www.hcarc.us

March 2023

Toms River, NJ

#### **Our President's Message**



Amateur Radio takes on many forms and satisfies many interests. One of the very popular activities is making QSO's and receiving awards for this accomplishment. The ARRL has numerous awards available to amateur operators. Some of the awards include WAS (Worked All States), WAC (Worked all Continents), and DXCC (Worked 100 Countries) awards. POTA (Parks on the Air), SOTA (Summits on the Air), IOTA (Islands on the Air), VOTA (Volunteers on the Air) and QSO parties serve to enable operators to achieve these awards. Visit the ARRL website (arrl.org) to find information and rules for obtaining these awards.

At the March meeting there will be a presentation on the History of the Car Radio. Car radios have evolved from very basic forms of entertainment to being a necessity in the automobile.

Even though this is a diversion from amateur radio, it should prove to be an interesting topic.

-Doug Poray KC2TZC

#### The Red Doozy



The Duesenberg looks embarrassed because a few of our members still need to pay their dues. If that means you, please see or contact Larry Puccio K2QDY. See page 3 column 2 for address, etc.

#### March 1st Chinese Buffet



It's "short notice" but we're having a buffet lunch at noon on March 1<sup>st</sup> at the Fortune Buffet (as usual) 1311 NJ Route 37W. Y'All come.

#### **OUR NEXT REGULAR MEETING:**

Thursday, March 2nd at 7:00 PM Holiday City South Clubhouse A Santiago Drive at Mule Road Toms River, NJ

#### **Ocean County ARES® News**

On Saturday, February 18th, Ocean County ARES participated in Thinking Day On The Air 2023 with the Jersey Shore Girl Scouts. Two sites were established, one at Toms River and another in Farmingdale, Monmouth County. Each site had VHF/UHF capability and HF on 10 meters.

The Toms River operator crew was WX2NJ, K2MDW, NJ2N and KD2SIE.

The Farmingdale crew was KD2FFR, K2HES and KC2ENS.

N2LD and WB2ALJ assisted from their home stations by having QSO's with the scouts.



KD2SIE Explains program to K2MDW

The girls were working on the ARRL Radio and Wireless Technology Patch Program.



KD2SIE is a Girl Scout advisor at Toms River and built the activity workshop for the scouts. The activities are based on a program developed by the Girl Scouts of Greater Atlanta.

The ham radio operating station was established outside the building close to the activity room. Once the girls were briefed on radio protocol and answered a hint sheet of possible questions to ask on the air, they were bought out to the radio area where licensed ARES operators connected them to another operator via radio.



K2MDW and Ava in QSO

The girls enjoyed discussing various topics with ARES operators and other scouts at the other site. Most of



NJ2N and K2MDW. All photos by WX2NJ the girls were anxious to get ARRL Technician training info to study for their exam. We were fortunate to have utility power available to power our gear, but we were

prepared to use only battery, if needed. A small, UHF/VHF dual band antenna was mounted on a small tripod and easily reached Toms River and Lacey ARES repeaters. A 10 meter hamstick was mounted on a mobile with coax extended to the operating station for HF. The girls were treated to listening to some active CW QSO's on HF.

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



## **Happy Birthday To:**

Michael Carson KC2OOF

Raymond Kozakiewicz KC2TPK

John Roberts KQ4WR

Vickie Freidman

Vincenza Mattson

Sarah Punderson

Maureen Dobrolovich



## Happy Anniversary To:

Dennis & Pat Aldrich
Christine & Steve Jackson



#### **Our Volunteer Examiner Crew**

Larry <u>K2QDY</u> (Liaison) 732-349-2950, John <u>KQ4WR</u>, Stan <u>KB2P</u>, Steve N2WLH, Michael WA2CWX

License exams are given by appointment at 7:00pm 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	<u>N2WL</u> H	732-255-7916
Secretary	John Perry	KD2NDY	732-349-2705
Treasurer	Larry Puccio	K2QDY	732-349-2950
<b>Executive Board</b>	Carl Lee	W2PTZ	732-575-7558
Executive Board W2HC Trustee	John Roberts Larry Puccio	KQ4WR K2QDY	732-966 4665 732-349-2950

Membership is open to all interested persons. Ham license is not required. Dues are \$25.00 per year, payable Jan 1<sup>st</sup>. 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 and park near the pool. EnterBuilding 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, KQ4WR, 732-350-1162.

## Broadcasting And Its History\*

Radio and television have undergone seismic shifts in the way they produce content and make it available to viewers and listeners since the start of the 20th century. Streaming may have revolutionized the entertainment business, but everyone who binges their favorite television show via a streaming service or listens to music in their car thanks to an app on their phone is in the debt of the pioneers of the broadcasting business who first brought entertainment to the masses in their own homes.

#### The Early 20th Century\*

The person who first brought radio broadcasting to audiences in the United States was Reginald Fessenden, who first experimented with sending out broadcasts with music and vocals back in 1906. The Herrold School in San Jose, California, began experimenting with radio transmissions and call signs in 1909 under the guidance of Charles Herrold, and the Department of During the 1930s, scientists and the broadcast industry Commerce soon decided to regulate radio, a decision that led to radio stations having call letters.

The post-World War I era was a turning point in radio broadcasting history. During the war, only a select group of organizations were permitted to continue working on radio transmitters and receivers. Westinghouse made great strides during this time, and during the postwar era, many radio stations were founded, several of which were started by local newspapers. Pittsburgh's KDKA claims to have been the first fully functional radio station in the U.S., though this has been disputed.

Since stations quickly started accepting paying advertisers, the United States never imposed license fees for radios the way other countries did. The Radio Act of 1927 established the Federal Radio Commission, which a few years later was renamed the Federal Communications Commission, or FCC. The FCC continues to regulate and oversee broadcast stations and the content they air to this day.

Within a decade, by 1931, most households in the United States owned a radio. A few years later, in 1934, independent radio stations banded together for the first time to create a system for sharing syndicated content. The FCC then declared that NBC, which at the time

was strictly a radio network, must sell its Blue Network division. The Supreme Court upheld this decision in 1943, stating that the scarcity of radio waves meant that the FCC was correct in taking action to prevent any one company from controlling too much of the spectrum. The Blue Network eventually became ABC. CBS was also operating as a radio broadcasting network by this point. Many of the radio networks were airing serialized soap operas in the afternoons. The first soap opera was created by a Chicago radio station in 1930. The genre earned its name because Procter & Gamble was a major sponsor of several shows, and in time, the company actually produced its own soap operas as well. Only one radio soap opera, Guiding Light, successfully transitioned from radio to broadcast television. In fact, *Guiding Light* aired on CBS until the fall of 2009 and was the last of the Procter & Gamble soap operas.

#### World War II, The Post-War Era, And The **Arrival Of Television\***

started heavily experimenting with television. Much like World War I delayed radio for a few years, World War II slowed the progress of introducing television to the masses. But by 1946, ABC, CBS, NBC, and the DuMont network were all regularly broadcasting television content. DuMont stopped broadcasting during the 1950s; 30 years later, many former DuMont stations became the first stations of the Fox Network.

Radio was still going strong, though. During World War II, radio proved its value in being able to quickly transmit information to the entire country at the same time. For example, the attack on Pearl Harbor in 1941 was reported to the entire country nearly at the same time. Before radio, people would only learn about breaking news when their local newspaper put out its next edition. Radio soap operas and dramas, including familiar names like Perry Mason, were far more popular than anything offered on television, in large part because there was still so much more content on the radio and because far more households owned radios than televisions. In 1950, only 9% of households owned a television. But just four years later, in 1954, almost 56% of households had a television. By 1962, 90% of households owned a television. One reason television sales skyrocketed was the breakout popularity of network programs like I Love Lucy.

The 1950s saw the meteoric rise of television broadcasting and the related fall of radio broadcasting. The <u>last network radio drama</u> went off the air in 1962, the same year when television ownership hit 90% for the first time ever. The next great innovation in broadcasting occurred when CBS started broadcasting color television signals in 1951. However, another war, the Korean War, meant that progress in color broadcasting was paused until the conflict ceased. RCA started selling color television sets in 1954 after another color television broadcasting system was approved by the FCC in 1953. The Tournament of Roses Parade, which aired on Jan. 1, 1954, was the first coast-to-coast color television broadcast. However, the cost and complexity of filming and broadcasting shows in color meant that networks were slow to move to an all-color lineup. Several shows, like *Gunsmoke*, began airing in black and white despite the existence of newer technology. It wasn't until Gunsmoke's 12th season, which started airing in the fall of 1966, that the show moved to airing episodes in color. Daytime television was even slower to make the transition. For example, ABC's <u>Dark Shadows</u> premiered in 1966 in black and white. It wasn't until 1967 that the soap switched to color, and it was the first ABC soap to do so. Other shows, however, began airing in color earlier. For instance, Bonanza, which premiered in 1959, was only ever filmed and aired in color.

# Broadcast Supremacy And The Rise Of Viewing Options\*

The final episode of the hit television show M.A.S.H. aired in 1983, and more than 100 million viewers tuned in to CBS to watch their favorite Korean War medics say goodbye; this would be the most-watched TV episode of all time. Twenty-one years later, Friends, which had been the defining sitcom of its era, only drew a little more than 52 million viewers. When the 21st-century sitcom phenomenon The Big Bang Theory aired its final episode in 2019, slightly less than 18 million viewers tuned in. What happened? Quite simply, the rise of options. M.A.S.H. aired during the infancy of cable television. Until that point, the only television content viewers had available was what was aired by the major networks and independent stations like Chicago's WGN and Atlanta's TBS. Cable meant that over the course of about a decade, people's choices exploded. That impacted the number of people viewing Friends. By the time The Big Bang Theory went off the

air, cable and broadcast networks were also competing for viewers against streaming services like Netflix and Hulu. Radio also lost listeners as satellite radio put up stiff competition and then apps like Spotify and Apple Music began dominating the market.

#### The Business Of Broadcasting\*

Broadcast networks depend on advertising dollars to fund their <u>business</u>. Shows with bigger audiences command more money for their advertising slots, and it's because of this that ratings for television and radio are carefully tracked. Sports, especially events like the Super Bowl, still draw large audiences and allow broadcasters to charge heavily for each <u>commercial</u>. However, recently, networks have turned to new streams of revenue, like product placement within shows and running their own subscription-based streaming apps to monetize their vaults of programming, in an effort to continue to be fiscally viable in a changing entertainment landscape.

#### \*Credits

The preceding articles about broadcast radio are from "Business Studies: Broadcasting and its History", on the Internet as:

https://wyomingllcattorney.com/Blog/Business-Studies-Broadcasting-History

## A Free Ham Radio Library

Michael Carson KC2OQF called my attention to a tremendous source of useful information. Stuff like data in old issues of CallBook and equipment manuals.

Such data is best viewed on a disktop computer, but give it a try.

For example, I easily found my old callsign listing in the Fall 1952 issue Radio Amateur Callbook.

The website is:

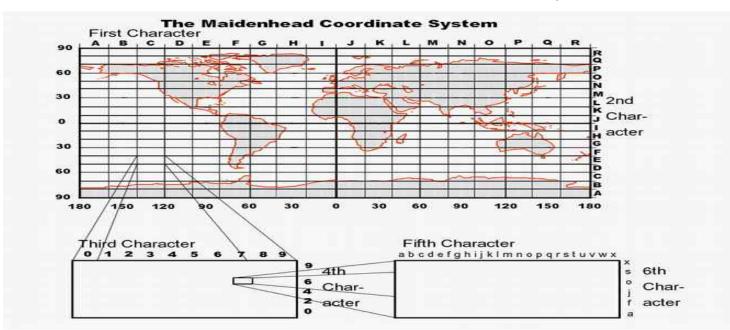
https://archive.org/details/dlarc

-John Roberts KQ4WR

SKYHOOK editor.

## **Larry Pucciio K2QDY Worked:**

DATE	TIME	FREQ	MODE	CALL	ENTITY	LOC MII	LES DIR
1/21/2023	15:30	28.036	CW	HG9W	Hungary	Call no	t found
1/21/2023	17:47	28.390	SSB	MM0TFU	Scotland	I075qh	3260 NE
1/21/2023	17:57	28.424	SSB	HZ1WRTC	Saudi Arabia	LL34ir	6577 NE
1/23/2023	23:53	28.408	SSB	JA1XEC	Japan	PM86tf	6800 NNW
1/27/2023	16:50	28.013	CW	DL4QB	Germany	J031qs	3802 NE
1/27/2023	19:23	28.028	CW	ZL6WRTC	New Zealand	RE78kp	8919 WSW
1/28/2023	22:13	1.827	CW	N1LN	CHAPEL HILL, NC	FM05jw	388 SW
1/28/2023	22:15	1.812	CW	NA8V	MI	EN83ob	491 WNW
1/29/2023	00:14	7.004	CW	VU2GSM	India	MK82tw	8365 NNE
1/30/2023	19:49	18.086	CW	7P8WW	Lesotho	KG30wg	8107 ESE
2/01/2023	02:35	3.540	CW	KC2IGE	MASSAPEQUA PARK, NY	FN30gp	63 NE
2/01/2023	22:00	28.045	CW	KL7AC	Alaska	BP64is	3280 NNW
2/01/2023	22:16	28.019	CW	JM70LW	Japan	QM07fo	6648 NNW
2/02/2023	00:10	07.010	CW	CT1ZQ	Portugal	IN50vc	3410 ENE
2/02/2023	00:16	28.026	CW	BA5AD	China	PM00is	7461 NNW
2/02/2023	21:36	28.015	CW	CX5FK	Uruguay	GF15bn	5248 SSE
2/02/2023	21:42	28.030	CW	HI3T	Dominican Republic	FK49tl	1434 S
2/05/2023	16:46	28.004	CW	5V22FF	Togo	JJ06of	5176 E
2/05/2023	21:49	28.380	SSB	KL7TC	FAIRBANKS, Alaska	BP64ev	3289 NNW
2/05/2023	21:56	28.340	SSB	PY2WDX	Brazil	GG66rk	4740 SSE
2/06/2023	21:28	28.439	SSB	KP4VOR	Puerto Rico	FK68kl	1544 SSE
2/06/2023	23:52	10.107	CW	PJ2ND	Curacao	FK52kg	1939 S
2/09/2023	15:40	28.560	SSB	F6HQP	France	JN25wn	3912 NE
2/09/2023	15:42	28.565	SSB	ON7LV	Belgium	J021la	3724 NE
2/09/2023	15:50	28.016	CW	YL25M	Latvia	K027aa	4245 NE
2/09/2023	22:07	28.010	CW	CA40MQ	Chile	FF46rq	5071 S
2/10/2023	01:31	7.005	CW	VP5/DK6AS	Turks & Caicos Is.	FL41ao	1276 S
2/12/2023	20:17	28.400	SSB	HI8AT	Dominican Republic	FK48ws	1485 S
2/12/2023	20:55	28.435	SSB	KP4VOR	Puerto Rico	FK68kl	1544 SSE
2/12/2023	21:56	28.444	SSB	PY4YY	Brazil	GH49eq	3765 SSE



#### **Some DX Opportunities**

Callsigns shown in alphanumeric order

Italics if DX > 6000mi

Mode codes: 8 = JT8, C = CW, D = Digital, J = JP4, P = PSK31, R = RTTY, S = SSB, T = SSTV.

Bands: "Low" usually means 160, 80 & 40m.

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

START	FINISH	ENTITY & Ranking	PFX	CALLSIGN	IOTA	BANDS	MODES	QSL via	LOC	MILES DIR	INFO by
2023 Feb24	2023 Mar05	Agalega & St Bran	о 3В7М	в 3В7М	F AF-015	G 160-6m	C S 8 R	LoTW	LH89qp	8810 ENE	TDDX
2023 Jan20	2023 Mar03	Timor Leste	4W	4W/JH2EUV	OC-148	80-10m	8	LoTW	PI09ma	9583 NNW	DXW.Net
2023 Feb27	2023 Mar07	San Andres & Prov	53	5J0EA	NA-049	80-10m		W4GDV		1890 SSW	DXW.net
2023 Feb27	2023 Mar07	San Andres & Prov	5K	5KØVT	NA-033	80-10m		W4GDV	EK92eq	1938 SSW	DXW.net
2023 Feb06	2023 Mar31	Senegal	6W7	6W7/ON4AVT		80-40m	S C 8	OQRS or LoTW	IK14mi	3865 E	TDDX
	2023 Mar31	Japan	JA	8J1H90T	AS-007			buro	PM95qi	6814 NNW	ARLD048
2022 Decem	2023 Decem	Antarctica	AT4	AT42I				VU2CRS	JB59uf	8715 SSE	ARLD055
2023 Feb14	2023 Mar14	The Gambia	C5	C5C		80-6m	S C 8	LoTW F5NVF	IK13uj	3941 E	DXW.Net
2023 Mar20	2023 Mar29	Sable I	CY0S	CY0S	NA-063	160-2m	C S 8 R	WA4DAN w/sase	GN03aw	783 ENE	DXW.Net
2022 Jan01	2023 Sep30	Germany	DA	DR45HAAN				DL7DT	J040ic	3901 NE	ARLD039
2022 Aug20	2024 Apr01	Mayotte #110	FH	FH4VVK	AF-027	80-10m		F4VVJ	LH27pe	8346 E	ARLD033
	2023 Aug15	St Barthelemy	FJ	FJ4WEB	NA-146	40-10m	S	K2LIO	FK87ov	1672 SSE	ARLD002
2023 Mar21	2023 Mar28	Martinique	FM	FM/EA1BP	NA-107	80-10m	S	LoTW	FK94mq	1923 SSE	EA1BP
2023 Jan15	2023 Mar15	Martinique	FM	FM/F6BWJ	NA-107	80-10m	CPR	LoTW F6BWJ	FK94mq	1923 SSE	TDDX
	2024 Sep15	Wallis &Fortu #88	FW	FW/F4CIX	0C-054	40-10m	S 8 4	LoTW	AH16vr	7437 W	ARLD037
2002 5 145	2023 Dec31	Wallis & Fortuna	FW	FW1JG	0C-054	00.10		LoTW F4CIX	AH16vq	7439 W	ARLD003
2023 Feb15	2023 Apr30	Solomon Is	H4	H44MS	OC-047	80-10m	S 8	DL2GAC	RI01hp	8433 WNW	DXW.Net
2023 Mar01	2023 Mar11	Galapagos	HD8 HH	HD8M	SA-004	160-6m	C S 8 4	See Web N200	EI49uf		TDDX
2023 Jan01 2023 Mar12	2023 May03 2023 Mar19	Haiti Dominican Rep	HI0	HH75RCH HI0LT	NA-096 NA-122	160-2m	C S R 8 4	EB7DX	FK39sa FK48nu	1453 S ı 1473 S	ARLD052 DXW.Net
2022 Nov23	2023 Mar13	Honduras	HR5	HR5/F2JD	NA-122	80-10m	C S R 4 8	LoTW	EK64np	1909 SSW	TDDX
2022 Nov01	2023 Apr02	Thailand	HS	HS0ZME		40-10m	C 3 K 4 8	SM6MT	NK92xm	8797 N	TDDX
2022 100001	2023 Jun01	Djibouti	J2	Ј28НЈ		80-10m	S 8	LoTW	LK11mn	7082 ENE	ARLD029
2023 Mar09	2023 Mar24	Ogasawara	JD1	JD1B0I	AS-031	160-6m	C S R 8 4	JI1IET dir	QL17rd		TDDX
2023 Mar09	2023 Mar24	Ogasawara	JD1	JD1BON	AS-031	160-6m	C S R 8 4	JA1UII dir	QL17rd	7209 NW	TDDX
2023 Jan24	2023 Mar07	Japan	JI3	JI3DST/6	AS-079	160-6m	CSRF	JI3DST dir	PL24pt		ARLD003
2023 Jan24	2023 Mar07	Japan	JI3	JI3DST/P	AS-079	160-6m	8	JI3DST dir	PL24pt	7792 NNW	ARLD003
2023 Jan24	2023 Mar07	Japan	JJ5	JJ5RBH/6	AS-079	160-6m	CSRF	JI3DST dir	PL24pt	7792 NNW	ARLD003
2023 Jan24	2023 Mar07	Japan	JJ5	JJ5RBH/P	AS-079	160-6m	8	JI3DST dir	PL24pt	7792 NNW	ARLD003
2023 Jan24	2023 Mar07	Japan	JR8	JR8YLY/6	AS-079	160-6m	CSRF	JI3DST dir	PL24pt	7792 NNW	ARLD003
2023 Jan24	2023 Mar07	Japan	JR8	JR8YLY/P	AS-079	160-6m	8	JI3DST dir	PL24pt	7792 NNW	ARLD003
2023 Jan24	2023 Mar07	Japan	JS6	JS6RRR/6	AS-079	160-6m	CSRF	JI3DST dir	PL24pt	7792 NNW	ARLD003
2023 Jan24	2023 Mar07	Japan	JS6	JS6RRR/P	AS-079	160-6m	8	JI3DST dir	PL24pt		ARLD003
	2023 Apr28	Guam	KH2	N7JVJ/KH2	OC-026	40-10m	(QRP) S 8	opr instr		1 7977 NW	ARLD003
	2023 Mar28	Montserrat	VP2M	P2MDX	NA-103	80,40,30m	C S	WA2APF	FK86vs	1758 SSE	ARLD002
2023 Feb20	2023 Mar03	Curacao	PJ2	PJ2/AA1M	SA-044	80-10m		LoTW AA1M	FK52md	1950 S	TDDX
2023 Mar04	2023 Mar22	Curacao	PJ2	PJ2/DK50N	SA-099	160-6m	S C 4 8 R	LoTW DK50N		1953 S	DK50N
2023 Feb20	2023 Mar03	Curacao	PJ2	PJ2/W1SR	SA-044	80-10m		LoTW W1SR	FK52md	1950 S	TDDX
2023 Feb20 2023 Mar28	2023 Mar03 2023 Apr04	Curacao Saba & St Eus	PJ2 PJ5	PJ2/W1USN PJ5/W5JON	SA-044 NA-145	80-10m 80-6m	S 8	LoTW W1USN LoTW	FK52md FK87ml	1950 S 1694 SSE	TDDX W5JON
2023 Mar01	2023 Apr 04 2023 Mar 08	Sint Maarten	PJ7	PJ7/KC9EE	NA-143 NA-105	40-10m	C 8 4	LOTW KC9EE	FK881b	1655 SSE	TDDX
2023 Mar04	2023 Apr01	Sint Martin	PJ7	PJ7AA	NA-105	80-10m	C S 8	LoTW AA9A dir	FK88ka	1656 SSE	TDDX
2023 1101 04	2024 March	Antarctica	Anta	RN1ON	AN-016	00 10111	CSD	RI1ANC	OB31km	9782 S	ARLD052
	2023 Mar31	Antarctica	Anta	RZ3EC	AN-016		CSD	RI30ANT	OB31km	9782 S	ARLD052
2023 Feb24	2023 Mar02	Palau	T8	T88CH	OC-009	80-10m	8 c s	JF6CHA	PJ77fi	8695 NW	EA1CS
2023 Feb24	2023 Mar02	Palau	T8	T88UW	OC-009	80-10m	8 c s	JH7IPR LoTW	PJ77fi	8695 NW	EA1CS
	2023 Dec31	Turkey	TC	TC100TA				burough	KM69kv	5267 NE	ARLD003
	2023 Dec31	Turkey	TC	TC100TC				burough	KM69kw	5265 NE	ARLD003
	2023 Dec31	Turkey	TC	TC100TR				burough	KM69kv	5267 NE	ARLD003
	2023 Dec31	Turkey	TC	TC100YEAR				burough	KM69kv	5267 NE	ARLD003
2022 Dec29	2023 Mar15	Gabon	TR	TR8CR		30-10m	С	F8EN B/d	JJ40rj	5871 E	TDDX
2023 Mar24	2023 Apr02	Antigua & Barbuda	V2	V26EI	NA-100	80-10m	C S D	M00X0		1748 SSE	DXW.Net
2023 Mar02	2023 Mar05	Anadaman Is	VU4	VU4T	AS-001	40-10m	C s	LoTW	NK31ho	8674 NNE	
2023 Feb15	2023 Mar11	Belize	V31	V31DJ		160-10m	C	LoTW or WOCP	EK57ox	1750 SW	425DXN
2023 Feb15	2023 Mar11	Belize	V31	V31DK	NA 072	160-10m	S	LoTW or KOZF	EK57ox	1750 SW	425DXN
2023 Mar19	2023 March	Belize	V3	V31TX	NA-073	160 10-	C c 0	DJ5QW		1812 SSW	ARLD051
7072 I.Iqi.13	2023 Apr01 Few years	St Kitts & Nevia Brunei	V4 V8	V4/N4RF V85NPV	NA-104	160-10m	C s 8	N4RF LoTW	0J74fl	1717 SSE 9322 NNW	DXW.Net ARLD046
2023 Mar17	2023 Mar31	Norfolk I	V6 VK9	VK9NT	OC-005	160-6m	C SD 8	LoTW or M00X0	RG30xx	9322 NNW 8892 W	425DXN
2023 Mari7 2022 Oct15	2023 Marsi 2023 Apr30	Willis Island	VK9 VK9w	VK9WX	0C-003 0C-007	20m 40-10m	S	VK4WVW	QH53av		ARLD049
2023 Mar23	2023 Apr 02	Montserrat	VP2	VP2MEI	?	160-10m	SCD	M00X0		1764 SSE	DXW.Net
2023 Mar08	2023 Apr 02 2023 Mar22		VP5	VP5/N9EAS	: NA-003	80-10m	Sc	ClubLog/LoTW	FL41kl		TDDX
	2024	Indonesia	YB	YB8QT	OC-210	80-10m	D S	IK2DUW	PJ21ib		ARLD048
	2023 Mar05	Indonesia	YB	YB9/ON6HX	OC-150	80-10m		NO6HX		10177 NNW	ARLD007
	2023 Jun30	Romania	Y0	YR1400VT				YR1400VT	KN34bk		ARLD051
2022 Decem	2023 Decem	Albania	ZA	ZA15K		40, 20m		oper instr		4675 NE	ARLD050

March							
Sunday	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday	
		Buffet 1 <sup>st</sup> See ge 1	1 7:30 ARES Dig net 145.170, 8:30 ARES Voice 449.825	HCARC Meeting 7:00PM	3	4	
5	6	License Exams 6:30 Tomorrow by appointment See Page 3	8 7:30 ARES Dig net 449.825, 8:30 ARES Voice 145.170	9	10	11	
12	13	14	7:30 ARES Dig net 145.170, 8:30 ARES Voice 449.825	16	17	18	
19	20	21	7:30 ARES Dig net 449.825, 8:30 ARES Voice 145.170	23	24	25	
26	27	28	29	30	31		

## **A Thank You To Our Authors**

To Doug Poray, Steve Jackson, John Perry, Larry Puccio, Carl Lee, and Bob Murdock, Thank You.