15774, was in San Salvador from February 13-20th using call sign YS1/AA4NC. CW, SSB, RTTY and FT8. I did not find him on Ten but got him on the WARC bands. LoTW.

ZF Cayman Islands. Tim **N6WIN** #53747, was in the ARRL DX CW contest with friends, in mid February using call ZF1A. LoTW.

ZL New Zealand. Leslie **ZL3AB** #4434, was with two friends in the ARRL DX CW contest on February 16th.

ZP Paraguay. Dale **N3BNA** #32100, was using call ZP5DBC in January. He was going to Haiti in February.

UPCOMING DX & NEW 10-10 ACTIVITY:

3D2/R Rotuma. Antoine **3D2AG** #72719 is hoping to be back in Rotuma in April 2019. He is now in Tuvalu operating as T2AR but no Ten meters from Tuvalu!

7P Lesotho. A group of seven ops are trying to get into Lesotho for March 8-16th. The only 10-10 member is Gerald **OE7PGI** #36910, expected call 7P8LB. Website: <http://www.LA9VPA.com/7P8LB/index.html>.

CN Morocco. Bruno **IK2PZG** #42066, will be with a group of ops on Los Farallones Island from July 25-30th. The call for this rare IOTA DXpedition will be 5C9A.

CY9 St. Paul Island. A group of twelve operators that visited the island in 2016, will be back from August 1-11th. They will setup two sites like in the past, with six ops at each site. There are three 10-10 members: Randy **N0TG** #12990, Dan **W4DKS** #5395 and Will **AA4NC** #15774. All bands/all modes including EME by WW2DX. Website is: <http://www.CY9C.com> with YouTube video from 2016. LoTW and ClubLog for QSL.

E5 South Cook Islands. Doug **W6HB** #68854, will again be on the air as E51DLD on Rarotonga from April 21-28th. He will be a guest at either E52JD or E51BQ shack. After he leaves Rarotonga, he travels to New Zealand where he might be on the air as ZL/W6HB until May 11th.

FP St. Pierre & Miquelon Islands. Eric **KV1J** #31247, will be back for his 13th trip to Miquelon operating as FP/KV1J from September 24th to October 8th. Mostly SSB, RTTY, FT8 and hopefully CW. LoTW. Website at: www.KV1J.com/FP/Sep19.html.

J6 Saint Lucia. Three members are already in Saint Lucia getting ready for the ARRL DX SSB contest this coming weekend, March 2-3rd. Bill **K9HZ** #2618, Dan **W0CN** #27026 and Kyle **WA4PGM** #50763. They will be using J6/home call before/after the contest. During the contest they will be J68HZ and QSL to LoTW. They will have a HF signal on six bands, so good luck.

K USA. The steam ship Queen Mary **W6RO** #25000, will be observing its 40 years of operation from Long Beach, CA during the entire month of April 2019. The QM was more powerful than the Titanic and made her maiden voyage in May 27, 1936. She moved 800,000 troops during WW2 but soon after air travel would replace the steam ship. By 1967 she was retired and then sold to the city of Long Beach. The QM has a haunting history of about 150 spirits which have been heard by guests who have stayed on the QM or eaten in a restaurant on board the QM docked in Long Beach. So look for W6RO on any band for a special contact in April. Sorry but NO LoTW contacts are being uploaded.

KH2 Guam. Toshi **J13ERV** #39995, will be in the ARRL DX SSB contest the first weekend of March. LoTW.

KG4 Guantanamo Bay. Carl **KP2L** #47405, will operate from the club station using call KG4SC from March 6th to 13th. A friend, Tip N4SIA, will be there at the same time using call KG4AS.

P4 Aruba. John **W2GD** #14109, will be back in Aruba again for the March 30-31st CQWW WPX SSB contest and from May 22-27th for WPX CW contest. His call is P44W. Outside of the contest he operates on the WARC bands. LoTW.

PJ2 Curacao. There will be two members in a group using call sign PJ2T at the end of March. Look for Jeff **K1ZN** #60508 and Barclay **WT4BT** #76242. They will be in the CQWW WPX SSB contest at the end of March.

VP9 Bermuda. Three members are going to Bermuda from March 28th to April 2nd. They are: Frank **W8KA** #69853, Lee **N8LJ** #61088 and Stan **AC8W** #62885. No call sign was given for the CQWW WPX SSB contest.

MISCELLANEOUS ITEMS & NOTES:

Propagation forecast: <http://www.solen.info/solar/>, www.SolerHam.net and <http://ARRL.org/Propagation>.

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

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

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

Propagation: I expect the solar flux to range from 68-75 during the Spring of 2019. The Spring Equinox is when winter ends and spring begins on March 20st for the USA, and HF propagation begins to shift over a period of weeks to a north/south path. This change of season marks the last time you might hear DX from Europe and Asia on Ten until we get winter conditions again. Propagation all depends on how much the Sun ionizes the atmosphere to let our radio waves bounce across the earth's atmosphere as skip.

Our solar cycle #24, peaked in February 2014 at 170.3. Cycle #24, is now slowly going through the solar minimum phase (usually 2-3 years) until we begin cycle #25, probably in 10-14 months. The natural cycle of the sun is 11 years and we are now ten plus years into cycle #24. Cycle #25 could start as early as January 2020 and then it could take 1 ½ years of building sun ionization before we get better skip conditions.

The monthly maximum solar fluxes for 2018: Jan 71, Feb 79, March 70, April 77, May 77, June 82, July 73, Aug 72, Sept 70, Oct 72, Nov 73, Dec 71, and Jan 2019 76, Feb 72.

The monthly minimum fluxes for 2018: Jan 68, Feb 67, March 67, April 66, May 67, June 67, July 66, Aug 67, Sept 66, Oct 67, Nov 66, Dec 68, and Jan 2019 68, Feb 70.

On March 1st, the solar flux was 70, the A index was 26 and K index was 3. There were few solar flares this winter and the solar flux high for last year was many points lower than the May 2016 high of 123. The short term solar flux for the next 45 days will be 68 to 71 thru April 14th.

My Prediction: Over the next three months, the best conditions could be: March 17-19th, April 13-15th, May 10-12th and June 6-9th. For the lower USA, expect a 0% chance of DX to Europe or Asia with a 20% chance of DX to South America and the S. Pacific, later in the day. Listen to the CW beacons from 28.175-28.300 for path information.

We had 3 New 10-10 DX members join from December to February 2019:

Dec: DM6MD 77687, DK6TD 77688, DO7DA 77689; **Jan/Feb 2019:** None.

Thanks to the QRZ-DX, The Daily DX by W3UR #25731 and the Ohio/Penn DX Bulletins. Info to Mike Davidson, 26274 Whispering Pines Ave, Denham Springs LA 70726 USA Email: N5MT@aol.com.

DX IS! 73 Mike Davidson N5MT #24949

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QSL Bureau News

Spring 2019

Let me open by apologizing to everybody for not having a report in the last 10-10 News. My wife began growing ill last summer, and over the winter continued to deteriorate, until she joined the Heavenly Choir on January 10, 2019 at the ripe old age of 49. While I very much mourn her passing, I am comforted by the fact that she is no longer suffering or in any pain.

During all the mess, I did clear out all the cards from the pending card file, some dating back more than 10 years. This was made possible from a \$200 grant from the Ten-Ten petty cash fund, supplied to me by club treasurer Keith Schlottmann, KR7RK. Thus far, I have spent \$140 of that on postage; 2 rolls of 100 stamps purchased in early January, and 2 books of 20 stamps purchased around Labor Day.

I have had questions as to exactly how the QSL Bureau works, so please allow me to explain what happens here.

Most QSL Bureaus require Amateurs to keep envelopes on file to send forth cards; with the \$200 in petty cash from our treasury, I am not that strict. As long as I have a valid QTH and can read the calls on the card, I am good.

Here is the part where I am strict when you send cards to the bureau: both stations – the one sending the card and the one receiving the card – MUST be members of 10-10. That is not to say that I mandate both be paid up with their membership dues, but both stations MUST have a valid 10-10 number, one that I can verify by looking at the 10-10 membership records.

QSOs do not have to be made on 10 meters for the 10-10 Bureau to sort and process your cards. Exchanges can be any mode, any band. This is a good opportunity to send and receive cards for the popular contests – Field Day, Sweepstakes, CQ WW, the 10 Meter Contest, and of course, all 10-10 operating events. Remember, however, that both stations MUST have a valid 10-10 number.

Lastly, where do you need to mail your outgoing QSL cards for processing? Here is where you send them:

10-10 QSL Bureau
c/o Jim Stoeber, wi9x
8829 Bermuda Ave.
Caseyville, IL 62232

I hope this helps clarify how the bureau works!

73 – Jim, wi9x



Hello out there wherever you may be.

At the ARRL Yuma Hamfest is K7CWS, (coffee with sugar) Ray #50288, and N6OPR (old Peter Rabbit) Bob #45715 working the booth for 10-10.

The doors opened at 12 noon Friday and there was a long line waiting to get inside as it was a cold and windy day. We had 42 people sign into the guest book Friday. Saturday it rained all day and was very cold. Only 26 sign in. 10X #29 W6RW AZ and 10X #102 WB6NUV CA were the oldest members. KC9KZ 10X #77631 Bill AZ, and AK7RM 10X #77324 AZ were the newest members to stop by.

There were 41 10-10 members and 27 guests. There were \$25,000 in 6 radios up for grabs at 15 tickets for \$20. You did not need to be there to win!! There were several hourly prizes both Friday and Saturday.

It was fun working the booth. Ray and I meet several old friends and several worked in the 10-meter Daily 10-10 nets

Stay well and 73
Bob N6OPR 45715
Director Net Management



Mel KD5DE #33513, Greg WA3GM #46927, and Bob N6OPR #45715 man the 10-10 booth at Hamcation in Orlando FL.

10 Meter Beacons

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

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

73 Dennis Stice WI5V #35806

IARU Region 2 HF Beacon Coordinator

<https://wi5v.net/author/wi5v>





Net Report

Bob Farrow, N6OPR
(#45715)

Net reports for 4th Quarter 2018

MONDAY NETS

28.38 MHz			28.80 MHz		
DATE	TOTAL	NO 10X#	DATE	TOTAL	NO 10X#
1-Oct	2	0	1-Oct	10	0
8-Oct	3	0	8-Oct	8	1
15-Oct	2	0	15-Oct	5	0
22-Oct	2	0	22-Oct	6	0
29-Oct	2	0	29-Oct	11	2
5-Nov	2	0	5-Nov	5	0
12-Nov	2	0	12-Nov	8	0
19-Nov	2	0	19-Nov	7	0
26-Nov	2	0	26-Nov	4	0
3-Dec	2	0	3-Dec	11	1
10-Dec	2	0	10-Dec	8	0
17-Dec	10	1	17-Dec	10	0
24-Dec	2	0	24-Dec	8	0

TUESDAY NETS

28.38 MHz			28.80 MHz		
DATE	TOTAL	NO 10X#	DATE	TOTAL	NO 10X#
2-Oct	9	0	2-Oct	2	0
9-Oct	9	0	9-Oct	2	0
16-Oct	10	0	16-Oct	2	0
23-Oct	8	0	23-Oct	2	0
30-Oct	11	0	30-Oct	2	0
6-Nov	8	0	6-Nov	2	0
13-Nov	10	0	13-Nov	2	0
20-Nov	6	0	20-Nov	2	0
27-Nov	10	0	27-Nov	2	0
4-Dec	6	0	4-Dec	2	0
11-Dec	7	0	11-Dec	2	0
18-Dec	7	0	18-Dec	2	0
25-Dec	10	0	25-Dec	2	0

WEDNESDAY NETS

28.38 MHz			28.80 MHz		
DATE	TOTAL	NO 10X#	DATE	TOTAL	NO 10X#
3-Oct	9	0	3-Oct	4	0
10-Oct	8	0	10-Oct	8	0
17-Oct	9	0	17-Oct	3	0
24-Oct	9	0	17-Oct	3	0
31-Oct	12	0	24-Oct	4	0
7-Nov	10	1	31-Oct	6	0
14-Nov	8	0	7-Nov	4	0
21-Nov	7	0	14-Nov	6	0
28-Nov	6	0	21-Nov	6	0
5-Dec	8	0	28-Nov	4	0
12-Dec	8	0	5-Dec	2	0
19-Dec	8	0	12-Dec	2	0
			19-Dec	4	0

THURSDAY NETS

28.38 MHz			28.80 MHz		
DATE	TOTAL	NO 10X#	DATE	TOTAL	NO 10X#
4-Oct	5	0	4-Oct	3	2
11-Oct	10	0	11-Oct	5	1
18-Oct	9	0	18-Oct	3	1
25-Oct	10	0	25-Oct	4	0
1-Nov	7	0	1-Nov	2	0
8-Nov	9	0	8-Nov	3	1
15-Nov	9	0	15-Nov	2	0
22-Nov	6	0	22-Nov	2	0
29-Nov	12	3	29-Nov	8	0
6-Dec	6	0	6-Dec	2	0
13-Dec	9	0	13-Dec	2	0
20-Dec	8	1	20-Dec	3	1
27-Dec	9	0	27-Dec	3	1

FRIDAY NETS

28.38 MHz			28.80 MHz		
DATE	TOTAL	NO 10X#	DATE	TOTAL	NO 10X#
5-Oct	2	0	5-Oct	6	0
12-Oct	11	0	12-Oct	6	0
19-Oct	2	0	19-Oct	6	0
26-Oct	2	0	26-Oct	7	0
2-Nov	2	0	2-Nov	4	0
9-Nov	2	0	9-Nov	5	0
16-Nov	2	0	16-Nov	5	0
23-Nov	2	0	23-Nov	2	0
30-Nov	2	0	30-Nov	2	0
7-Dec	2	0	7-Dec	2	0
14-Dec	2	0	14-Dec	5	0

FRIDAY NETS (cont.)

28.38 MHz			28.80 MHz		
DATE	TOTAL	NO 10X#	DATE	TOTAL	NO 10X#
21-Dec	2	0	21-Dec	2	0
28-Dec	2	0	28-Dec	11	0

SATURDAY NETS

28.38 MHz			28.80 MHz		
DATE	TOTAL	NO 10X#	DATE	TOTAL	NO 10X#
6-Oct	2	0	6-Oct	X	X
13-Oct	2	0	13-Oct	X	X
20-Oct	2	0	20-Oct	X	X
27-Oct	2	0	27-Oct	X	X
3-Nov	2	0	3-Nov	X	X
10-Nov	2	0	10-Nov	X	X
17-Nov	2	0	17-Nov	X	X
24-Nov	2	0	24-Nov	X	X
1-Dec	2	0	1-Dec	X	X
8-Dec	2	0	8-Dec	X	X
15-Dec	2	0	15-Dec	X	X
22-Dec	2	0	22-Dec	X	X
29-Dec	3	1	29-Dec	X	X

X = No Net

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

10-10 NET CONTROL STATIONS

ALL NETS BEGIN AT 1800Z

Mon (28.380)	Alan, WB9WZI	#76209	IL
Mon (28.800)	Doc, WB6OJB	#70675	CA
Tues (28.380)	Ray, K7CWS	#50288	AZ
Tues (28.800)	Mike, KF4WKY	#70191	NC
Wed (28.380)	Bob, N6OPR	#45715	AZ
Wed (28.800)	Louise, N6ELK	#36654	CA
Thu (28.380)	Bob, N6OPR	#45715	AZ
Thu (28.800)	Robert, KQ4PK	#63201	NC
Fri (28.380)	Terry N0TW	#36547	FL
Fri (28.800)	Bob, K6DNR	#75386	CA
Sat (28.380)	Mike, KF4WKY	#70191	NC
Sat (28.800)	Open. Contact Bob N6OPR for info		
Alternate	Dan, KC8IM	#31959	MI

Sunday **NEVER ON SUNDAY**

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For more information please contact
om@qcwa.org

10-Meter Decagon Loop

First off let me start out by saying my name is Bill "KB5BIL" and I have been a ham for about two years. I upgraded to General class 5 months after getting my Technical certificate. I said I was happy just hanging out on VHF and didn't think I would ever do much else.....famous last words. So I got a great deal on a Yaesu FT-857 and a friend loaned me a Butternut vertical to go with it. Well one thing led to another and I found myself reading about HF radios and all the different antennas. Most of which goes over my head. But enough of all the reading stuck and got me thinking about building a wire antenna. I did the math on a 160M inverted L and got one put up. With my tuner, it works on 160, 80, 40, and works somewhat on 20. So that left me trying to talk on the Ten-Ten net with my Butternut and I just wasn't happy with trying to talk local with it. To fix that, I did some more reading and built a Delta loop and hung that up on one of my pine trees. Wow is all I could say as it made a huge difference in my local contacts, but I was still not getting DX with it. I am OCD and can never leave well enough alone. So did some more reading and read about the different shapes of Loops and how the more it resembled a circle the more efficient it was. Being hard to make a wire antenna round, most people just make them in Delta's, Squares, or Rectangles. Having worked in construction, I decided to use electrical grey PVC pipe and try to build a hexagon antenna with 8 sides. Looking at the options I found I could make it a decagon with 10 sides just as easy, so I changed the shape.



I found a website that allowed me to put in my wire length and it told me how long each flat section needed to be along with the angle of each bend. Using the formula

$1005 / f$ in MHz ($1005/28.4$), the wire needed to be 35.24 feet. I added a couple of feet to it to start with for adjustment purposes. I then took 4, 10' sticks of the pipe and starting with the first piece, marked out the 3.5' spacing from the website calculator. I then used my heat gun to heat and bend the pipe at each of the marks. I didn't bend the pipe the full 36 degrees called for in the calculator as I wanted it to have some outward pull to help it hold its shape. As I worked my way down the pipe I just kept gluing the next joint on as needed till I had all 4 joints glued and bent. I then snaked my wire through the pipe which on

Polygon Calculator

Choose a Regular Polygon
(n=10) Decagon

Choose a Calculation
Find a, r, R, A | Given perimeter P

P = 35.24

Units* ft

Significant Figures 6

Clear Calculate

Answer:
n = 10
a = 3.524 ft
r = 5.42288 ft
R = 5.70195 ft
A = 95.5511 ft²
P = 35.24 ft
x = 144 °
y = 36 °

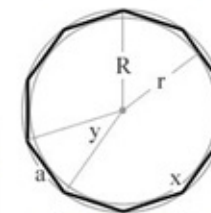
[Report a Problem](#)

Share this Answer Link: [help](#)
Paste this link in email, text or social media:
https://www.calculatorsoup.com/calculators/geometry-plane/polygon.php?n=10&given_data=p&p=35.24&units_length=ft&sf=6&n_last=10&given_data_last=p&action=solve

[Get a Widget for this Calculator](#)

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**Decagon Shape
n=10
A 10 sided polygon**



r = inradius (apothem)
R = circumradius
a = side length
n = number of sides
x = interior angle
y = exterior angle
A = area
P = perimeter
 π = pi = 3.14159...
 $\sqrt{}$ = square root

Polygon Calculator

www.calculatorsoup.com/calculators/geometry-plane/polygon.php

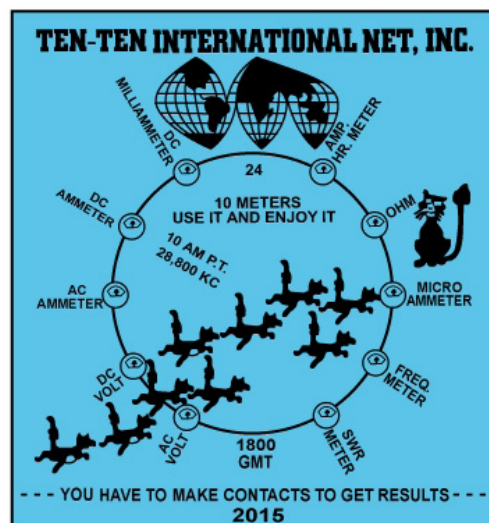
second thought would have been easier to do prior to bending. But that is 20/20 hindsight. I then cut the pipe in the middle of the flat section where they came together. I bought a Tee PVC fitting with the access door to join the two ends and feed my wire out the bottom of the Tee making sure I left both the pipe and wire long. I tied my rope to the corners of what would be the top flat section leaving enough slack to reach the tee at the bottom. This gave me some bottom support I knew I would need when I hooked up my Comtek 4:1 balun. I then hung it up with a 25' piece of RG8X to tune it with. After adjusting the wire and pipe length multiple times, I was able to get the SWR to 1.1 at 28.855 MHz. I then took my Delta Loop down and hung the Decagon Loop in its place with the feed point 10' above ground. The response I got from all my contacts was very positive. Of course, band conditions can affect that, but most of my regular locals said I gained 1-2 S units with the antenna change. Fun Fun Fun! No rest for the weary, I added an Icom IC-7300 the next week and a Heil ICM Silver mic on a Heil boom. Am I done? It is ham radio.....never done!

73's to all,

Bill "KB5BIL"

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.



Licensed at least 25 years ago and licensed today?

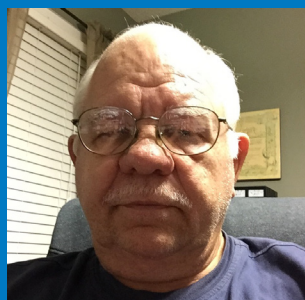
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For more information please contact
om@qcwa.org



QSO Parties

Dan Morris, KZ3T
(#41015)

56th ANNIVERSARY RESULTS FOR 2018

CALL	10-10#	CTX
1. N5MT	24949	11
2. KN4Y	17757	5

Meet the Volunteers Results 2018

CALL	10-10#	CTX
1. N5MT	24949	6
2. KD5HIP	71476	3

2019 WINTER PHONE QSO PARTY

February 2-3

TOP TEN

CALL	10-10#	CTX W	CTX WO	TOTAL
1. DL8YBM	36109	61	148	270
2. DL5HCN	69620	54	2	110
3. DL5HAN	69621	53	2	108
4. DL6DK	39944	35	10	80
5. KQ4PK	63201	22	12	56
6. PA2NJC	30903	23	3	49
6. KM4ODS	77504	22	5	49
7. N4ZCG	56067	19	7	45
8. K7CWS	50288	21	0	42
9. K4PGM	77579	17	0	34

CALL AREA ORDER

CALL AREA 1

CALL	10-10#	CTX W	CTX WO	TOTAL
N1API	25468	8	3	19
N1BRL	77655	5	0	10
N1JW	8993	2	0	4
N1WVQ	73256	1	1	3

CALL AREA 4

CALL	10-10#	CTX W	CTX WO	TOTAL
KQ4PK	63201	22	12	56
KM4ODS	77504	22	5	49
N4ZCG	56067	19	7	45
K4PGM	77579	17	0	34
AK4YS	75328	16	1	33
KJ4RV	37776	15	1	31
K4FET	77603	14	1	29
KK4MCY	77124	13	0	26
N3GTY	50585	12	0	24
N0TW	36547	8	7	23
N4ERM	34524	9	0	18
W4MLW	65162	6	0	12
WB4WXE	7010	1	5	7

CALL AREA 5

CALL	10-10#	CTX W	CTX WO	TOTAL
KD5DE	33513	12	1	25
N5MT	24949	9	4	22
KG5ZMQ	77628	9	1	19
KB5UNX	64337	8	2	18
KM5FF	50356	4	0	8
KM5EH	71103	2	0	4

CALL AREA 7

CALL	10-10#	CTX W	CTX WO	TOTAL
K7CWS	50288	21	0	42
K7QXG	5956	12	0	24
KR7RK	63324	6	2	14
N7QOZ	62599	2	1	5

CALL AREA 8

CALL	10-10#	CTX W	CTX WO	TOTAL
K8DEL	2978	4	14	22
W8PJY	14574	3	1	7
K8IZK	73889	3	1	7

CALL AREA 9

CALL	10-10#	CTX W	CTX WO	TOTAL
N9AVY	43313	3	3	9
KC9TQU	77157	3	2	8

COUNTRY ENTRIES**GERMANY**

CALL	10-10#	CTX W	CTX WO	TOTAL
DL8YBM	36109	61	148	270
DL5HCN	69620	54	2	110
DL5HAN	69621	53	2	108
DL6DK	39944	35	10	80

NETHERLANDS

CALL	10-10#	CTX W	CTX WO	TOTAL
PA2NJC	30903	23	3	49

LOW POWER

CALL	10-10#	CTX W	CTX WO	TOTAL
PA2NJC	30903	23	3	49
N4ZCG	56067	19	7	45
K4PGM	77579	17	0	34
AK4YS	75328	16	1	33
K4FET	77603	14	1	29

KK4MCY	77124	13	0	26
KD5DE	33513	12	1	25
K7QXG	5956	12	0	24
N3GTU	50585	12	0	24
N1API	25468	8	3	19
N4ERM	34524	9	0	18
KB5UNX	64337	8	2	18
KR7RK	63324	6	2	14
W4MLW	65162	6	0	12
N1BRL	77655	5	0	10
N0CUN	33031	3	3	9
N9AVY	43313	3	3	9
KM5FF	50356	4	0	8
KC9TQU	77157	3	2	8
W0RTV	13962	3	1	7
W8PJY	14574	3	1	7
KA0HZP	31562	3	1	7
N7QOZ	62599	2	1	5
N1JW	8993	2	0	4
KM5EH	71103	2	0	4
KC0VDY	72580	0	1	1

HIGH POWER

CALL	10-10#	CTX W	CTX WO	TOTAL
DL8YBM	36109	61	148	270
DL5HCN	69620	54	2	110
DL5HAN	69621	53	2	108
DL6DK	39944	35	10	80
KQ4PK	63201	22	12	56
KM4ODS	77504	22	5	49
K7CWS	50288	21	0	42
N0TW	36547	8	7	23
K8DEL	2978	4	14	22

N5MT	24949	9	4	22
KG5ZMQ	77628	9	1	19
WB4WXE	7010	1	5	7
K8IZK	73889	3	1	7
N1WVQ	73256	1	1	3

CLUB ENTRIES

CALL	10-10#	CTX W	CTX WO	TOTAL	OPS
DF0IA	68914	61	148	270	DL8YBM
DF0HHT	74877	54	2	110	DL5HCN
DF0HM	74878	53	2	108	DL5HAN
					DL6DK/
DF0AG	74925	36	9	81	DL1AXX
DF0VK	75885	36	9	81	DL6DK/DF7DJ
DL0BIC	77526	35	10	80	DL6DK
W4OIX	54432	22	12	56	KQ4PK
W5RRV	42114	12	1	25	KD5DE
NZ4FF	77686	12	0	24	N3GTY
NM5H	68588	9	4	22	N5MT
W1NRG	29650	8	3	19	N1API

NOTICE OF CHANGE OF POWER REQUIREMENTS FOR 10-10 QSO PARTIES AND ADDITION OF REMOTE OPERATIONS

The following changes of power requirements and remote operations was proposed before the 10-10 Board of Directors. The following is what has been modified.

MODIFICATION TO PARA 5.2.4 OF THE QSO PARTY RULES:

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

CHAPTER ENTRIES

CHAPTER	LOGS	PTS
HANSE	10	1298
POSSUM TROT	14	461
NEANDERTHAL	2	98
STEAMBOAT	3	69
CASTLE CRAIG	5	64
HOUSTON SHOT	2	44
ARIZONA DESERT	1	42
CATT	3	36
GATEWAY	4	31
OREGON TRAIL	1	24
LONESTAR	1	18
NM MUD DUCKS	1	8

CHECK LOGS

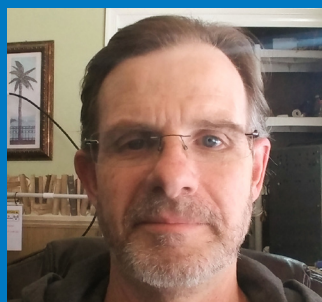
CALL	10-10#	CTX W	CTX WO	TOTAL	OPS
PA6TEN	75925	23	3	49	PA2NJC
K4MN	24874	12	0	24	N3GTY
KC1SA	77232	6	0	12	0
KR7YAN	74819	4	2	10	0

LOW POWER: Same as QRP listed above except that output power for Digital operations is max 50 watts and CW/RTTY/Phone operations is max 100 watts during the entire event.

HIGH POWER: Same as QRP listed above except that output power for Digital operations is max 100 watts and CW/RTTY/Phone operations is greater than 100 watts during the event.

ADDITION TO PARAGRAPH 5.2.5 OF THE QSO PARTY RULES:

No matter your physical location, your QTH is the location of the transmitting antenna.



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
1655	W5DEA	Joseph L. Manena - Lake Charles, LA
1657	K8VXD	Daniel D. Jernigan - Findlay, OH
2389	W4ITX	Larry D. Freeman - Taylors, SC
3732	K7WJJ	Burton D. Calkins - Longview, WA
5093	W3FIP	Frank I. Pannebaker, Jr. - Millsboro, DE
5291	N4ZX	John M. Lambert - Charlotte, NC
5456	W4RIW	Walter R. Lightner - Lexington, KY
5511	K8SMC	William T. Osborn - Jackson, MI
5533	WA2NCF	Howard R. Wilson - Poughkeepsie, NY
5924	W2GQC	James A. Marino - Helena, MT
5987	N5AX	Hilary C. McDonald - Barstow, CA
6033	AC4GO	James A. Hampton - Decatur, AL
6102	W4BGH	Bernard G. Huth - Riverview, FL
8014	K8GHE	John R. Allen - Poland, OH
8613	W3AEG	Milton E. Holdridge, Jr. - Highland, MD
9528	W5ZHI	Richard E. Lambert - Albuquerque, NM
9553	WA6OTV	Wilbur F. Wilhelm, Jr. - Hidden Hills, CA
9581	K0OU	Stephen C. Lufcy - Kansas City, MO
10191	NN1A	Alfred W. Cook - Beverly, MA
10556	WA4BIM	Charles A. Baisch, Jr. - Vestavia Hills, AL
13547	WA4IMR	Bernard G. Herring - Dothan, AL
13654	K5UOR	Hubert S. Crain - China Spring, TX
16289	WB8OBW	Howard N. Mark - Willard, OH
16836	KV3I	Albert E. Gianeksi - Butler, PA
18730	WW4I	Philip C. Henry - Greenwood, SC
19463	W0ACP	Gary A. Saint - Idaho Springs, CO
19944	W3MPN	Goro G. Asaki - Ellicott, MD
20221	KL7AZ	Florence R. Weber - Fairbanks, AK
20522	N1ADE	Philip A. Mongelluzzo, Sr. - Ormond Beach, FL
20983	KB4IH	Joe I. Parker - Fayetteville, NC
21171	KC6X	Willard D. Wolfshohi - Omaha, NE
21558	AA2AE	John H. Pearson - Long Lake, NY
21934	KL7AG	Albert F. Weber - Fairbanks, AK
23615	NW7O	James R. Frye - Great Falls, MT
23665	WD5GBL	James R. Jenkins - Westwego, LA
24265	AA9CN	Joel E. Lepounce - Pleasant Prairie, WI
24635	VE2ALZ	Allan C. Brown - Dorval, Quebec
24943	KE5WN	William C. Millis - Dallas, TX
25517	KL7JJH	David Lee Byrd - Anchorage, AK

10-10#	Call	Name - City, State
25758	N3ATV	William "Tenney" Brown - Catonsville, MD
26190	KJ4ZM	Sam B. Bridges - Chester, SC
26715	NV4Z	Mary L. Tomlinson - Naples, FL
27820	AA5VU	Richard M. Kriss - Austin, TX
27835	K7CI	Joseph V. Gardner - Fishertown, PA
28465	K7DRA	David R. Allman, Sr. - Rock Springs, WY
28715	W3JH	John P. Heffley - Connellsville, PA
29060	AL7CW	Jerry W. Jordan - St. Mary's, AK
29730	N4EWG	Kelly K. Kanode - Fayetteville, NC
29922	K1ROZ	Richard D. Simpson - New Hampton, NH
31917	WB8SIO	James F. Dean - Vermilion, OH
32003	W4KUZ	Wendell E. Booth - Jackson, KY
32456	N9BOY	William F. Norris - Evansville, IN
32519	W1VSX	Malcolm E. Tumey - Brandenton, FL
33918	WA1GCT	Roger L. Perry - Telephone, TX
34597	WB4KUZ	Dwayne A. Wimberly - Hoover, AL
34636	WR5Y	Harold R. Guest - Cotulla, TX
35309	K1BYS	Wilfred P. Halliday - Vernon, CT
38111	W8YGW	Gordon K. Neal - Hamersville, OH
39487	KT4Z	Richard D. Blevins - Pulaski, VA
39684	K1KU	Darrel L. Daley - Putney, VT
40058	W5WP	William D. Paperman - Cut and Shoot, TX
43564	K6QDC	Arnold S. Lindquist - Davis, CA
45645	NI5DX	William M. Loeschman - Angleton, TX
46275	N7HKF	Carl E. Ray - Spokane, WA
46276	K17BP	Ted I. Hollingsworth - Caldwell, ID
47350	KW4BG	Daniel C. Clark, Jr. - Fayetteville, NC
48316	WR2D	Edward R. Kinley, IV - Corry, PA
49300	K5FNN	Charles P. Winder, Jr. - Houma, LA
49311	KB5CSQ	Betty Jo Byrd - Gulfport, MI
49971	KB4MHY	Byron N. Marny - Chesterfield, VA
53344	N1GSC	David G. Earle - Berverly, MA
53903	KE0AY	Francis G. Tissot - Florissant, MO
54959	KA9RAQ	Paul D. Headland - Macon, GA
56324	N0LGU	David Bauer - Fremont, NE
57289	K6BNS	Bruce N. Smith - Walnut Creek, CA
57652	KA5NWA	Jerry L. James - Benton, AR
58044	NU7E	Walter J. Micon - Maple Falls, WA
60141	WN1OTV	Donald A. Benson - Millinocket, ME
60893	WK4Y	Roy D. Davis, Jr. - Henrico, VA
62399	W0BOB	Robert I. Goza - Beaufort, MO
64112	AK4JW	James W. Weigand - Groveland, FL
65037	W5WK	Carl C. Conrad - Benbrook, TX
66355	N0XDW	Jeff M. Gerst - Akron, CO
66384	AB7IE	Bernard P. Michlanski - Springfield, OR
66448	KA9HIR	Richard Lynch, Jr. - Boonville, IN
66602	KR4EP	Hicklin A. Harrel, Jr. - Fort Worth, TX
67083	KX5F	Patrick C. Burns - Oklahoma City, OK
67969	N0DK	Emil F. Wiegenda - Gladstone, ND
68129	N3TGB	Doris T. Slye - Millersville, MD

10-10#	Call	Name - City, State
68190	N2PIG	Alexander J. Dutkewych - Pulteney, NY
68825	WA6YJR	Jack H. Eddy - La Honda, CA
69455	N5QK	Jim C. Fife - Livingston, LA
69492	N1ZZO	George L. Kelly - Scituate, MA
70062	W1RXH	Ernest L. Parsons - Bowdoin, ME
70831	WA5LOC	Jerry W. Sparrow - Bryant, AR
70908	N9HZD	James C. Wescoat - Mascoutah, IL
72052	WA3FKT	George E. Scott, Jr. - Annapolis, MD
73025	W2GCK	George C. Keiser - Fairport, NY
74626	N8MNI	Mark Crosbie - London, OH
75472	W4MUO	Wyatt T. Poe, Jr. - Huntsville, AL
75718	KE5WQU	Donna M. Bennett - Wichita Falls, KS

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

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 four \$2000 college scholarships to be awarded in 2019. The Foundation was created in 2001 and is a qualified 501(c)(3) tax exempt organization and contributions are tax deductible. Why not consider a donation as a Chapter or an individual in memory of a fellow ham or loved one. This quarter Mary Lou Steinkamp sent a Christmas gift donation in the name of Patricia and Jeff Steinkamp, N7YG #65084. If you haven't donated before, we want you to know that all donations are appreciated and they do add up. At the time you make a donation to your favorite charity, please consider a donation to the 10-10 Scholarship Foundation. **If you have an employer matching program, please let us know.**

If you make a donation of \$25 or more you are eligible to receive one of the 10-10 pins. As more and more members have told me not to send a pin and want the maximum amount of their donation to go to the students, ***if you have made a qualifying donation and would like a pin, please contact me at wa2suh@aol.com.*** To pay by credit card see payment information on [Page 27](#) or send your check to me or the Data Manager. Our addresses can be found on [Page 27](#).

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)

N5MT	Michael Davidson	24949
KE6DRN	Charles Thompson	68855

Gold (\$500 to \$999)

WB0CON	Eva Donaldson	53964
KB5UJY	Kenneth Schulz	63342

Silver (\$100 to \$499)

K4QYC	Joe Sport	51459
N3TGB	Doris Slye	68129
AD5IF	John McCrevey	73372

Bronze (Up to \$99)

KD5DE	Mel Sojka	33513
JH1CML	Tetsou Kitou	50451
KD4EFJ	Charles Walther	64712
N7YG	Jeff Steinkamp	65084
NT6I	Robert Bruce	70454
N9XHN	David McMullen	72762
W4OFR	Jay Smith	74051
NQ6A	David Quillen	76183

10-10 SCHOLARSHIP APPLICANT INFORMATION

Each year the 10-10 International Net, through our non-profit corporation, the 10-10 Scholarship Foundation, funds four \$2000 scholarships, which are administered on our behalf by the Foundation for Amateur Radio (FAR). It is suggested that every 10-10 member encourage qualified college-bound amateur radio operators to take advantage of this opportunity. The five most recent winners are featured in on the 10-10 website. **Over the past 31 years, 10-10 has funded 118 scholarships valued at \$147,000.**

Applicants must be licensed amateurs. There is no restriction on the course of study, but applicants must intend to seek at least an Associate Degree from a college or university. Non-U.S. amateurs and those seeking graduate degrees are also eligible, as well as students who study outside the United States. Initial applications must be received by FAR prior to April 15th of each year. Download an application from FAR's website: <http://www.farweb.org> or request an application from:

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

TEN-TEN AWARDS

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

TOP TEN HONOR ROLL

No.	CONTACTS	CALL	10-10#
1.	24600	WA5JDU	3017
2.	11700	K0PV	9902
3.	11700	N5XZ	4530
4.	11300	DL8YBM	36109
5.	10600	N1API	25468
6.	10000	K6PZE	1341
7.	9800	N5DAS	35877
8.	8800	AC6FU	10937
9.	8200	K5FBS	48461
10.	8200	N6OPR	45715

TOP TEN CLUB

No.	CONTACTS	CALL	10-10#
1.	10100	WD0SFT	37933
2.	4400	K6MQ	K6MQ
3.	3400	DL0X	DL0X
4.	2100	W8PGW	W8PGW
5.	1800	W1NRG	W1NRG
6.	1200	NM5MD	NM5MD
7.	1100	W4MNM	W4MNM

1000+ MILESTONE BARS

1000 BAR

NO.	CALL	10-10#
1580	DL5HAN	69621
1581	DL5HCN	69620

AWARDS MANAGERS

BAR 100-900..	Dan Morris, KZ3T #41015	3162 Covington Way, Lenoir NC 28645	(828) 728-5049	dbmorris315@gmail.com
Bar 1000+	Tony Lisnak, N2WIE, #66790	192 Greenvale Ave, Yonkers, NY 10703	(914) 476-4032	lisnak@optonline.net
VP Bar	Bob Bishchoff K4QHH #26040	180 Persimmon, Rutherfordton, NC 28139-9319	(000) 000-0000	rabisch@hotmail.com
VP WAS.	Bob Bishchoff K4QHH #26040	180 Persimmon, Rutherfordton, NC 28139-9319	(000) 000-0000	rabisch@hotmail.com
VP Lucky 13 . .	Dan Morris KZ3T #41015	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	kevinemt1d@tvconnect.net
Counties	Brad Kimble, K0DBK #55192	3855 66th St. E., Inver Grove Hts, MN 55076-2222	(651) 755-9192	kzerodbk@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.	Mel Sojka, KD5DE #33513	353 Atlantic Ave., Shreveport, LA 71105-2909	(318) 861-7012	kd5de@nwla.com
Mobile	Bob Bishchoff K4QHH #26040	180 Persimmon, Rutherfordton, NC 28139-9319	(000) 000-0000	rabisch@hotmail.com
OM/XYL	Marcus Lieberman, KM5EH #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
GB Counties . .	Mike Crawshaw, G4BLH #18446	Moved - New address coming	No Phone	g4blh@zen.co.uk
Scouts	Rex Landreth, KD6FEC #77131	30 Alida Road, Braintree, MA 02184	No Phone	kd6fec@gmail.com

The Rotatable Dipole Revisited

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.

Hill-topping is a popular pastime when 10 meters is open. We grab a small rig, put a portable antenna in the truck or pick-up bed, and head for the highest pretty hill we can find for an afternoon of casual QSOs and sight-seeing. Where hills are scarce, an open flat area will do, either on the plains or by a seashore. We can embellish the scenario with QSO party challenges, QRP trials, and other activities. Whatever the exact plan, the goal is enjoyment.

Small rigs for 10 meters are plentiful. However, our antenna needs are usually not off-the-shelf items. We can press a mobile antenna into use but sometimes we want something with a bit more performance. Since we have several hours set aside for the trip, a few minutes assembly and disassembly is not much to ask in exchange for a better antenna. However, storage space during transport should be minimal.

With a little home construction using readily available materials, we can have a full size dipole that stores in a package about 5' long by a few inches in diameter, including some mast sections to get the antenna about 20' in the air. The elements disassemble and store inside a PVC tube. The tube bundles easily with 5' TV mast sections using luggage straps or dog collars.

THE MATERIALS

Let's begin with the materials, all of which are common. However, some are easier to obtain than others.

1. Rod Elements: Because I had access to some aluminum rod, these formed the initial set of dipole elements. Each element is broken roughly in half on each side of center, with a maximum length per unit of 4.5 feet. Hence, all will store inside a 5' length of tubing.

The final version of the rod element used a 5/16" diameter inner section and a 3/16" diameter outer section. I experimented with 1/4" diameter inner sections and found them too weak where threading was added. However, 5/16" diameter rod is harder to find, since it is not a normally stocked value at either hardware depots or ham vendors. My source was a ground-plane set of radials from a defunct CB antenna. With stock 3/16" aluminum rods as outer sections, full size elements are easily made.

The rods will require threading. Thread both ends of the inner rod. One end uses 5/16" stainless steel nuts and washers. The other end is a link that uses a short (1.5") section of 1/2" square aluminum stock cut from a scrap plate. A tap and die set is essential for making these elements, since the link piece requires 5/16 X 18 tapping at one end and #10 X 24 tapping on the other. If you have access to the stock and can do the work (or have friends who can assist), the

rod elements are the most compact for storage.

2. Tube Elements: Aluminum tubing is available from ham vendors in 1/2" and 3/8" diameter 6061-T6 or 6063-T832. These elements nest firmly, so the inside surface of the 1/2" tubes must be smooth. The cost of enough tubing to construct a dipole is remarkable small.

The larger elements cut neatly with a pipe cutter, which I prefer to a hack saw to minimize deformation of the tube. All element junctions are made with #8 stainless steel nuts and bolts through pre-drilled and thoroughly deburred holes. I tend to avoid washers, since they tend to get lost in the hilltop grass. Although permanently installed antenna elements deserve more durable fastening for both mechanical and electrical purposes, portable antennas require quick assembly and disassembly with no deformation that will prevent storing the smaller tubing inside the larger – and both inside a PVC tube.

I also have some scrap TV antenna elements of similar materials, but I rejected them for this project. TV elements are often seamed and only approximately round, making storage a problem. They are also weak for 10-meter use. Finally, I wanted to see what a thoroughly reproducible antenna might look like.

3. PVC: For this project, 1 1/4" nominal schedule 40 PVC is the main support material. In temporary portable use, none of the concerns about UV susceptibility trouble the project, and the RF characteristics are fully adequate to all phases of the project. 1 1/4" nominal schedule 40 PVC has dimensions closer to 1 11/16" outside diameter and 1 3/8" inside diameter. The inside diameter is just big enough to carry up to four 1/2" diameter aluminum tubes inside, with the 3/8" diameter tubes inside those. Schedule 40 PVC is fairly hefty, but a 5' tube – for storage of the dipole – is reasonably manageable. In addition to the 5' tube sections, the project uses end caps wherever there is an open end. The caps perform two functions: they close the tubing for storage and they prevent tubing deformation under the continued weight of the elements. The caps are friction-fitted only for regular removal and replacement.

The only other Schedule 40 1 1/4" fittings needed are threaded junctions. These junctions permit the dipole hub assembly to swage nicely over a standard 1 1/4" TV mast. Although some of the grey electrical conduit PVC materials are suitable substitutes for the Schedule 40 plumbing materials, the threaded connectors are not. They have thinner walls and a larger inside diameter that lets TV masting slide through.

4. Miscellaneous Materials: The antennas also require a number of common items, including male and female coax connectors, along with some coaxial cables. As mounting plates for the female connectors (1-hole SO-239s), I used a scrap length of 1" by 1" by 1/16" thick aluminum L-stock. I punched the 5/8" mounting holes for each needed bracket and then cut off a 1" wide section for final edge smoothing and mounting hole drilling. Two sets of #6 and #8

stainless steel nuts, bolts, and lock washers mount the bracket to the tube, with the coax connector mounted last.

Note that I have minimized the variety of hardware necessary for assembly. The tubing version uses #8 stainless steel throughout so that a single screwdriver and a 11/32" or 3/8" nut driver (depending on the specific hardware used) can be part of the dedicated portable tool kit. The rod version requires 5/16" nuts and the link pieces both of which require 1/2" wrenches. The only other tool in the kit is a bottle brush to clean the ends of the tubes for each use. The tools and a few supplies fit in a short scrap PVC tube with end caps.

5. **Mast:** For a 20' target antenna height, PVC is both heavy and a bit wobbly. Therefore, I have four 5' sections of TV mast. Each section locks with a tab in the next lower one. Together, they form a satisfactory hill-topping mast with the antenna on top. A variety of bracing and guying schemes can be used for temporary stability. When the wind is sufficient to threaten the antenna installation, it is usually time to go home anyway.

These notes on materials appear here at the beginning so that as you look at the simple antenna, you can be planning substitutes that you prefer – or have – or can obtain.

A DIPOLE IN A TUBE

Since the dipole can use either rods or tubing, let's start with the dipole composed of aluminum rod elements that store in a PVC tube. Figure 1 shows the details of the element mounting to a short (1') section of PVC. The threaded 5/16" rods go through the sides of the tube and are locked in place with inner and outer nuts. A second set of outer nuts clamps the O-ring connectors from the coax connector, mounted on its plate and secured to the PVC hub. Leave room for the cap to fit over the end, but do not place the rod holes so far down the hub that you can not start the nut with your fingers.

If you use rods, as in this example, the overall length should be about 7.0'. Allow a bit extra for trimming to perfection. For a tubing version using 4.5' inner sections of 1/2" diameter aluminum and 3/8" diameter outer sections, the overall length should be about 16.78'. Leave extra for tubing overlap, since the 3/8" diameter tube slides inside the large size.

Figure 2 shows the drilled and tapped link piece. When tapping this stock, be sure to follow the recommended guidelines for the holes to drill before using the tap. An undersized hole may snap the tap, while oversized hole will not have secure threads. If you have not used a tap and die set before, it makes a good addition to the shop. Just go slow, follow recommendations, and add a drop of oil to the work every now and then. Afterwards, clean the work thoroughly to remove the lubricating oil.

The final assembly of the dipole requires a cemented Schedule 40 female threaded coupling at the bottom of the hub section. A male coupling cemented

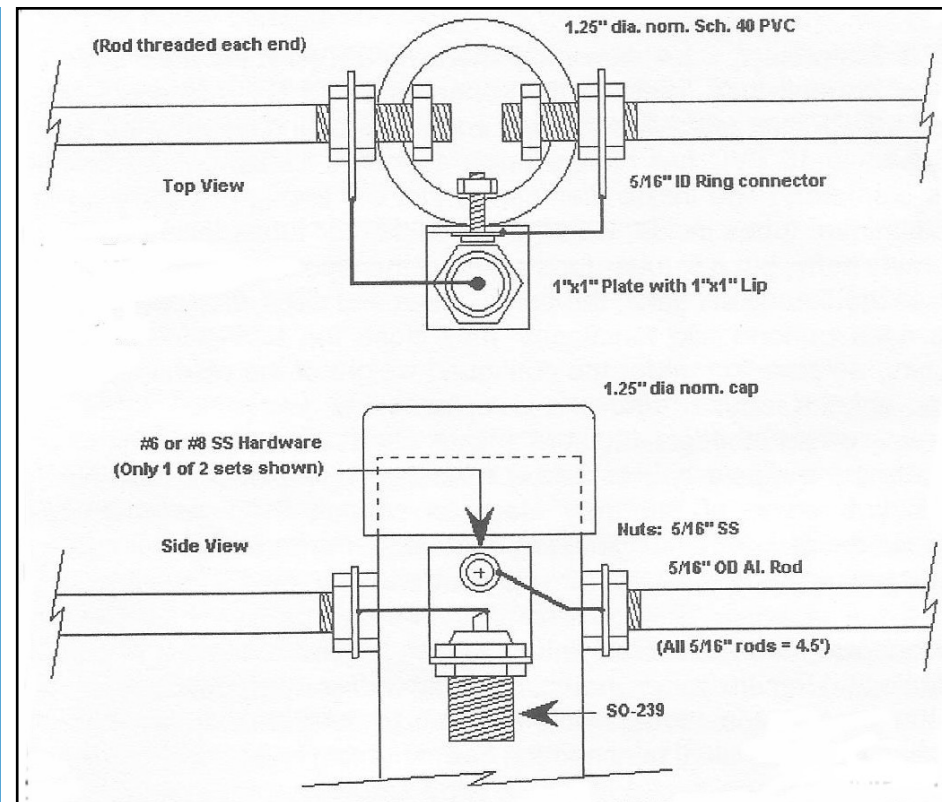


Figure 1. 5/16" Rod Element Junction Detail

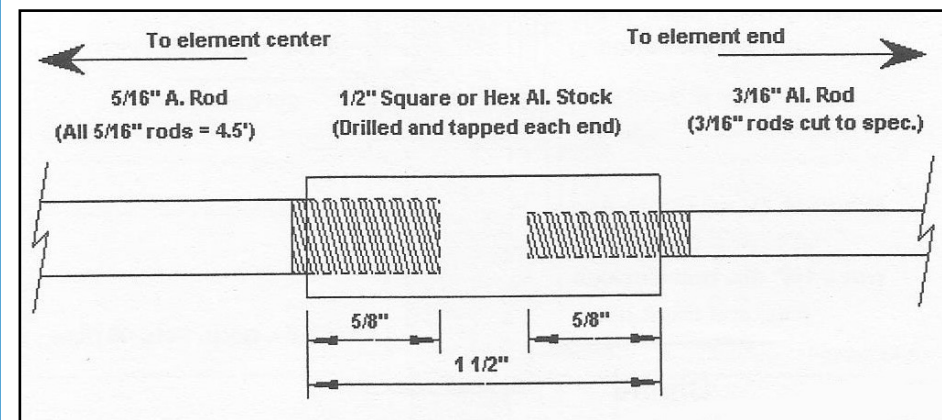


Figure 2. Rod Junction Detail

to another section of tubing, shown as a short piece in Figure 3. The male section inside diameter is small enough to fit over the reduced diameter at the end of the TV mast but swage firmly on the enlarged part of the mast.

You have a choice here. You can add a smooth PVC coupling cemented to a longer section of tubing, with a cap (cemented or friction fit) to the far end. The coupling will then friction fit the short tube in Figure 3 to form a storage tube for the antenna elements. Alternatively, you can make the tube section from the male coupling downward from one piece of PVC with a friction-fit cap. When in use as an antenna, the entire tube up to the male connector fits over the TV mast.

The dipole requires about 10 minutes to set up and a similar period to disassemble and store. Everything fits inside the hub and storage tube, although the SO-239 remains attached to the outside of the hub. An old white sock covers the connector and bracket during storage and transport.

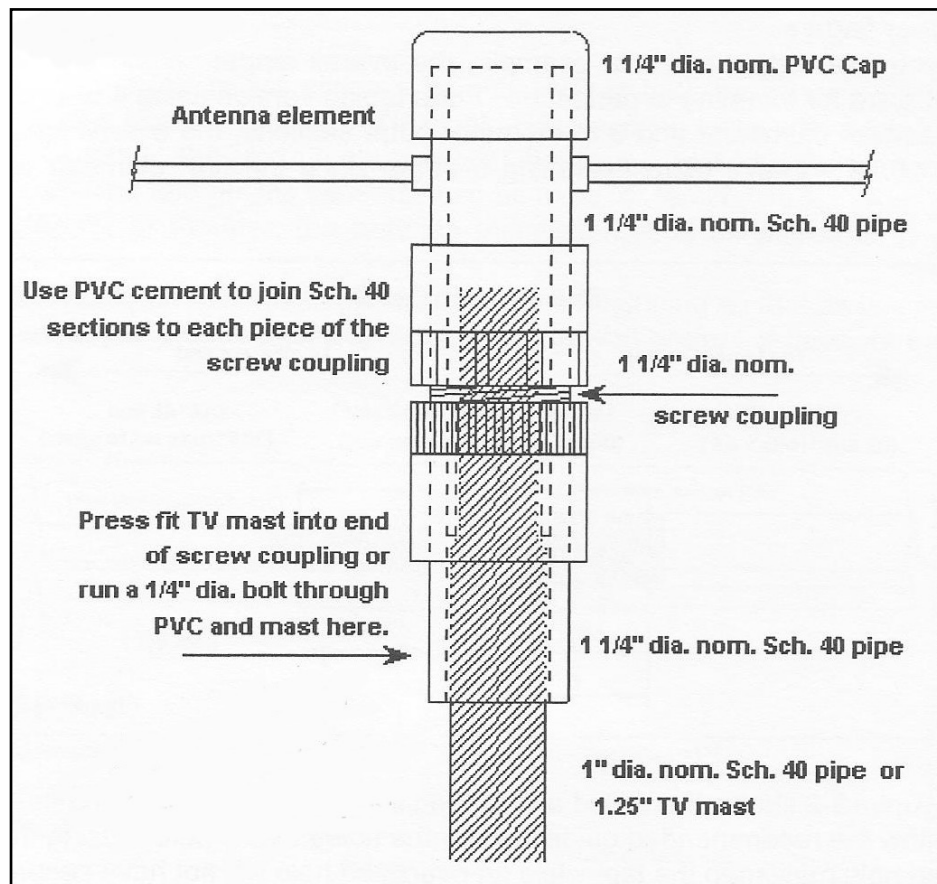


Figure 3. Dipole Element Junction-to-Mast Assembly

The tube version has a slightly broader SWR curve due to the fatter elements, but both versions of the antenna will cover well over the first MHz of 10 meters with under 2:1 SWR to a 50-ohm feedline, even though the resonant feedpoint impedance with the antenna at a 20' height is about 65-ohms resistive. Dipole azimuth patterns are too common to need repetition here.

Tuning up the antenna calls for setting the element lengths slightly long. For the rod version, use longer outer element sections. For the tube version, with no holes drilled in the inner tubing, set the 3/8" section long. Using a temporary set-up in the open that permits raising and lowering the antenna easily, simply trim the outer rod or slide in the 3/8" tubing until the SWR is lowest at your desired center frequency. Once the outer rod length is correct, smooth the edges of the trimmed end. For the 3/8" tubing, mark and drill the holes that align with those in the 1/2" tubing. See Figure 3 for the details of the element-to-hub construction.

We have already examined how to mount rod elements. Tube elements require a slightly different technique, as show in Figure 4. The boom holes are

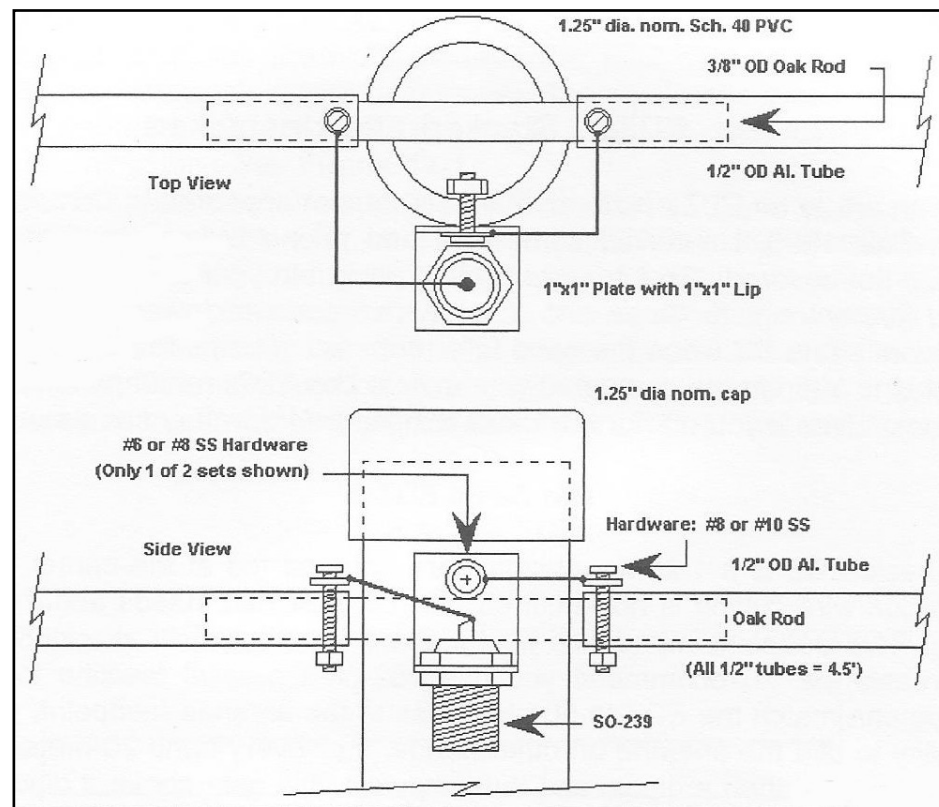


Figure 4. 1/2" Tube Element Junction Detail

3/8" diameter. Through them, run a 2' (or longer) length of 3/8" insulated rod. Fiberglass rod is ideal, but an oak rod from the hardware depot will also work if it never gets wet.

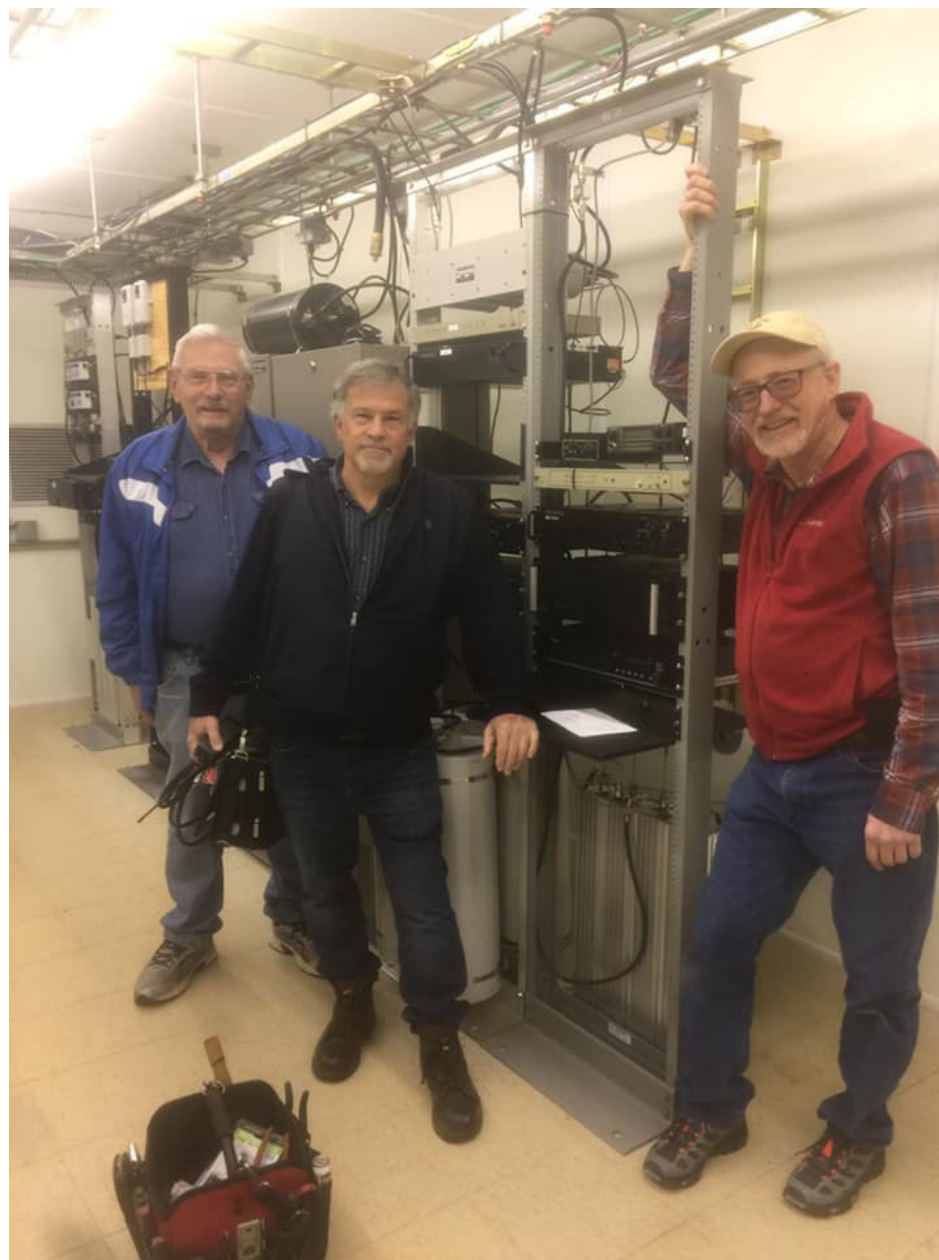
The dipole is the most flexible of the antennas in my collection. One 8-year-old version (written up for *10-10 News* before *An-Ten-ten-nas* was born) has traveled the Southeast on loan. The antenna has been mounted at every angle, including horizontal, from the balconies of upper-story vacation condos. RG-8X or RG-58 are suitable for short (20') feedline runs. The addition of a 1:1 "choke-balun" (coiled coax or W2DU design) is never out of order. If surroundings create a slightly high SWR, and the rig has a built-in tuner, by all means use it. Losses will be slight.

Minor element drooping has no effect on performance. (I have modeled the element droop and differences show up only in the second decimal place of any performance figure.) I have avoided structural materials that are only marginally adequate. Aluminum rods may be the most difficult item to find in the 5/16" diameter. Everything else is available from ham vendors or from hardware depots.

For further data on the dipole in a tube – and a 2-element hilltopping Yagi that uses the same element storage system – see *The ARRL Antenna Compendium*, vol. 6 pp. 1-9.

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.



KD5DE Mel #33513, K5SL Randy #10230, and W5SUM Ronnie #2019 creating a 10-meter FM link on the WN5AIA 147.03 repeater. This is a controlled access link and it should be fun this fall.

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 2019

AJ7B, Randy.....	Newsletter Editor	KZ3T, Dan.....	Director/QSO Party Manager
G4BLH, Mike	Awards – GB	N0TW, Terry	Past President
K0DBK, Brad	Awards – Counties	N2WIE, Tony.....	Awards – 1000+ Bars
KD2NOM, Mark	SK Manager	N5MT, Mike.....	Awards – DX
K4QHH, Bob.....	Award Manager-Mobile & VP	N6ELK, Louise.....	Net Control
K5BKT, Peggy	Committee Member	N6OPR, Bob.....	Director/Net Manager
K5ERJ, Ed	Committee Member	N7YG, Jeff.....	IT Manager
K6DNR, Bob	Net Control	N9AC, Gerald	W6OI Trustee
K6RDK, David	Data/ Membership Manager	NP2MR, David.....	Committee Member
K7CWS, Ray	Net Control	NZ1I, Kevin.....	Awards WAC
KA0ZPP, Jim	Director/Chapter Coordinator	VA7GY, Garry	Committee Member
KA5VVD, Bob	Committee Member	VE3MEW, Bill	Committee Member
KC1BTA, Jason	Scout Award Manager	W4MAA, Bobby	Committee Member
KC5ILO, Tom	Director/ Publications	W5DJT, David.....	Committee Member
KD5DE, Mel.....	President	W5SUM, Ronnie.....	Historian
KD6FEC, Rex.....	Scout Certificage Manger	WA2SUH, Larry	Scholarship Manager
KE1HG, Charles	Committee Member	WA3GM, Greg	Vice President
KF4WKY, Mike.....	Net Control	WB0CON, Eva	Awards – WAS
KI6OY, Lee	Awards – CW	WB6OJB, Arnold.....	Net Control
KM5EH, Marcus	Director/Awards Manager	WB9WZI, Alan	Net Control
KM5FF, Eddie.....	Awards – WPX	WI9X, Jim	QSL Bureau Manager
KQ4PK, Robert.....	Net Control	WN4AMO, Paul	Director/Publicity
KR7RK, Keith	Treasurer		

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

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

The Radio Amateur is:

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

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

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

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.

WOULD YOU LIKE TO JOIN 10-10?

Here is what you need:

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

TYPES OF MEMBERSHIPS

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

Primary Membership

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

Family Membership

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

Life Membership

Life membership is available and may be paid in one lump sum or spread across two or three 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, Money Order or IRC's (\$1USD per IRC). Due to banking regulations Credit Cards cannot be accepted for merchandise. Membership Services and Scholarship Donations can be made via credit card using the secure shopping cart at www.ten-ten.org

Mail to:

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

SCHOLARSHIP DONATIONS

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

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

TEN-TEN QSO PARTY RULES

5.2 10-10 QSO PARTIES

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

5.2.1 WHO IS ELIGIBLE?

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

5.2.2 WHEN ARE THE QSO PARTIES?

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

Winter Phone - held on the first full weekend in February

0001 UTC Saturday through 2359 UTC Sunday.

Spring Digital - held on the last full weekend in April.

0001 UTC Saturday through 2359 UTC Sunday.

Spring CW - held on the first full weekend in May.

0001 UTC Saturday through 2359 UTC Sunday.

Open Season (PSK) - held on the first full weekend in June

0001 UTC Saturday through 2359 UTC Sunday.

Spirit of 76 - 7 day, 6 mode event centering around 4 July each year - 0001 UTC Monday through 2359 UTC Sunday.

Summer Phone - held on the first full weekend in August.

0001 UTC Saturday through 2359 UTC Sunday.

Sprint - a 24 hour event held on October 10th (10-10).

0001 UTC through 2359 UTC.

Fall CW - held on the third full weekend in October.

0001 UTC Saturday through 2359 UTC Sunday.

Fall Digital - held on the second full weekend in November.

0001 UTC Saturday through 2359 UTC Sunday.

5.2.3 FREQUENCY AND MODES

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

5.2.4 ENTRY CLASSIFICATION

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

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

LOW POWER: Same as QRP listed above except that output power for Digital operations is max 50 watts and CW/RTTY/Phone operations is max 100 watts during the entire event.

HIGH POWER: Same as QRP listed above except that output power for Digital operations is max 100 watts and CW/RTTY/Phone operations is greater than 100 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. If a single transmitter becomes inoperable, it is permissible to change to a replacement transmitter. 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.

5.2.9 QSO PARTY ENTRIES

Logs shall be forwarded to the QSO Party Manager as identified in the 10-10 NEWS or on the 10-10 web site. It is strongly suggested that logs be sent as soon as possible after the close of the event. It is also recommended that DX logs should be sent AIR Mail to insure they are received in good time. Any logs received with a postmark date AFTER the deadline date will be handled as a check log. Any logs received more than 8 days after the entry deadline, regardless of postmark, will be discarded. LOGS MAY BE SENT VIA Email and/or uploaded to the KJ4IZW contest scorer. Q95 files are not a proper format nor are they readable, therefore, they will not be accepted.

5.2.9.1 ENTRY DESCRIPTION

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

5.2.9.2 ENTRY DEADLINES

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

5.2.10 QSO PARTY RESULTS AND AWARDS

QSO Party results will be posted on the 10-10 web site about 15 days after the closing deadline for the event and also printed in the 10-10 NEWS in the appropriate issue. Awards will be issued by the certificate manager for Top Ten Individual scorers in the World, the top individual scorer in each US Call Area (W0-W9), each DX Country, and for top QRP, 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: 2010 is the 48th anniversary year of 10-10 International Net, Inc. Contact with members containing a "48" in their membership number (i.e., 72048, 69485, 64854, 48126, 00487) would count toward the event. Each year the anniversary number changes, making a new group of members the focus of the event and promoting the use of the 10-meter band. All general rules are applicable with the following exceptions: During the calendar year (January 1 through December 31) make legal 10-10 contacts with 10-10 Number, Date, Call Sign, QTH with members

containing the anniversary year in their membership number as described above.

In the MEET THE VOLUNTEERS event, entrants may submit a log of contacts with members listed in the 10-10 NEWS as being a 10-10 volunteer. One contact per volunteer is permitted, regardless of mode of contact. In both events, contacts must be made on the 10-meter band with any legal mode (AM, SSB, FM, PSK, CW, etc.). All submitted logs must contain only one entry for each 10-10 number contacted. Contacts MUST be listed in 10-10 number order and each entry must list the 10-10 Number, Date, Call, Name, QTH and Mode, in that order. These events are for Individual entries as described in section 5.2.4 and certificates will be awarded for the TOP Ten, however all entrants will be listed in the 10-10 NEWS.

Logs MUST be postmarked no later than January 8th of the year following both the Anniversary and Meet the Volunteers events. Only members in good standing (with dues paid) are allowed to submit logs.

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

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

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

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

5.2.13 10-10 SPRINT (October 10) QSO PARTY

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

5.2.14 W6OI SPECIAL EVENT

This event is held during the 3rd weekend of November each year from 0000 UTC Saturday through 2359 UTC Sunday. This special event operation is where volunteers operate the 10-10 official club stations (W6OI/VE9TEN/DL0X) seeking to work anyone anywhere. Any mode of operation is permitted. Many operators will be authorized to operate W6OI from most US states and VE9TEN from various Provinces/Territories simultaneously. DL0X is operated by Henry, DL8YBM. The purpose is to have fun promoting 10-meter activity making contacts with 10-10 members and of course, non-members. This is a great way to increase membership! Exchange is similar to any 10-10 QSO Party event - name, call, QTH, and 10-10 number if one is available. As contacts are made, provide info on the 10-10 organization and where to find our website - www.ten-ten.org. If anyone wants to volunteer to operate W6OI during this event contact Jerry, N9AC. Members in Canada should contact Rob, VE9KM for permission to operate VE9TEN.

5.2.15 FOR MORE INFORMATION

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

10-10 QSO PARTY COVER SHEET

QSO Party (select one):

- | | | | |
|---------------------------------------|------------------------------------|---|---------------------------------------|
| <input type="checkbox"/> WINTER PHONE | <input type="checkbox"/> SPRING CW | <input type="checkbox"/> SPRING DIGITAL | <input type="checkbox"/> 10-10 SPRINT |
| <input type="checkbox"/> SUMMER PHONE | <input type="checkbox"/> FALL CW | <input type="checkbox"/> FALL DIGITAL | <input type="checkbox"/> SPIRIT OF 76 |

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):

- | | | | |
|--|-------------------------------------|------------------------------|---------------------------------|
| <input type="checkbox"/> LOW POWER | <input type="checkbox"/> HIGH POWER | <input type="checkbox"/> QRP | <input type="checkbox"/> MOBILE |
| <input type="checkbox"/> 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.

Members are encouraged to upload logs at the KJ4IZW contest scoring web site: www.hamclubs.info/scorer.

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