

The SKYHOOK



HOLIDAY CITY AMATEUR RADIO CLUB

www.hcarc.us

October 2018

Toms River, NJ

Our President's Message



As I sit here listening to 40 meters this evening, I hope everyone has had a good month since the last meeting.

If you need to get any antenna work done, now is the time. The bands have been dead lately except at night.

I have been playing with "web-sdr" to listen into other parts of the country and other parts of the world. If you would like to try it go to www.web-sdr.com.

We will be taking nominations for club officers at this meeting for November voting. Please consider volunteering to help the club.

I went to the Gloucester Hamfest last Sunday and had a good time. There was a good showing of Ocean County ARES members in attendance.

Congratulations to Tom, N2XW, who will be our next ARRL Southern New Jersey Section Manager effective January 1st 2019.

We had 18 members attend the Chinese Buffet this month. A good time was had by all.

Hope to see everyone at the next meeting.

73,
Carl
W2PTZ

At Our October Meeting

Holger Skurbe K2HES will offer a brief explanation of DMR radio and best sources for information. He will demonstrate and explain the programming of a TYT radio and what information is necessary to program a DMR radio with hints and suggestions on how to properly manage the contents of your code plug. Holger will also have a few new TYT MD2017 dual band analog/DMR radios available to purchase (\$160.00) with the code plug for NY-NJ-PA-DE with the 85,000 user list installed.

Club Leaders Nominations Needed

We need your help. Every year, at the November meeting, we elect a board of directors. Please give this serious thought, as the HCARC needs your input. If you would like to serve on our Board, or know someone who should, now is the time to speak up.

October Get-togethers

You're welcome to join us for lunch or brunch at the Holiday City Diner (Mule Rd near the Davenport Rd Parking Lot) and/or Lisa's Pizzeria/Restaurant (Route 37W opposite Mule Rd.).

The schedule for October 2018 is:

10/1 Noon Lunch at the Holiday City Diner

10/8 9 am Breakfast at the Holiday City Diner

10/15 Noon Lunch at Lisa's

10/22 9 am Breakfast at the Holiday City Diner

10/29 Noon Lunch at the Holiday City Diner

**NEXT REGULAR MEETING:
Thursday October 4 at 7:00 PM
Bldg A, Meeting Rm. #1
Holiday City South Clubhouse
Santiago Drive at Mule Road
Toms River, NJ**

No-Test Upgrading To General From Technician Plus

By Urb LeJeune W1UL

Prior to March 21, 1987, the theory test for both the General and Technician exams were one and the same. The only difference between Technician and General class was people testing for General took a 13 WPM code test while people testing for Technician took a 5 WPM.

When the code requirements were dropped from amateur licensing requirements the Technicians licensed before March 21 1987 were officially called Technician Plus license holders. Holders of Technician Plus licenses are eligible for an automatic, no-test upgrade to General. If you are in this category you must do the following.

1. You must be currently licensed as a Technician Plus
2. Provide proof you were licensed before March 21, 1987.
3. Attend a VE session and fill out all paperwork and pay the \$15 fee since this is an upgrade.

I have an old call book and can supply you with the necessary information to satisfy requirement 2 above. If you're not local, send me a stamped self-addressed number 10 envelope.

73 Urb LeJeune W1UL
15 Hunter Dr.
Tuckerton, NJ 08087

609-937-5487 if you have any questions.

73 Urb W1UL urb@ham-cram.com

Happy Birthdays

Larry Puccio K2QDY
Kathleen Kozakiewicz
Charlotte Militano



Happy Anniversaries

Ray & Kathleen Kozakiewicz
Morton & Elaine Levy
Larry & Janice Loscalzo
Joe & Charlotte Militano



End Fed Wire Antenna

Matt de Rouville, K3MR, has built an end-fed wire antenna for his Holiday City @ Berkeley lot. The property has a Sweet Gum tree out front but no trees in the rear. Matt decided that running an end-fed wire from a support on his back patio awning over the roof to the tree out front would be the ideal solution for multi-band HF operation. His shack is in his bedroom at the back of the house, overlooking the patio.

An Internet search led to VE3EED's (SK) page <http://www.hamuniverse.com/randomwireantennalengths.html> on desirable antenna lengths. It appeared 84 feet (25.6 m) would be the best size for the space available. The antenna was built in steps. The first part was buying 150' of stranded 14 ga. wire from cheapham.com and put it up as well as possible for a receiving antenna. This provided a chance to listen to HF while designing the antenna. The wire was cut to its desired length before installing it as a transmitting antenna.

For support on the back patio awning, four 4-foot fiberglass poles were purchased. These can be put together to make a 16-foot mast, which was placed on the ground and lashed to a support for the awning with four hose clamps spaced with 1½ x ¾" PVC board.

A ring on the top of the mast was used to hold a pulley, through which ran some paracord holding up the antenna and securing it to the patio support. The antenna wire goes to an LDG 4:1 balun mounted on the mast.



At first, the antenna was run around the side of the house, touching the roof.



A chimney mount with a five-foot pole was added to carry the antenna over the roof.

A twenty-foot length of PVC pipe with an elbow on top was lashed to the tree out front which gave the opposite end of the antenna some height without having to climb the tree or hire a bucket truck.

The antenna loads from 160 to 10 meters with an LDG tuner. SWR on 160 and 80 is about 2:1, and lower on the higher bands. Six turns of RG8X coax is used to form a choke at the balun end. A ground rod at the patio provides an earth ground for the antenna system

and the shack. There is still a problem with RF activating a touch lamp in the dining room, and the electronic keyer doesn't work on some bands. Contacts have been made to Europe and South America on 30 m, plus as far as Michigan on 160 m with a 100 watt Alinco DX-SR8 transceiver.

This project received a lot of help from members of the

Our VE Crew

Larry [K2QDY](#) (Liaison) 732-349-2950,
Urb [W1UL](#), John [KQ4WR](#), Stan [KB2PD](#), Steve [N2WLH](#),
Murray [KD2IN](#), Paul [N2QXB](#), Larry [WA2VLR](#), Tony [KD2GSO](#).
License exams are given by appointment at 6:30pm on the second Wednesday of each month 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.

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

CLUB COMMITTEES

Refreshments: Tony [KD2GSO](#) 732-930-5779
Webmaster: Steve [N2WLH](#) N2WLH@yahoo.com
Programs: Tony [KD2GSO](#) 732-930-5779
Sunshine: Dave [WA2DJN](#) WA2DJN3@verizon.net
Field Day: Larry [K2QDY](#) 732-349-2950
VE Sessions: Larry [K2QDY](#) 732-349-2950
Membership: Doug [KC2TZC](#) 732-928-2316

Holiday City Amateur Radio Club

Toms River, New Jersey

Web Site www.hcarc.us

President	Carl Lee	W2PTZ	732-575-7558
Vice President	Billy Locke	KD2MHA	732 281-0151
Treasurer	Larry Puccio	K2QDY	732-349-2950
Secretary	Marge Penn	KD2LNT	732-736-0115
Executive Board	Doug Poray	KC2TZC	732-928-2316
Executive Board	John Roberts	KQ4WR	732-966 4665
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.

Meetings are held on the first Thursday of every month, at 7:00 pm, except December.

Location: Meeting Room #1 in the 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.-

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e-mail KQ4WR@arrl.net 732 966 4665

Holiday City Amateur Radio Club, the Jersey Shore Amateur Radio Society, and other local hams. Steve, AC2ST, helped survey the property and made suggestions for the antenna. Tony, KD2HIT, donated an LDG antenna tuner. Unfortunately, it didn't seem to work properly, so Ralf, N2FVB, brought his tuner over and was able to tune the antenna. So K3MR sent his tuner back to LDG, which fixed it for free.

Larry, K2QDY, provided the PVC pipe for the tree in front. Rick, KC2VXI, and Charlie, N1CRR did the grounding and running the antenna over the roof. Other hams provided over the air suggestions and encouragement. Apologies if anyone has been left out. It's good to be back on HF, particularly CW.

Matthew de Rouville, K3MR

baltimatt@verizon.net

An 80m Antenna For Small Gardens

Not too long ago I was having a conversation with a fellow "Ham" that had moved to a new location with less property to erect his antennas. The dilemma was to put up an antenna that he could easily construct that would fit within his backyard and be reasonable inconspicuous when viewed from the front of his home. While searching the Internet for an antenna that would fit these limitations, I came across Mike's (G7FEK) website and his construction article on just such an antenna. He calls it "80m Antenna for small gardens". If you plan on building this antenna, I suggest you read all the articles on his website. He gives notes on this antenna along with results he has acquired over the years. I think this antenna would be well worth looking into especially if you live in antenna restricted areas. His website and his antenna articles can be reached at <http://www.g7fek.co.uk/index.html>

Antenna (all one line of text):

http://www.g7fek.co.uk/news.php?page=80m_Antenna_for_small_gar_49493

A link to Mike's website will also be placed on the HCARC website in the "Helpful Links" section.

While you're there take a look at the other articles Mike has on his website. Well done Mike.

Steve, N2WLH

What Is Impedance?

Impedance is the ratio of voltage to current, like resistance. However, it's a complex quantity that varies with frequency.

Power equals Volts of voltage, times Amps of current, but for alternating currents, such as radio, only when they're in phase with each other.

When they're not perfectly in phase, you have to multiply that by the cosine of the phase error. The phase error is the number of degrees of the cycle the voltage is out of step with the current.

So an electric fan, for instance, may run on 120 volts and draw half an amp, but use less than 60 watts.

Impedance is to AC (including RF) as Resistance is to DC. But Impedance is the combination of two different voltage-to-current ratios.

One of these is the ratio of the amount of voltage that is in phase with the current, and so that's called the Resistance, or just R. That's the part that determines the power.

The other part is the ratio of the amount of voltage to current that is 90 degrees (a quarter-wave) out of phase (out of step compared to the voltage). That's called the Reactance, and the symbol for it is X.

At low frequencies, Inductive reactance usually comes from coils, and Capacitive reactance usually comes from capacitors, and one tends to tune out the other. But at higher frequencies, wiring, especially coaxial cables, greatly affect the impedance.

Reactance draws current and consumes voltage, but doesn't directly affect the power.

The math can get messy, but it's nice to know.

Resistance and reactance are like length and width. Impedance, at a particular frequency, can be stated either as R ohms and X ohms, or as an amount of impedance ($|Z|$ ohms) and phase angle (in degrees).

Like width and length, the voltage-to-current ratio that results from resistance and reactance is the square root of the sum of the squares of the resistance and reactance.

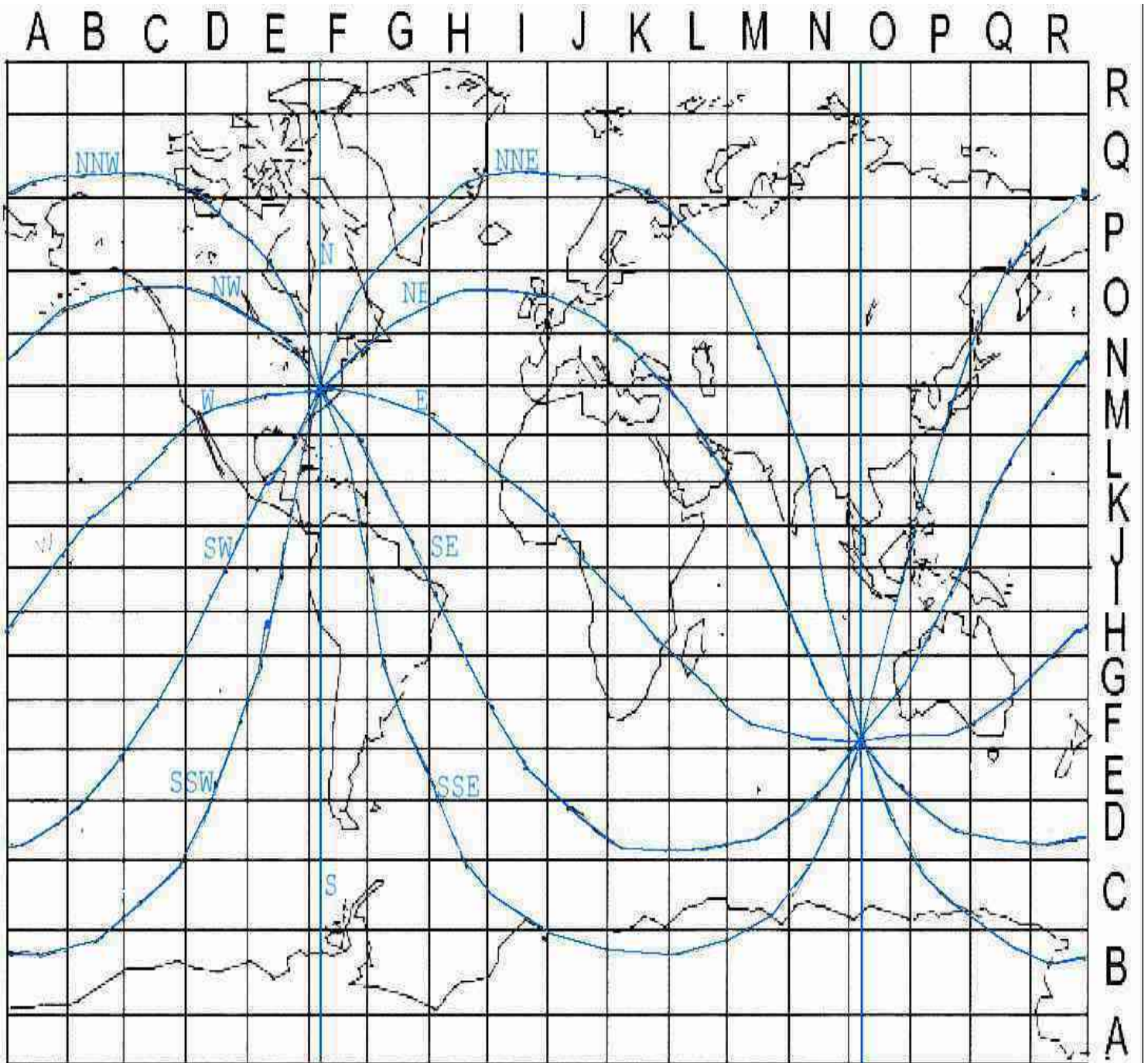
When you connect an inductance and a capacitance

together, (in series or parallel), their reactances will oppose each other. At some frequency, they will cancel each other completely. That's the resonant frequency.

Impedance is most useful when considering the effects of components that are connected in series. For components connected in parallel, which is a more typical case, the reciprocal of impedance, called Admittance (symbol Y) is easier to use. Admittance defines the currents when you know the voltage, whereas impedance defines the voltages when you

know the current.

For RF above 30 MHz, "S Parameters", which are based on SWR, are even better suited. Engineers use neat computer programs such as Spice to do most of the math. Antennas, cables, PC boards, transistors, and even internal leads are treated as components.



License Exams



To make arrangements to take an exam for an amateur radio license, please call Larry Puccio at 732-349-2950.

The FRN Number on your current FCC license may be used instead of your Social Security Number.

Our exam sessions are normally scheduled for 7:00pm on the second Wednesday of each month, but candidates must make reservations at least two days in advance.

Thank You

A special "Thank You" to our article contributors:

Urb LeJeune, W1UL

Matt de Rouville, K3MR

Steve Jackson, N2WLH

Tony Kuzinski, KD2GSO

Larry Puccio, K2QDY

Doug Poray, KC2TZC

Carl Lee, W2PTZ

Some DX for October:

Begins	Ends	Callsign	Entity	Bands	Modes	IOTA#	Grid	Miles	Dir
Oct 19	Oct 29	4V7R	Haiti	160-6m	C, S, R, FT8	NA-096	FK38mm	1484	S
Oct 24	Nov 28	5H3MB	Tanzania	80-10m		AF-032	KI93pu	7736	E
Oct 27	Nov 03	5W	Samoa	160-10m	C, S, 8	OC-097	AH47aa	7200	W
Sep 28	Oct 14	5W0GC	Samoa	160-80m	C, S, R	OC-097	AH47aa	7200	W
Sep 26	Oct 10	9X0T	Rwanda	160-10m	C, R, S		KI58am	7042	E
Sep 26	Oct 10	9X0Y	Rwanda	20m	FT8		KI58am	7042	E
Sep 30	Oct 12	C21GJ	Nauru	50.313 EME	? / HF C, S, FT8	OC-031	RI39am	7789	WNW
Oct 06	Oct 16	E6Y	Niue	160-10m	S, C	OC-040	AH56bw	7094	W
Oct 16	Oct 22	EA9	Ceuta & Melilla	40-10m	C, FT8	AF-036	IM76hq	3647	ENE
Oct 27	Nov 11	FG	Guadeloupe	20m	C	NA-102	FK96eg	1805	SSE
Oct 29	Nov 06	FH	Mayotte	160-10m	C, S	AF-027	LH27pa	8353	E
Oct 09	Oct 27	FR	Reunion	160-10m	C, S	AF-016	LG79sa	9227	E
Sep 24	Oct 09	H88X	Panama	160-6m	C, S, FT8		FJ09ga	2163	S
Oct 24	Oct 29	JD1BNA	Ogasawara	160-40m		AS-031	QL07mm	7256	NNW
Oct 10	Oct 15	JW	Svalbard		C, S, Dig	EU-026	JQ75tf	3566	NNE
Oct 10	Oct 24	KG4	Guantanamo	160-80m	S, FT8, PSK, R	NA-015	EL83td	1256	SSW
Oct 02	Oct 29	KH8	American Samoa	160-10m	S, FT8, R	OC-077	AH55fs	7127	W
Sep 25	Oct 02	OX3LX	Greenland			NA-018	GP44de	1906	NNE
Oct 12	Oct 19	P4	Aruba	80-10m	C, S, R, FT8	SA-036	FK52am	1915	S
Oct 20	Oct 30	PJ4	Bonaire			SA-006	FK52ne	1948	S
Sep 20	Oct 10	SV5	Dodecanese	80-10m	C, S, R	EU-001	J040ic	3901	NE
Oct 04	Oct 09	T88	Palau	160-6m	C, FT8, FSK, S	OC-009	PJ77jm	8674	NW
Oct 17	Oct 24	T88SM	Palau	160-6m	C, s, fm	OC-009	PJ77jm	8674	NW
Sep 21	Oct 06	T060K	Mayotte	160-10m	C, S, R, FT8	AF-027	LH27pa	8353	E
Oct 09	Oct 21	TT8KO	Chad	160-10m	C, s		JK72ma	5653	E
Oct 10	Nov 06	V47JA	St Kitts & Nevis	160-6m & 60m	S, FT8	NA-104	FK87pf	1717	SSE
Oct 09	Oct 14	VK9	Norfolk I	40-10m	C, S, FT8	OC-005	RG30xx	8892	W
Oct 09	Oct 19	VK9N	Norfolk I	40-6m	S, FT8	OC-005	RG30xx	8892	W
Oct 16	Oct 30	VK9XG	Christmas I	160-10m	FT8	OC-002	OH29tm	10406	N
Sep 29	Oct 06	VK9XT	Christmas I	160-10m	C, S, Dig.	OC-002	OH29tm	10406	N
Sep 27	Oct 04	V02VC	Canada: Labrador		R	NA-044	G003aa	1124	NNE
Oct 20	Nov 03	VP6D	Ducie I	160-10m	C, S, Dig incl FT8	OC-182	CG75oh	5528	SW
Oct 31	Nov 14	VP9KF	Bermuda	160-10m	C	NA-005	FM72ph	749	SE
Oct 22	Oct 30	XT2SZZ	Burkina Faso	80-6m	S		IK92dh	4756	E
Oct 10	Oct 16	XV9RH	Vietnam	80-10m	S		OK30it	8933	N
Oct 03	Oct 27	XV9WJR	Vietnam	40,20,15m	C, s	AS-128	OK30hs	8936	N
Oct 12	Oct 16	XW1IC	Laos	40-6m			OK18ga	8430	N
Oct 12	Oct 22	XW4XR	Laos	40-6m	C, R, FT8		OK18ga	8430	N
Oct 15	Nov 04	YJ0GC	Vanuatu	160-6m	C, S, R	OC-035	RH43am	8407	W
Oct 26	Nov 06	Z23MD	Zimbabwe	80-10m	C, S, R		KH52ma	7811	E
Oct 01	Oct 12	ZA5V	Albania	80-2m	C, S, FT8, EME	EU-169	JN91sm	4644	NE
Sep 20	Oct 22	ZD9CW	Tristan da Cunha	80-15m	C, R, s	AF-029	IF32uv	6620	SE
Oct 16	Oct 22	ZL7X	Chatham I	160-10m	C, FT8, s	OC-038	AE16sa	8589	WSW

+ CQ WW DX Contest SSB Oct 27-28

(C=CW, S=SSB, etc.)

Contests And Other Activities

I noticed that there's a lot of British contest activity in October. For a very complete directory of all DX contests, check out the WA7BNM Contest Calendar on the Internet. You can find it via NG3K's ADXO website.

RSGB has a lot of contest activity on 80 meters this month.

Don't forget the PA and NY QSO Parties on Oct 13-14 and Oct 20-21 respectively.

Ducie Island Activation

Ducie Island, VP6D, one of the Pitcairn Islands, Oct 20 to Nov 3, is still the big prize this month, if you can work it.

American Samoa, KH8, might be even harder to work, but might be worth a try.

And Christmas Island, VK9, is on the list also.

October						
Sunday	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday
	1 Noon lunch at Holiday City Diner	2	3	4 REGULAR MEETING 7:00 PM	5	6
7	8 9:00 Breakfast at Holiday City Diner	9	10 License Exams by appointment call Larry 732 349 2950	11	12	13
14	15 Noon lunch at Lisa's Pizzeria	16	17	18	19	20
21	22 9:00 Breakfast at Holiday City Diner	23	24	25	26	27 https://www.cqww.com/rules.htm
28 CQWW SSB contest continues	29 Noon lunch at Holiday City Diner	30	31			

