

The SKYHOOK



HOLIDAY CITY AMATEUR RADIO CLUB

www.hcarc.us

October 2021

Toms River, NJ

A Note From Me, For Skyhook:

(from HCARC President Michael Carson:)



Ah, Autumn; time for cooler weather, jack-o-lanterns, and great DX! This is the time to get outside and finish up that antenna project before winter.

In looking for upcoming events to mention here, I instead found this:

<https://www.contestcalendar.com/contestcal.html>. If there isn't something going on every day, there is every week!

In-person club meetings are continuing, and I hope to see you all there.

Sadly, between work commitments and the likelihood that I will be moving this year, I must step down as President. It has been a pleasure to see the club through a trying year. I am certain that, with all your support, my successor will see the club flourish again.

C.

Happy Birthday To:

Larry Puccio K2QDY
Bob Wilson KA2WPL
Robert Mattson KD2TYE
Kathleen Kozakiewicz
Candice Larkins
Harriet LeFevre

Happy Anniversary To:

Raymond & Kathleen Kozakiewicz
Larry & Janice Loscalzo
Anthony & Carol Lepardo Manus

Southern NJ Section News

October 2021

Tom Preiser N2XW SNJ Section Manager

n2xw@arrl.org

It was great to meet many people at the Gloucester County Hamfest/SNJ Convention. I would like to thank the Gloucester County Amateur Radio Club for putting on another great event. There were many compliments received by many of the attendees. The turnout was good despite the tornado from the week prior. Thanks again to everyone at Gloucester County ARC for your hard work.

[Continued on page 2]

OUR REGULAR MEETINGS:
First Thursday of each month at 7:00 PM
Holiday City South Clubhouse A
Santiago Drive at Mule Road
Toms River, NJ

The ARRL has begun conducting monthly online meetings for Section Managers. This usually takes place at the end of the month and after I have written the Section News. ARRL members should keep an eye out for updated information via email for the latest ARRL news updates.

I hope many of you were able to participate in the NJ QSO Party. I did hear that there were quite a few stations on the air. Some people were reporting some pretty high scores. We will have to see what the results show. Thanks to the Burlington County Radio Club for sponsoring this event.

For anyone interested the 2021 Virtual National Hurricane Conference Amateur Radio Workshop that was held on Tuesday June 15th, 2021 is posted on YouTube. It can be seen at the following link:
<https://www.youtube.com/watch?v=9ecZRKvGI0>

In the interest of time to get this posted on YouTube since it has been several months since the conference, it is one long workshop video of 4 hours and 8 minutes but in the description of the video, they provide the rough start time for each of the workshop topics. It should be useful to anyone in the coastal areas that are threatened by tropical systems each year.

Registration Opens for USA Amateur Radio Direction Finding Championships

Registration is now open for the 2021 USA and IARU Region 2 Championships of Amateur Radio Direction Finding (ARDF), set for October 13 – 17. Competition venues will be near Asheboro, North Carolina. Postponed from 2020, these championships will be conducted in accordance with CDC COVID-19 guidelines.

“The USA ARDF Championships are an ideal opportunity to watch and learn from the best radio-orientees in the US,” said ARRL ARDF Co-coordinator Charles Scharlau, N2OI. “Winners who qualify by citizenship or residence may be selected for positions on ARDF Team USA, which will travel to Serbia for the 2022 ARDF World Championships.”

Check this website for more information:
<https://backwoodsok.org/us-2021-ardf-champs-bulletin-one> ,

Ocean County ARES Report

October 2021

The tower and linear amplifier listed last month have been sold with proceeds going to the treasury of Ocean County ARES. Thank you to all that assisted in the sale.

The next meeting of Ocean County ARES will be via Zoom and not in person, on October 20th at 7:00 PM. Zoom connection info will be sent out a day or two before the meeting.

Thank You to the operators who provided communications support for the 2021 Habitat for Humanity Walk on the Lavallette boardwalk on Saturday, September 18. Mike, K2MDW, was Net Control with operators N2XW, WB2ALJ, N2LD, KD2FFR and KC2SBR strung along the walk. The event was incident free.

On Monday, September 13th, WX2NJ and K2MDW installed a VARA FM Digipeater at the Berkeley Township Police Tower. It shares the same antenna as the D-Star repeater, with the D-Star being UHF and the VARA FM being VHF. Both can operate at the same time thanks to duplexer technology. The digipeater carries the callsign WA2RES-15 on a frequency of 145.010 MHz. It accepts Narrow or Wide mode VARA FM and has a Tactical ID of WA2RES-15.

It supports all VARA FM sessions including Winlink Express Vara FM, Winlink Express Vara FM P2P, Winlink Express Vara FM Radio Only and Vara FM Chat.

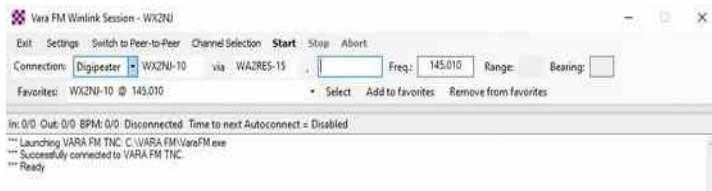
The digipeater consists of an Alinco DR-135TMKII Transceiver operating in the 9600 baud digital mode on high power, A Masters Communications DRA-45 Digital Radio Adapter and a Lenovo mini PC running Windows 10 Pro. The PC is configured to run with no Internet, no

updates and bare bones background apps. It automatically reboots once a week to clear any accumulated memory.



Berkeley Twp VARA FM Digipeater Photo by K2MDW
 The Digipeater allows Winlink Express users to connect to an RMS Gateway to pick up and drop off Winlink mail. Currently the only RMS Gateway in Ocean County is WX2NJ-10 in Bayville and the digipeater allows a good portion of the county to access the gateway.

The Digipeater also allows direct connection of two stations to transfer Winlink mail or chat directly.



VARA FM Winlink Session Screen for Digipeater

The screen picture above shows how to properly enter the callsign to connect to the gateway via the digipeater. Vara FM is part of the Vara software suite that includes Vara HF, Vara FM and Vara Chat. Registered users are not limited to speed and can also act as a digipeater. The goal is to get every Ocean County ARES operator up to speed using Winlink Express for message handling since it is the preferred software of the Red Cross.

There will be a Simulated Emergency Test (SET) of all SNJ ARES counties on October 2nd. All Ocean County ARES resources will be used during the test and it is requested that non-participating operators keep clear of repeaters and listed frequencies the day of October 2nd.

The Ocean County ARES frequency plan can be found at:

<http://www.wa2res.com/frequencies.html>

73 de Bob Murdock WX2NJ, Ocean County Amateur Radio Emergency Service® EC

Holiday City Amateur Radio Club

Toms River, New Jersey

Web Site www.hcarc.us

President	Mike Carson	KC2QQF	917-830-4225
Vice President	Carl Lee	W2PTZ	732-575-7558
Secretary	John Perry	KD2NDY	732-349-2705
Treasurer	Larry Puccio	K2QDY	732-349-2950
Executive Board	Doug Poray	KC2TZC	732-928-2316
Executive Board	John Roberts	KQ4WR	732-350-1162
W2HC Trustee	Larry Puccio	K2QDY	732-349-2950

CLUB COMMITTEES

Refreshments:	Marge	KD2LNT	pearl1122@comcast.net
Webmaster:	Steve	N2WLH	N2WLH@yahoo.com
Programs:	(open)		
Sunshine:	(open)		
Field Day:	Larry	K2QDY	732-349-2950
VE Sessions:	Larry	K2QDY	732-349-2950
Membership:	Doug	KC2TZC	732-928-2316

Membership is open to all interested persons. Ham license is not required. Dues are \$25.00 per year, payable Jan 1st. Members joining during the year will have the dues prorated. Family membership \$30.00 per family. **Meetings** are normally held on the first Thursday of every month, at 7:00 pm, except in December. **Location:** Meeting Room #1 in Holiday City South Clubhouse A. **Directions:** From either Route 37 W or Davenport Road, take Mule Road to Santiago Drive. Turn into the parking lot from Santiago Drive and park near the pool. Enter the building nearest the street corner.

The SKYHOOK is published monthly as the HCARC's official newsletter.
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Searching The FCC ULS



To find information about any US ham station, try:
<https://wireless2.fcc.gov/UlsApp/UlsSearch/searchAdvanced.jsp>

This ULS search will even work if you only enter zip code and person's name. In fact, the "Name" search works best if you just enter the last name.

Click the callsign and you can make a copy of license.

To find a "grid code", go to QRZ.com, enter the callsign and select "Detail".

From that, you should get at least the latitude and longitude of the mailing address, and even a map you can "Explore" to see if that makes sense.

Chasing Hedy Lamarr

I usually stay in the 40 meter band and monitor the CW mode while trying to communicate with other Hams. Looking for a change of pace, I have been reviewing the Special Event Stations listed in QST. One time, while searching for a listed frequency, I did not make contact with the named special event but did have a conversation with a Ham in Scotland. Some unexpected contacts are very rewarding. I again checked the Special Events Stations in the August edition of QST and was intrigued by the Dallas, Georgia Radio club's notice regarding a time schedule honoring Hedy Lamarr for her contribution to short wave radio and its application to military and civilian use. There has been a television documentary concerning Hedy's involvement with short wave radio as well as an article printed in QST, therefore, I tried to pursue obtaining the QSL card.

The time period for contacting the radio club was from August 13th to August 21st and from 1400Z to 1400Z. Well, I tried every day for six days to make a communication with the radio club but, to no avail. I could not even receive any of the programming that was to be transmitted. In the past, I have never had any trouble receiving code or phone with Georgia.

Time was moving on and I had not even heard the broadcast of the club much less made a SSB contact so, on August 19th I decided to write the person responsible for the QSLs and certificates that were being issued. I was looking to obtain the unique QSL because a picture of Hedy Lamarr was on the card.

On the evening of August 21st I received a phone call from Charles Turner, a club member who directed me to a frequency so we could talk about the honor being given to Hedy Lamarr. Last minute - yes, but I really appreciated the fact that someone made the time to speak to a fellow Ham and helped me qualify for the QSO. Charles and I also had a conversation about the tribute and the club's activities. I like to think that I made a friend in Georgia.

I completed the required information the club needed to qualify for the QSL card and mailed it to Georgia. I am sure the volume of requests that the club has received will take some time for my data to be processed but, I'm sure it will be worth the wait. Well, this quest has certainly made me heady for Hedy. (I just had to say that.)

73

John Perry, KD2NDY

How Far Is That?

Someone asked me how to calculate the distance from one station to another. Well, there's the **easiest way**, **an easy way**, **the traditional way**, **a better way**, and the most accurate way. Whichever you choose, you still must know the latitude and longitude of both stations.

First, the **Easiest way** to find the distance from your station to another is to look up the other station at the QRZ.com website. Check their map to see that they have the correct locations. If they don't give the distance, you might still find the latitude and longitude and be able to use another method.

An **Easy way** is the Pythagorean Theorem, but it assumes the world is flat, but is better than 2% accurate up to 90 miles. Square the longitude difference, multiply by the cosine of the average latitude, add the latitude difference Then the distance in miles is 69.1 times the square root of that.

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The **Traditional way** assumes the Earth is a sphere but has accuracy problems with short distances.

$$c = \text{ARCCOS}(\text{COS}(a) * \text{COS}(b) + \text{SIN}(a) * \text{SIN}(b) * \text{COS}(C))$$

in which a and b are the sides of spherical triangle ABC, in which the North Pole or South Pole is the third corner (C). Likewise side a is the side opposite angle A, and is the latitude of point B minus the latitude of point C, etc. Likewise for side b. Angle C is the difference in longitudes of points A and B. When doing this on a computer, beware that its trig functions may require that you first convert latitudes and longitudes from degrees to radians, and all angles and distances will be in radians. The result still has to be converted into miles by multiplying distance c in radians by the radius of the Earth, which is 3959 miles (more or less, because it's not a perfect sphere).

A **Better way** avoids unintended roundoff problems by using haversines, which is based on the Traditional method. It's even more complex, but if you program your computer to do all the work, it's easy to use. Refer to the excellent explanation at Wikipedia.com under "Haversines".

The **Most Accurate way** is the Vincenty method, which accounts for the fact that the world isn't a perfect sphere, but is very complex and slow. It's used only if accuracy is essential.

For the SKYHOOK, I've been using a version of the haversine method for a few years, with good results. The only problem is when both stations have the same longitude. In that case, no triangle is possible, so the mileage is simply 69.1 times the latitude difference.

Thanks to "Reference Data for Engineers: .." Published by SAMS, MacMillan Computer Publishing. For several decades, this rival of The ARRL Handbook was known by radio engineering students as the "Federal Handbook" because the original edition was a 60 page brochure in 1943 by Federal Telephone and Radio Corp., which quickly grew and was later greatly expanded by International Telephone and Telegraph Corp.

John Roberts KQ4WR

Working For A Worked All States?

You can get a good and easy start by using the QSO Parties. This month there are several:

California 1600Z Oct 2 to 2159Z Oct 3
<http://www.cqp.org/Rules.html>

Nevada 0300Z Oct 9 to 2100 Oct 10
<http://nvqso.com/contest-rules/>

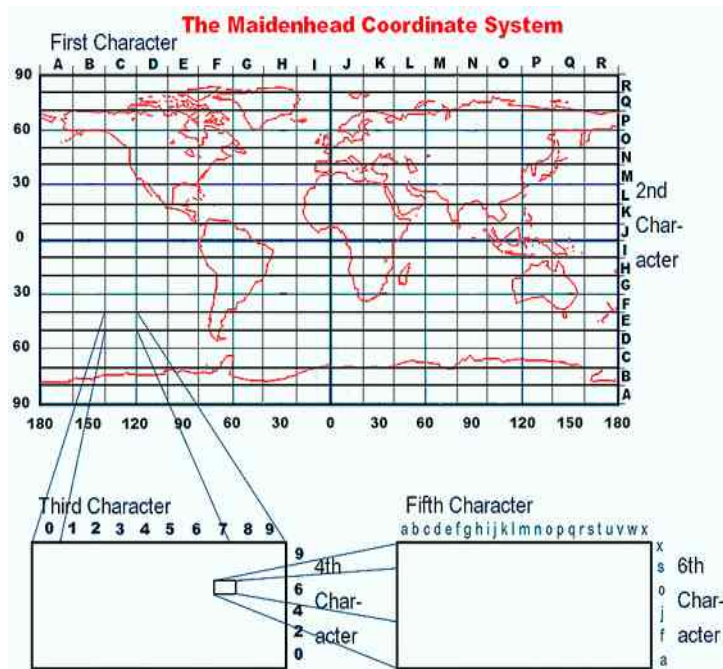
Arizona 1500Z Oct 9 to 0500Z Oct 10
<https://www.azqp.org/>

Pennsylvania 1600Z Oct 9 to 2200Z Oct 10
<http://paqso.org/pa-qso-party-rules.html>

South Dakota 1800Z Oct 9 to 1800Z Oct 10
<http://www.sdqsoparty.com/>

New York 1400Z Oct 16 to 0200Z Oct 17
<http://www.sdqsoparty.com/>

Illinois 1700Z Oct 17 to 0100Z Oct 18
<http://www.w9awe.org/ILQP%202020%20Rules.pdf>



Kevin Wagner W2FA Worked:

CALL	DATE	TIME	FREQ	BAND	PWR	ENTITY	MODE	LOC	MILES	DIR
OT4A	2021-09-15	15:35:50	14.19530	20m	0	Belgium	SSB	J021sd	3743	NE
HP3SS	2021-09-14	19:28:08	18.13600	17m	75	Panama	SSB	EJ88qs	2220	SSW
S57DX	2021-09-14	16:59:15	14.23900	20m	75	Slovenia	SSB	JN75dw	4259	NE
KF4JEY	2021-08-31	19:02:30	14.07529	20m	50	United States	FT8	EM92cl	669	SW
WI4MPY	2021-08-31	18:59:00	14.07529	20m	50	United States	FT8	EM77ts	566	WSW
DM2DXA	2021-08-31	18:51:30	14.07529	20m	50	Fed Rep Germany	FT8	J064qb	3966	NE
N9DLB	2021-08-29	16:08:30	14.07571	20m	35	United States	FT8	EN32eh	1019	WNW
WA6GXQ	2021-08-29	16:04:45	14.07571	20m	35	United States	FT8	FM06na	374	SW
KB4RZG	2021-08-29	15:55:15	14.07568	20m	35	United States	FT8	FM05ru	371	SW
K4RGN	2021-08-29	15:52:45	14.07568	20m	35	United States	FT8	FM05pv	374	SW
TI2CF	2021-08-29	13:34:34	18.13800	17m	75	Costa Rica	SSB	EK88aa	1627	SSW
S51DX	2021-08-27	17:33:12	14.24000	20m	75	Slovenia	SSB	JN75dx	4257	NE
OK4YL	2021-08-26	19:40:33	14.25000	20m	75	Czech Republic	SSB	J070gh	4124	NE
AD8LF	2021-08-18	17:17:30	14.07470	20m	50	United States	FT8	EN72vc	539	WNW
N7WFK	2021-08-18	16:33:45	14.07470	20m	50	United States	FT8	EM15dk	1317	W
K4CY	2021-08-18	16:29:00	14.07470	20m	50	United States	FT8	EM74pa	710	WSW
WI9MMS	2021-08-09	19:32:45	21.07460	15m	60	United States	FT8	EN62bx	734	WNW
K8HSQ	2021-08-09	19:29:15	7.07460	40m	60	United States	FT8	EN90fu	388	W
AI0Y/9	2021-08-09	19:06:00	7.07460	40m	60	United States	FT8	EN41ti	850	WNW
N1UL	2021-08-08	18:24:30	14.07501	20m	60	United States	FT8	EL95dv	1066	SSW
IN3BFW	2021-08-08	18:22:00	14.07439	20m	60	Italy	FT8	JJ55kx	5698	E
S57DX	2021-08-05	21:38:37	14.25200	20m	75	Slovenia	SSB	JN75dw	4259	NE

Larry Puccio K2QDY Worked:

DATE	TIME	FREQ	MODE	CALL	ENTITY	LOC	MILES	DIR
8/15/2021	21:46	14.03	CW	DL4ZA	Germany, Fed.Rep.	J031	3800	NE
8/15/2021	21:49	14.03	CW	F6ARC	France	JN18	3700	NE
8/15/2021	21:51	14.03	CW	IR2C	Italy	JN62	4300	ENE
8/15/2021	22:07	14.01	CW	IR80	Italy	JN62	4300	ENE
8/17/2021	21:48	14.03	CW	G3ZXZ	England	IO91	3500	NE
8/17/2021	21:57	14.02	CW	S5030A	Slovenia	JN76	4300	NE
8/18/2021	20:42	14.02	CW	OL50DJ	Czech Republic	J070	4100	NE
8/18/2021	20:46	14.00	CW	IZ3GOA	Italy	JN62	4300	ENE
8/18/2021	21:00	14.00	CW	I1ULJ/8	Italy	JN62	4300	ENE
8/18/2021	21:27	14.02	CW	YU7QF	Serbia	KN04	4600	NE
8/18/2021	21:34	14.01	CW	OZ1H4CK	Denmark	J065	3900	NE
8/18/2021	22:02	14.01	CW	ZB2FK	Gibraltar	IM76	3700	ENE
8/18/2021	22:17	14.02	CW	OK1VK	Czech Republic	J070	4100	NE
8/22/2021	21:34	14.03	CW	EC5K	Spain	IN80	3600	ENE
8/22/2021	21:38	14.02	CW	UV5ERY	Ukraine	KO50	4700	NE
8/24/2021	21:36	14.01	CW	OK1FHD	Czech Republic	J070	4100	NE
8/24/2021	21:47	14.01	CW	9A3YK	Croatia	JN75	4300	NE
8/24/2021	21:56	14.02	CW	SP8ARY	Poland	KO00	4300	NE
9/03/2021	17:15	14.02	CW	F6ARC	France	JN18	3700	NE
9/03/2021	17:25	14.02	CW	IZ3NYG	Italy	JN62	4300	ENE
9/03/2021	17:58	14.02	CW	EG1SDC	Spain	IN80	3600	ENE
9/05/2021	14:42	14.02	CW	UT5XS	Ukraine	KO50	4700	NE
9/05/2021	14:49	14.01	CW	R875GE	Asiatic Russia	?		
9/05/2021	23:14	14.03	CW	TI200I	Costa Rica	EK80	2200	SSW
9/06/2021	21:24	14.01	CW	IK7XJA	Italy	JN62	4300	ENE
9/06/2021	21:40	14.01	CW	LZ3FA	Bulgaria	KN12	4800	NE
9/06/2021	21:45	14.02	CW	7X4AN	Algeria	JM16	4100	ENE
9/08/2021	20:35	14.02	CW	II0GDF	Italy	JN62	4300	ENE
9/08/2021	20:50	14.00	CW	9Y59IND	Trinidad & Tobago	FK81	2100	SSE

Some DX Opportunities

In alphanumeric order of Callsign

Mode codes: 8 = FT8, 9 = JT9, A = AM, C = CW, D = Digital, E = EME, R = RTTY, S = SSB, T = SSTV.

Bands: "Low" usually means 160, 80 & 40m. HF means 3 to 30 MHz (includes 80 to 10 meters).

Many thanks to NG3K, Wikipedia, Google Maps, the ARRL, the RSGB, DXWorld, DXNews & QRZ.com for the data.

FINISH	ENTITY	Pfx	CALLSIGN	IOTA	BANDS	MODES	QSL via	LOC	Miles	Dir	Info
20211108	Swatini / Swaziland	3DA	3DA0RU		160-6m	C S 8	LoTW	KG53sa	8192	ESE	20210620
20211130	Panama	HP	3F200AT				LoTW	FJ09bi	2144	S	ARLD029
20211130	Panama	HP	3F200NG				LoTW	FJ09bi	2144	S	ARLD029
2023xxxx	Guinea	3X	3X2021	FT-051	160-6m		ClubLog F1TMY	IJ39ea	4274	ESE	ARLD034
20211015	Poland	SP	3Z20UR				SP8POP	K000xc	4419	NE	ARLD037
20211231	Georgia	4L	4L1PJ		80-10m	S	N4GNR	LN04vp	5376	NE	ARLD001
20211120	Tanzania	5H	5H3MB		80-10m	C S R 8	IK2GZU	KI93sa	7787	E	ARLD035
20211022	Niger	5U	5UAIHM		40&20m	C	F4IHM	JK13am	4903	E	ARLD035
20211015	Senegal	6W	6W1/EA4ATI		80-10m	S	EA4R	IK15	3784	E	ARLD028
20220331	Japan	JA	8J100CB	AS-007			bureau	QM05bo	6781	NNW	ARLD014
20211231	Antarctica	00	8J1RL	AN-015			bureau	KC90sx	9352	SSE	ARLD004
20211231	Japan	JA	8J2SUSON				bureau	PM86tf	6800	NNW	ARLD030
20220430	Japan	JA	8N0J	AS-007			bureau	PM97cd	6729	NNW	ARLD005
20221231	Japan	JA	8N1MORSE	AS-007			C	PM86tf	6794	NNW	ARLD016
20211031	Japan	JA	8N7SPORT				bureau	QM08lh	6591	NNW	ARLD026
20211013	Maldives	8Q	8Q7CQ	AS-013	80-10m	S D C	M0OXO	MJ63oe	8818	NE	DXW.Net
20211231	Croatia	9A	9A10FF				9A2MF	JN85et	4355	NE	ARLD007
20220315	Zambia	9J	9J2BG		20m		HB9EWU	KI40iq	7322	E	ARLD010
20211201	Rwanda	9X	9X4X		160-10m	C S R 8	4Z5FI	KI47ts	4054	E	ARLD032
20211031	Tonga	A3	A35JP	OC-049	80-6m	C S 8	LoTW	AG29ma	7693	W	JA0RQV
20211001	United Arab Emerites	A60	A60EXPO				EA7FTR	LL73lp	6964	NE	ARLD034
20211231	Taiwan	BV	BX30ARL		40-6m		BM2JCC	PL05rb	7836	NNW	ARLD031
20211119	The Gambia	C5	C5/F5RAV		80-10m	C S D	F5RAV	IK13ma	3923	ESE	ARLD035
20211119	The Gambia	C5	C5/M0NPT		80-10m	C S D	F5RAV	IK13ma	3923	ESE	ARLD035
20211119	The Gambia	C5	C5C		80-10m	C S	F5NVF	IK13ma	3923	ESE	DXW.Net
20211119	The Gambia	C5	C5C		40&20m	C S	LoTW	IK13ma	3923	ESE	20210827
20211106	Bahamas	C6	C6AHB	NA-048	80-10m	S D	NN2T	FL05jr	1025	SSW	20210810
20211231	Uruguay	CX	CW60ATS					GF16wv	5183	SSE	ARLD026
20211201	Angola	D2	D2UY		20-10m	C	per op instr	JH87sx	6847	E	ARLD038
20211002	Comoros	D6	D60AC	AF-007	80-10m	C S R 8	SP9FIH	LH18pg	8194	E	ARLD038
20211002	Comoros	D6	D60AD	AF-007	80-10m	C S R 8	SP6CIK	LH18pg	8194	E	ARLD038
20211231	Germany	DA	D8100AVUS				DO2PZ	JO62rk	6019	NE	ARLD001
20211017	Rep of Korea	HL	D90EXPO				DS3BBC	PM36ns	6962	NNW	ARLD007
20211231	Germany	DA	DL65ESSEN				bureau	JO31lj	3798	NE	ARLD018
20220131	Rep of Korea	HL	DS4DRE/4	AS-060	80-10m	C S	DS4DRE	PM34ig	7114	NNW	ARLD005
20211231	S. Shetland Is	—	DT8A	AN-010		C S 8	DS5TOS	GC08uc	7098	S	ARLD014
20211231	Ukraine	EM30	EM30UARL				UX7UU	KN59rb	4809	NE	ARLD034
20211231	Ukraine	EM	EM60KTS				IK2DUW	KN59rb	4810	NE	ARLD026
20211005	St Pierre & Miq.	FP	FP/KV1J	NA-032	160-6m	S C R 8 4	see web	GN16tw	1015	NE	KV1J
20211231	England	G	GB75ISWL		80-10m	most	bureau	JO01pu	3560	NE	ARLD004
20211231	Poland	SP	HF100LEM				SP9PKZ	JO90xb	4347	NE	ARLD004
20240501	Haiti	HH	HH2JA	NA-096	80-6m	C S 8	LoTW	FK38um	1487	S	ARLD021
20211231	Dominican Repub	HI	HI95RCD		160m-UHF	C S F 8	RW6HS	FK58ak	1509	S	ARLD029
20220531	Columbia	HK	HK3JCL		20m	S	DK8LRF	FJ35aa	2415	S	ARLD035
20211130	Panama	HP	HP200I		80-10m	S D	HP1DAV	FJ08fw	2169	S	ARLD021
20211031	Thailand	HS	HS400OZ				E21EIC LoTW	OK03fq	8720	N	ARLD035
20211231	Italy	I	I10LXXV				bureau	JN62ks	4311	NE	ARLD026
20211022	Guinea-Bissau	J5	J5HKT			8	I2YSB or LoTW	IK22fa	4041	ESE	ARLD034
20211022	Guinea-Bissau	J5	J5T			C S R	I2YSB or LoTW	IK22ga	4045	E	ARLD034
20211108	St Lucia	J6	J68HZ	NA-108	160-2m	C S 8	K9HZ	FK93lu	1973	SSE	ARLD033
20211215	Minami Torishima	JD1	JG8NQJ/JD1					QL07mm	7256	NNW	ARLD036
20211101	Svalbard	JW	JW6VDA	EU-026	80-10m	S	LoTW	JQ75tf	3566	NNE	20210627
20211005	Jan Mayan	JX	JX0X	EU-022	80-10m	"all"	EA3DX	IQ51vb	3103	NNE	ARLD037
20211001	Antarctica	00	KC4USV	AN-011	20m	S 8	K7MT	RB32id	9328	SSW	ARLD015
20211231	Argentina	LU	L21RCA				L21RCA	FF75qq	5170	S	ARLD004
20211231	Bulgaria	LZ	LZ190FT					KN22dg	4801	NE	ARLD003
20211231	Peru	OA	OC4B		40-15m	S 8	LoTW	FH19na	3525	S	ARLD023
20211231	Peru	OA	OC6B		40-15m	S 8	LoTW	FH19na	3525	S	ARLD023
20211231	Peru	OA	OC7B		40-15m	S 8	LoTW	FH19na	3525	S	ARLD023
20220301	Finland	OH	OF60RR				OH8DR	KP20np	4156	NE	ARLD010
20211231	Finland	OH	OH100SRAL					KP20np	4156	NE	ARLD005
20211231	Czech Republic	OL	OL75KCR				ClubLog	JN79vv	4130	NE	ARLD013
20211231	Belgium	ON	OR40NOL					JO21pf	3736	NE	ARLD018
20211031	Denmark	OZ	OZ400HS				ClubLog, LoTW	JO65hq	3896	NE	ARLD035
20211031	Aruba	P4	P40W		160-10m	C s	LoTW N2MM	FK52bk	1921	S	ARLD032
20211101	St Eustatius	PJ5	PJ5/W5JON		40-6m	S 8	W5JON LoTW	FK87cm	1672	SSE	20201209
20211023	Sint Maarten	PJ7	PJ7JA		40-6m	S 8	W5JON LoTW	FK88ka	1656	SSE	20201209
20211018	Surinam	PZ5	PZ5G	SA-092	80-10m	S C	DJ4EL LoTW	GJ25jt	2640	SSE	20210323
20211020	Surinam	PZ5	PZ5ZS		80-10m	S	PF9Z LoTW	GJ25io	2640	SSE	20210713
20211231	Slovenia	S50	S5030DX				LoTW	JN76hc	4269	NE	ARLD035
20211016	Sao Tome & Principe	S90	S90K	AF-023	160-6m	C S D	ClubLog	JJ30hf	5729	E	20210616
20211210	Dodecanese	SV5	SC5/G2JL		"all"	"all"	G2JL	KM37ih	5126	NE	ARLD032
20220205	Poland	SP	SN0ZOSP				SP90DM	KO02mg	4310	NE	ARLD009
20220205	Poland	SP	SN100ZOSP				SP9PJ	KO02mg	4310	NE	ARLD009
20220201	Poland	SP	S039SYBIR		80-10m	C S D	SP4PZM	KO13od	4354	NE	ARLD038
20211231	Greece	SV	SZ200P				LoTW	KM18te	4958	NE	ARLD016
20211018	St Kitts & Nevis	V47	V47JA		160-6m	S 8	W5JON LoTW	FK87pf	1717	SSE	20201209
20211231	Australia	VK	VI50SG				bureau	QF56na	9922	W	ARLD019
20211101	Antarctica	00	VK0PD	AN-016	40&20m		EB7DX	OC53gr	10547	S	ARLD013
20211001	Turks & Caicos Is	VP5	VP5MA	NA-002	20-15m	8	W4HBW	FL31wt	1261	S	ARLD025
20211231	Serbia	YT	YT165TESLA				YU1MM	KN04gv	4557	NE	ARLD005
20211231	Venezuela	YV	YW200BC		80-10m	C S D	YV4KW	FK60ad	2096	SSE	ARLD019
20211231	Cyprus UK Sovrn Base	ZC4	ZC4GR	AS-004	80-10m	S D	EB7DX	KM64ln	5514	NE	ARLD037
20211231	Ascension Island	ZD8	ZD8HZ	AF-003			TA1HZ	II22tb	5048	ESE	ARLD012

October

Sunday	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday
					1	2 CA QSO Party starts 1600Z; also Simulated Emergency Test
3 CA QSO Party ends 2159Z	4	5	6	7 HCARC Meeting 7:00 PM	8	9 NV, AZ, PA & SD QSO Parties start-see page 5
10 QSO Parties finish	11	12	13 License Exam Session 7:00 See page 3	14	15	16 NY QSO Party starts 1400Z
17 IL QSO Party 1700Z-0100Z	18	19	20 ARES Zoom Meeting 7:00 PM	21	22	23 UK/EI DX Contest 1200Z-1200Z Oct 24
24 North American SSB Sprint Contest 0000Z-0400Z	25	26	27	28	29	30 CQWW SSB Contest starts 0000Z
31 CQWW SSB Contest ends 2400Z						

Thank You

The editor wishes to thank Mike Carson, Tom Preiser, Bob Murdock, John Perry, Kevin Wagner, Larry Puccio, NG3K.com,

Wikipedia.org, QRZ.com, and ARRL.org.