<u>www.hcarc.us</u> August 2024 Toms River, NJ

Our President's Message



As the summer heat continues to provide uncomfortable temperatures, we find comfort in our air-conditioned homes. Our Field Day experience reminded us of the effect Mother Nature can place in our path. Even though the heat and threatening thunderstorms were part of our event, we had an enjoyable time. These natural phenomena we endured reminded me of one of the major reasons for our hobby, Emergency Preparedness.

Whether it be a loss of electrical power, damage due to floods and winds, or any other natural disaster, radio amateurs are called upon for assistance. We as radio amateurs must be prepared for these occurrences. This is the major reason the ARRL Field day is held each year.

Our tropic for the August Meeting will be "Science and Amateur Radio". This should be a very interesting presentation you would not want to miss.

Doug Poray KC2TZC

Happy Birthday To:

Larry Loscalzo WA2VLR

John Perry KD2NDY

James Punderson W2QO

Christine Jackson



Happy Anniversary To:

James & Sarah Punderson Stan & Marjoie Stafiej



OUR NEXT REGULAR MEETING:

Thursday August 1st at 7:00 PM Holiday City South Clubhouse A Santiago Drive at Mule Road

Ocean County ARES® News

August 2024

The next meeting of Ocean County ARES will be Wednesday, August 21st at 7:00 PM, Ocean County EOC, Robert J. Miller Airport. All are welcome.

There has very recently been word of a **worldwide tech outage** affecting travel, finance and 911 call centers. I would like to take some time to explain what is going on.

In our current day of automation, it seems like everything is run by computers, from cash registers to your home washer and dryer. Cyberattacks against critical computers can shutdown everything very quickly and cause total chaos. A security company called Crowdstrike supplies a flagship security product called Falcon Sensor, which computers around the world have installed to prevent such cyberattacks.

There was a "defect" in a software update of Falcon that caused Windows computers to crash after an update, into the dreaded "Blue Screen of Death". Linux and Apple computers are not affected. Almost all users of Windows have run into the blue screen at least once, and it can be quite frustrating.

Crowdstrike has identified the problem and fixed the update, but all companies with computers and servers around the world need to recover their computers, which in some cases can take a lot of effort. Everything from large corporations, hospitals, transportation hubs and government departments are affected. Practically anyone who during their everyday life interacts with a computer system running software from Crowdstrike is affected, even if the computer isn't theirs.

CrowdStrike says users should boot the computer into Safe Mode or Windows Recovery Environment, navigate to the CrowdStrike directory, and delete the faulty file "C-00000291*.sys."

WB2ALJ (SNJSEC) has announced that the 2024 **Simulated Emergency Test** (SET) will take place on Saturday, October 5th. He is asking for suggestions for

a scenario, so if you have any ideas, please contact him.

From the ARES Letter of July 17, 2024:

ARES LAX Northeast Excels in Angel Fall Complex Exercise

During the "Angel Fall Complex" exercise held on June 29, 2024, ARES LAX Northeast demonstrated exceptional teamwork and technical proficiency. This exercise tested the capabilities of amateur radio operators in a simulated scenario in which a cyberattack, orchestrated by a hacker group named "Specter Net," targeted Southern California's healthcare infrastructure. The goal was to ensure that mission-critical communications could still be maintained despite the disruption.

Radio operators worked in pairs and on-site at five hospitals (Huntington, Kaiser LAMC, White Memorial, San Dimas, Pomona) and the LA County Medical Alert Center (LAC-MAC). Over four hours, the MAC station received 74 messages, successfully transmitting 100% of the mission-critical traffic sent via VARA Chat.

VARA FM: A Valuable Asset

VARA FM proved to be an indispensable tool during the exercise. It facilitated the rapid transmission of spreadsheets and word forms, which were essential for managing hospital resource requests, bed availability reports, and general messages. Its digipeating capabilities helped overcome propagation challenges on the 2-meter band, ensuring reliable communication. Additionally, VARA FM seamlessly integrated Chat and APRS functionalities, streamlining the communication process.

Operators praised VARA FM digipeating capabilities. Jason Chan, KM6WJQ, who operated with Ed Vanderpool, KJ6LYS, from Pomona Valley Hospital, said "from Pomona we do not have a line of sight connection to the Medical Alert Center (MAC) due to a mountain range. We therefore leaned on the digipeating capabilities our teammates at White

Memorial and Huntington hospitals provided. I was especially impressed with Eric, N5KMF, at White Memorial. It was his first deployment exercise and he and his VARA FM digipeater played a critical part in passing our traffic to the MAC."

73 de WX2NJ

Bob Murdock

Ocean County Amateur Radio Emergency Service®

DVRA 2 Meter Fox Hunt

The Delaware Valley Radio Association will host another fine Mobile Fox Hunting Session of the 2024 season. Join Huntmaster Glen, NK1N, for this event Saturday, August 3 at 9:00am ET. Hunts are usually done by 12:00 noon.

The starting point for this hunt is the Chapin School South Parking Lot located at 4101 Princeton Pike, Princeton NJ 08540.

Please listen to the DVRA 70cm repeater, W2ZQ, on 442.650 MHz, positive (+) offset, CTCSS (PL) 131.8 Hz, as that is how you will receive the day's foxhunting instructions.

If you have any questions, please feel free to contact us at foxhunts@w2zq.com.

In case the DVRA 70cm repeater is unavailable, W2MER on 147.105, positive (+) offset, CTCSS (PL) 123.0 Hz will serve as a backup.

Fox Hunting is a receive-only event. Participation does not require an amateur radio license. The only requirements are a 2m FM receiver and some means of motorized transport (it takes too long to walk).

Our Volunteer Examiner Crew

Larry <u>K2QDY</u> (Liaison) 732-349-2950, John <u>KQ4WR</u>, Stan <u>KB2PD</u>, Steve N2WLH, Michael WA2CWX

License exams are given by appointment at 6:45pm on the first Wednesday after each HCARC meeting at Holiday City South Clubhouse Bldg A, which is at the corner of Mule Rd. and Santiago Dr. Call Larry Puccio, K2QDY, at 732-349-2950 for an appointment.

<u>Directions</u>: From either Route 37 W or Davenport Road, take Mule Road to Santiago Drive. Clubhouse A is the building nearest the street corner.

Holiday City Amateur Radio Club

Toms River, New Jersey Web Site www.hcarc.us

President	Doug Poray	KC2TZC	732-928-2316
Vice President	Steve Jackson	N2WLH	732-255-7916
Secretary	John Perry	KD2NDY	732-349-2705
Treasurer	Larry Puccio	K2QDY	732-349-2950
Program Chair	Carl Lee	W2PTZ	732-575-7558
Skyhook Editor	John Roberts	KQ4WR	732-350-1162
W2HC Trustee	Larry Puccio	K2QDY	732-349-2950

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.

<u>Meetings</u> are held at 7:00 pm on the first Thursday of every month except December.

Location: Meeting Room #1 in Holiday City South Clubhouse.

<u>Directions</u>: From either Route 37 W or Davenport Road, take Mule Road to Santiago Drive. Turn into the parking lot from Santiago Drive, park near the pool. Enter Building A (the building nearest the street intersection).

<u>Newsletter</u>: The SKYHOOK is the HCARC's official newsletter, circulation about 75. Original articles and photos are appreciated. Editor is John Roberts, <u>KQ4WR</u>, 732-350-1162.

Field Day Was HOT



Kevin Wagner W2FA, Larry Puccio K2QDY, Doug Poray



Kevin Wagner W2FA



KEVIN W2FA, Larry K2QDY, & Doug KC2TZC





Weather closing in, we had enough.

PRICE REDUCED RADIO EQUIPMENT

Lots of NA2R still available. Contact N2OO for details.

	MAKE/MODEL	DESCRIPTION	WAS	NOW
4	AEA PAKRATT PK-232	cover is not attached. As Is. Parts?	\$5.00	\$1.00
6	ALINCO DM-340MV SER Z203140	13.8vdc, 30 amp Variable 0-15vdc REGULATED POWER SUPPLY	\$120.00	\$110.00
16	AmQRP NUE-PSK	DIGITAL MODEM (NEW)	\$40.00	\$20.00
18	ARMSTRONG TV WALLMOUNT	тво	\$10.00	\$5.00
19	ARRL HANDBOOKS	NUMEROUS	х	FREE LOCAL
20	ASTATIC D-104 MICROPHONE	Iollipop vintage microphone AS IS	\$60.00	\$40.00
26	CDE HAM-IV	Rotor and controller (used-not tested)	\$200.00	\$175.00
	DAIWA CN-103-L	SWR/POWER METER 140-525 MHZ 20/200W	\$50.00	\$40.00
	DIGITECH MODEL DR-3 DIG MSG ANNOUNCER	UNKNOWN	\$5.00	\$1.00
35	DISHTRONIX DWM2104A	SWR METER 160-6	\$90.00	\$65.00
	HEATHKIT SBA-300-3	6 METER CONVERTER (as is)	\$5.00	\$1.00
83	HP 6217A	0-60 v, 0-250ma POWER SUPPLY	\$70.00	\$40.00
88	ICOM IC375D SN03099	430-440 10w transceiver FM/SSB/CW (no mic) tested OK	\$190.00	\$95.00
89	ICOM IC-706MKII SER 07551 (tested works)	HF/VHF MOBILE TRANSCEIVER 100W 160-6, 20W 2.includes new mic, (vol knob missing available Ebay cheap)	\$425.00	\$400.00
99	ICOM ICSP3 SN12749	External Speaker	\$80.00	\$60.00
	ICOM RS-BA1 REMOTE CONTROL SOFTWARE	CD REMOTE SOFTWARE	\$5.00	\$1.00
	ICOM SP20 SN008791	External Speaker	\$150.00	\$125.00
119	LDG AT-11	AUTOTUNER 80-10 150W	\$75.00	\$50.00
128	MFJ 259	ANTENNA ANALYZER	\$100.00	\$75.00
129	MFJ 989D SER 023063	VERSA TUNER V 160-10 1500W MANUAL TUNER	\$275.00	\$225.00
133	MFJ-993B	160-10 meter auto-tuner 300/150w	\$175.00	\$150.00
135	MIRAGE 50 SER 958-189	10W/150W 50 MHZ AMPLIFIER	\$100.00	\$50.00
136	MOAAZELRC-1 SER#0001	unknown ANT ROTOR CONTROLLER (rare s/n0001?)	\$10.00	\$5.00
	Radiowavz Scout multiband HF antenna 20- 10 meters (possible attic antenna, see link) not complete	New but some parts missing. Available from Radiowavz. \$330 new. Sell as is parts \$50.00 https://www.radiowavz.com/product/scout/72? cp=true&sa=false&sbp=false&q=true	\$50.00	\$25.00
148	STANDARD TRANSFORMER PV-6443	ISOLATION TRANSFORMER	\$10.00	\$5.00
152	TENTEC 238B SN10C10244	160-10 meter manual tuner 2KW	HOLD WS2C	
155	THOMPSON SA-185/U	COAX SWITCH N FITTINGS (RELAY 28VDC)	\$50.00	\$40.00
156	THOMPSON SA-185/U	COAX SWITCH N FITTINGS (RELAY 28VDC)	\$50.00	\$40.00
159	TIGERTRONIX SIGNALINK SL-1 REV C ser- 0401240	RADIO INTERFACE W/ SOUND CARD	\$45.00	\$40.00
161	TIMEWAVE PK-232SC	TNC missing cables. Otherwise very clean	\$200.00	\$150.00
162	TOKYO HL-32V 2M AMP 25W	1W IN, 25W OUT	\$40.00	\$30.00
	WESTMOUNTAINRADIO RIG BLASTER PRO	RIG CONTROL INTERFACE	\$50.00	\$40.00
173	WORKMAN CX-3 ANT SW 3 POS	259 STYLE 3 PORT COAX SWITCH	\$10.00	\$10.00
183	ZALMAN ZM400-APS	??	\$20.00	\$10.00

Here's The Rest Of The List

200	HONOR BUCKET March 6, 2024 (OBARC meeting)	For record keeping only	Odds and ends sold at meeting	
203	ICOM 02AT (bad display) parts only	2 meter HT for Parts only	\$1.00	FREE LOCAL
204	internal 80GB HDD IDE	80GB hdd	\$10.00	\$5.00
209	SKYLAB Skynav SKM53	GPS Module ? Unknown condition	\$5.00	\$1.00
211	LUNAR ELECTRONICS 2M10-80P	2 METER AMPLIFIER 10 IN 80 OUT	\$50.00	\$40.00
218	LJE GP1 Radial Plate	Round Radial Plate	\$50.00	\$40.00
219	M2 ROTOR (AZ) OR2800DC with RC2800PDC	Extra Heavy Duty antenna rotor NEW IN BOX	\$1,250.00	\$1,000.00
220	ROHN 25G TOWER 48'	Rohn (4) 10 ft sections plus (1) top 8 ft section with thrust bearing (needs repair/replace) INCLUDES hinge plate. Needs new bolts. Galvanize looks good.	\$250.00	\$150.00
	xxxxxxxxxxxxxxxxxxxxxxx			
	NEW LIST PART 2			
229	YAESU YF115C CW Filter	500hz CW Filter (New in box)	\$250.00	\$175.00
231	Tigertronix SignaLink	you fix	\$10.00	
234	E-SKY 300 MBPS WIRELESS PCI ADAPTER ES-LW04-A2	ESKY 300 MBPS WIRELESS PCI ADAPTER ES-LW04-A2 WLAN NIC CARD 2 DUAL ANTENNAS NEW	\$8.00	\$5.00
236	INDMEM MCR86E	Multi-Card Reader/Writer SD xD MS CF	\$10.00	\$5.00
245	Harbach FB-220 Filter Capacitor Block Kit for SB-220/SB221 amplifers	FB-220 Replacement Filter Capacitor Block Harbach Electronics	\$100.00	\$80.00
249	ROHN 25 ROTOR PLATE (new)	SOLD KU2C	\$75.00	\$50.00
250	ROHN 25 ROTOR PLATE (new)	Rotor plate for mounting a rotor inside a Rohn 25 tower	\$75.00	\$50.00
251	HyGain CDE Rotor Mast Mount (new)	Mast mount for mounting HAMIV or T2X rotor to a mast	\$75.00	\$50.00
252	SONY MEX-N5100BT CD Receiver (CAR)	Bluetooth Stereo W/CD for car with all extras in box	\$50.00	\$35.00
253	MAGNECRAFT M60B-48VDC (5 each)	RELAY BOX of 5	\$50.00	\$40.00
254	VERTEX FP-712 12 amp solid state PS	12amp solid state power supply	\$50.00	\$40.00
255	YAESU MH-67ABJ mic. Needs new cord	Yaesu modular hand mic. Needs new cord	\$5.00	\$5.00
256	WESTMOUNTAINRADIO 58012-1288	RIGblaster Advantage RB/AD/USB	\$100.00	\$75.00
257	SYBA PEX-20133 4 port PCI-express card	USB 3.0 4 port PCI-Express card	\$5.00	\$1.00
258	Startech PEX-2S553 2 post PCI-express card	2 port RS232 Serial adapter Card w/16550 UART	\$5.00	\$1.00
263	SAMSUNG LS23PTNSF/ZA	HOLD W2CG	\$25.00	\$25.00
264	SAMSUNG LS24LRZKUV/ZA	HOLD W2CG	\$25.00	\$25.00
265	VIEWSONIC VX2452MH	HOLD W2CG	\$25.00	\$25.00
266	SAMSUNG UN32J525DAF	32" FULL LED SMART TV (VESA 200mmx200mm)	\$25.00	\$25.00

Larry Puccio K2QDY Worked:

DATE	TIME	FREQ	MODE	CALLSIGN	ENTITY	LOC MIL	ES DIR	IOTA
5/25	21:55	14.056	CW	II4M	Italy	JN62ks	4303.6 NE	
5/25	22:03	14.057	CW	DL4UNY	Germany	JN58ve	4078.6 NE	
5/25	22:08	14.001	CW	LZ5R	Bulgaria	KN22ie	4829.5 NE	
5/25	22:10	14.029	CW	HA8T	Hungary	KN07na	4495.3 NE	
5/26	15:47	21.025	CW	9A5D	Croatia	JN92bp	4535.2 NE	
5/26	15:52	28.025	CW	PA40	Netherlands	J033gh	3725.8 NE	
5/26	15:54	28.023	CW	EA6T	Balearic Is.	JM29du	4011.2 ENE	EU-004
5/26	15:56	28.021	CW	PY4H0	Brazil	GG78mr	4629.2 SSE	
5/26	15:58	28.020	CW	VE3EJ	Canada	FN03ed	354.5 NW	
5/26	16:00	28.018	CW	PX2A	Brazil	GG66se	4752.6 SSE	
5/26	16:04	28.017	CW	XM3R	Canada	FN04jm	404.4 NW	
5/26	16:07	28.016	CW	PS2E	Brazil	GH49eq	3760.8 SSE	
5/26	16:10	28.011	CW	PT5J	Brazil	GG52kh	4941.7 SSE	
5/26	16:13	28.010	CW	EA5EL	Spain	IM98pc	3828.0 ENE	
5/26	16:17	28.006	CW	EA5GX	Spain	IM99wv	3801.1 ENE	
5/26	16:25	28.027	CW	8P5A	Barbados	GK03ef	2047.8 SSE	NA-021
5/26	16:27	28.031	CW	II9P	Italy	JM76ix	4596.9 ENE	
5/26	16:34	28.031	CW	D4Z	Cape Verde	HK76mu	3337.7 ESE	AF-086
5/26	17:15	28.033	CW	CR6K	Portugal	IN50ru	3369.6 ENE	
5/26	17:18	28.035	CW	ED4J	Spain	IN80dj	3615.1 ENE	
5/26	17:20	28.037	CW	DP9A	Germany	J061ls	4015.3 NE	
5/26	17:22	28.037	CW	IP9T	Italy	JM67ss	4513.5 ENE	EU-025
					-			

Some DX Opportunities

Opportunities shown in alphanumeric order of callsigns.

Mode codes: 3 = PSK31, 4 = JP4, 8 = JT8, C = CW, D = "digital", F = FM, O = Olivia, R = RTTY, S = SSB, T = Image (SSTV)

Many thanks to Bill Feidt NG3K for ADXO. Also to Wikipedia, the ARRL, the RSGB, DX World, The Daily DX & QRZ.com.

START	FINISH	ENTITY	PFX	CALLSIGN	IOTA	BANDS	MODES	QSL via	LOC	MILES	DIR	INFO by
2024 Aug17	2024 Aug30	Timor Leste	4W	4W/VK2MET	OC-148	40-12m	C 8	LoTW	PI21sk	9936	NW	DXW.Net
2024 Aug03	2024 Aug13	Maldives	8Q	8Q7GG	AS-013	80-10m	C S 8 QRP	TBA	MI69oj	9028	NE	DXW.Net
	2024 Dec31	Croatia	9A	9A100RKZ				9A1ADE	KM64lo	5506	NE	ARLD004
2024 Aug26	2024 Sep04	Ghana	9G	9G5AS		20-10m	S 8 4	eQSL	GJ34uu	2782	SE	TDDX
2024 Jul23	2024 Aug01	Malta	9H	9H/LA8FTA	EU-023	80-10m	S 4 8	LoTW	JM75ex	4620	ENE	TDDX
2024 Aug03	2024 Aug09	Botswana	A2	A25UX		40-10m	8	LoTW	KG28ma	7660	ESE	TDDX
2024 Aug26	2024 Sep05	St Paul I	CY9	CY9C	NA-094	160-6m	C S 8 R	LoTW	FN97we	863	NE	WA4DAN
2024 Aug26	2024 Sep05	St Paul I	CY9	CY9R	NA-094	160-6m	C S 8 R	LoTW	FN97we	863	NE	WA4DAN
	2024 Dec31	Philippines	DU	DU3/F4EBK	OC-042	20-10m		F4EU0	PK04kw	8515	NNW	ARLD024
2024 Jul27	2024 Jul31	South Cook Is	E51	E51CZZ	OC-013	40-10m	C S	IK2DUW	BG08ct	6917	WSW	OPDX
2024 Jul27	2024 Jul31	South Cook Is	E51	E51KEE	OC-013	40-10m	C S	IK2DUW	BG08ct	6917	WSW	OPDX
	2024 Dec31	Armenia	EK	EK/RX3DPK		160-10m	8	RX3DPK	KO85vt	4716	NE	ARLD001
2024 Aug13	2024 Aug20	Kyrgyzstan	EX	EX/SP9DLM		80-10m		SP9DLM	MN72gu	6458	NNE	DXW.Net
2024 Aug13	2024 Aug20	Kyrgyzstan	EX	EX/SN9GM		80-10m		SN9GM	MN72gu	6458	NNE	DXW.Net
	2024 Aug15	St Barthelemy	FJ	FJ4WEB	NA-146			K2LIO	FK87ov	1672	SSE	ARLD051
2024 Aug15	2024 Sep15	French Polynesia	FO	FO/F1SMB	OC-046	20-10m	S 8	LoTW	BH52gh	6249	WSW	DXW.Net
	2024 Aug31	Poland	SP	HF25NATO		80-6m	SRD	LoTW	KO02mg	4307	NE	ARLD018
2024 Aug10	2024 Aug17	St Lucia	J6	J6/N4XTT	NA-108	40-10m	C S 8 4	LoTW	FK93ns	1981	SSE	DXW.Net
2024 Jun20	2024 Sep20	MINAMI TOROSHIMA	JD1	JG8NQJ/JD1	AS-031	80-10m	C 8	JA8CJY LoTW	QL64xg	7018	NW	TDDX
2024 Aug01	2024 Aug04	Scotland	MM	MM0UKI	EU-118	40-6m	C 8	M00X0	IO37do	2893	NE	DXW.Net
2024 Aug05	2024 Aug17	Palmyra Jarvis Is	N 5J	N5J	OC-081	160-6m	C S 8	TBA	AJ921s	5922	W	DXW.Net
2024 Jul20	2024 Aug04	Greenland	OX	OX/K0MOS/p	NA-018	20, 15, 10m	S	LoTW K0MOS	GP44de	1904	NNE	TDDX
2024 Jul20	2024 Aug04	Greenland	OX	OX/KØMOS/p	NA-220	20, 15, 10m	S	LoTW K0MOS	GP39bg	2157	NNE	TDDX
	2024 Sep01	SOMALIA	T5	T5/IT9HRK		80-10m	Cr84	IU5RPJ	LJ22pa	7659	ENE	QRZ.com
2024 Aug10	2024 Aug22	St Pierre & Mique	e FP	T08FP	NA-032	80-6m	CSD	OQRS	GN17tc	1018	NE	DXW.Net
2024 Jul26	2024 Aug10	French Guiana	FY	T0973FY		80-10m	S 8	EA5GL	GJ34uu	2782	SE	DXW.Net
	2024 Aug12	Kazakhstan	UN	UN/SN9GM				SN9GM	MN47ao	5955	NNE	ARLD027
	2024 Aug12	Kazakhstan	UN	UN/SP9DLM				SP9DLM	M051re	5804	NNE	ARLD027
	2024 Nov01	Antarctica	VK0	VK0DS		80-10m		VK2JDS	MC81xk	10214	SSE	ARLD051
2024 Jul20	2024 Aug01	LORD HOWE I	VK9L	VK2/W7BRS	OC-004	40-10m	C S 8	OQRS W7BRS	QF98ml	9424	W	W7BRS
2024 Aug14	2024 Aug24	Turks & Caicos	VP5	VP5/K5SL	NA-002	40-10m	C S	K5SL	FL31us	1261	S	TDDX
2024 Jul21	2024 Aug07	Canada (Nunavut)	VY0	VY0ERC	NA-008	20-10m	C S 8	M00X0	ER60tb	2787	N	ARLD026
	2024 Aug01	Iraq	ΥI	YI9WPZ		80-10m	C S	IK2DUW	LM23ei	6038	NE	ARLD018
2024 Aug20	2024 Aug27	Vanuatu	YJ0	YJ0VK	OC-035	40-6m	C 8	LoTW /M00X0	RH42ch	8437	W	DXW.Net
2024 Jul24	2024 Aug20	Nicaragua	YN	YN2RP		40-10m	C 4 8 s	LoTW NN2RP	EK71aw	2065	SSW	TDDX
2024 Aug23	2024 Sep30	Tristan da Cunha	ZD9	ZD9GJ	AF-029	6m, EME	s 8	LoTW	IE59aq	6857	SE	DXW.Net

August

Sunday	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday
				1 7:00pm HCARC MEETING See page 1	2	3
4	5	License Exams Wed. Aug 7 see page 3	7 7:30pm ARES digi 145.170; 8:30pm ARES voice 449.825	8	9	10 MD-DC QSO Party
11 QSO Parties continue	12	13	7:30pm ARES digi 449.825; 8:30pm ARES voice 145.870	15	16	17
18	19	20	21 7:00pm ARES MEETING see page 2	22	23	24 HI, KS & OH QSO Parties
25	26	27 HCARC Board Lunch Meeting August 28	28 7:30pm ARES digi 449.825; 8:30pm ARES voice 145.870	29	30	31 CO QSO Party

QSO Party Rules

See **State QSO Parties** at **WA7BNM**'s **Contest Calendar**.

Two Great Hamfests This Month

Huntsville, AL https://hamfest.org August 17-18; Marlborough, MA http://www.hamxposition.org/ August 22-25.

Thank You All

Many thanks to:

Doug Poray KC2TZC, Larry Puccio K2QDY, Bob Murdock WX2NJ, Mike Larkins WA2CWX, Carl Lee W2PTZ, Bill Feidt NG3K, QRZ.com, and the ARRL.