ORANGE COUNTY AMATEUR RADIO CLUB, INC.

VOL. LXII NO. 11

P.O. BOX 3454, TUSTIN, CA 92781

November 2021

The Prez Sez... By Nicholas AF6CF



Hello and Greetings to all! This is November, so we are in the Club's Elections month, and preparing for the Holiday Banquet on December 10th. The October Auction was cancelled, so we had to dispose of all the donated equipment via swap meet sales, which went very well, with lots of fine equipment changing hands and the Club benefiting from the sales. Many thanks to the generous souls that donated equipment to be sold and especially to those that helped with the sale, Tom, Steve, Jim, Ron and Doug in particular.

We will have an outstanding speaker for the November meeting, and after that we will have the elections for next year's Board of Directors. The presentation will be about the ten meter band and we will learn about Cycle 25 propagation and the Ten-Ten organization.

An interesting aspect of the ten meter band is that a portion of it is open to all class operators, so you don't need to be a General or Extra to do long distance contacts. The Elections committee working on a slate, but because this is an unusual year, the committee has decided to propose the same as this year to carry over to the next. However, as per the Club's rules, anybody can be nominated to any position from the floor, so this is your chance to help the Club run its daily business by becoming one of the Directors (or even President). Any current Club member can have any position on the board.

As mentioned, the Christmas Party date has been set for Friday, December 10th. Mark your calendars early so you don't miss it. This year you will be able to pay for your dinner via PayPal on our website. Because of the low expenses this year the cover price will be very low, and we will have great door prizes, including gift certificates, radios, accessories, etc. Please see the flyer in this newsletter for menu, location and times.

As usual, I look forward to an eyeball contact with you all at the next General Meeting, and expect you to cast your vote for next year's Board of Directors. And remember, "Vox Populi, Vox Dei."

--73, DE AF6CF

NEXT MEETING

November 19th, 2021

Join us via ZOOM at 7:00PM!
Current OCARC members will
receive an email with
instructions. Early check-in
available at 6:30 PM(+-)

Keith Schlottman KR7RK

"Get on 10 Meters - Cycle 25 is here."

Plus: Club Elections

NEXT BOARD MEETINGSaturday, January 8, 2022

SPECIAL NOTICE:

During the COVID-19 pandemic
All OCARC Nets will Remain
Active!
See page 2.

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2021 Board of Directors:

President:

Nicholas Haban, AF6CF (714) 693-9778 af6cf@w6ze.org

Vice President:

Tim Goeppinger, N6GP (714) 730-0395 n6gp@w6ze.org

Secretary:

Corey Miller, KE6YHX (714) 322-0395 ke6yhx@w6ze.org

Treasurer:

Ken Konechy, W6HHC (714) 348-1636 W6HHC@W6ZE.org

Membership:

Bob Eckweiler, AF6C (714) 639-5074 af6c@w6ze.org

Activities:

Ron Mudry, W6WG (714) 840-3613 w6wq@w6ze.org

Publicity:

Tom Cowart, W6ETC (714) 454-0571 w6etc@w6ze.org

Technical:

Steven Belasco, N1BKB n1bkb@w6ze.org

Directors @ Large

Dan Violette, KI6X (714) 637- 4632 ki6x@w6ze.org

Tim Millard, N6TMT (714) 744-8909 n6tmt@w6ze.org

2021 Club Appointments:

W6ZE Club License Trustee:

Bob Eckweiler, AF6C (714) 639-5074 af6c@w6ze.org

Club Historian(s):

Corey Miller, KE6YHX (714) 639-5475 ke6yhx@w6ze.org

Bob Evans, WB6IXN (Emeritus) (714) 543-9111 wb6ixn@w6ze.org

RF Editor for November 2021

Corey Miller, KE6YHX corwinv@earthlnk.net

Webmaster:

Ken Konechy, W6HHC (714) 348-1636 W6HHC@W6ZE.org

Assistant Webmaster:

Bob Eckweiler, AF6C (714) 639-5074 af6c@w6ze.org

Tim Millard, N6TMT (714) 744-8909 n6tmt@w6ze.org

ARRL Awards Appointees:

Arnie Shatz, N6HC (714) 573-2965 N6HC@aol.com

John Schroeder, N6QQ (West Orange Co.) (562) 404-1112 N6QQ@msn.com

Monthly Events:

Membership Meetings*



Time: 7:00 PM When: 3rd Friday of each Month

*See ZOOM announcement pg.1

Board Meetings

January 08 at 8:15 AM

New physical location coming soon

** Board will handle Club
business by ZOOM at this time

Club Nets (Listen for W6ZE):

10M: 28.375 ± MHz SSB Wed- 7:30 PM - 8:30 PM Net Control: Corey, KE6YHX

2M: 146.55 MHz Simplex FM Wed- 8:30 PM - 9:00 PM Net Control: Corey, KE6YHX

75M 3.883 MHz LSB

Tue @ 8:00 PM Net Control: Corey, KE6YHX

CATALINA AMATEUR REPEATER ASSOCIATION (CARA) 147.090 MHz (+0.600 MHz) No PL

9:00AM and 9:00PM Prg. Director. Tom W6ETC NCO's include: Jeff: KK6TRC; Don W6ZZW, Chris KF6LEX John AJ6F; Milt N6MG; Doug AD4AL; John KB6OVO

Monday - Friday

OCARC 2021 DUES

Membership period is: 1 January to 31 December

Individual New or Renewal: \$30.
Family New or Renewal: \$45.
Teen New or Renewal: \$15.

New Member Dues are prorated quarterly and includes a badge:
Additional Badges:

\$ 3.

Use one of our interactive online forms to calculate current prices.

Use one of our interactive online forms to calculate current prices, join the club and/or order badges:

Online Forms / Dues & Badges

\$3. plus mailing costs if applicable Dues are subject to change without notice

Election Committee Report

List of Nominees to THE 2022 OCARC BOARD OF DIRECTORS

Others can be nominated to the list at the November meeting.

More than one person can run for any position on the board.

PRESIDENT - Nicholas AF6CF

VICE PRESIDENT— Tim N6GP

SECRETARY — Corey KE6YHX

TREASURER — Ken W6HHC

ACTIVITIES — Ron W6WG

MEMBERSHIP — Bob AF6C

PUBLICITY — Tom W6ETC

TECHNICAL—Steve N1BKB

DIRECTOR AT LARGE — Tim N6TMT & Dan KI6X



This list of suggested names is not final or "all inclusive" and it is subject to change at or before the November 19th Elections.

If you want to run for a position on the OCARC Board of Directors, please contact an Elections Committee Chairman: Nicholas af6cf@w6ze.org, Ron W6WG ron@mudry.us, or Tim G. N6GP n6gp@w6ze.org.

OCARC Holiday Party! Friday, December 10th

Come and celebrate the Holiday season with OCARC on Friday, December 10th, 2021, at Mimi's Cafe in Tustin. Social hour begins at 5:30 PM, Dinner at 6:30 PM,

Dinner is priced at \$25 per person (Tax and Tip is included), and it includes the meal choices on page 5.

You do not need to make your meal selection until the evening of the event, but you must reserve your place and let us know in advance by Monday night Dec 6, since seating is limited.

(Check the club website www.w6ze.org for info)

Drawing prizes include: \$500 in gift certificates and items. Drawing tickets are available for \$1 per ticket, \$5 for 6 tickets.

One free ticket for each attendee

Grand Prize: Yaesu FT-817

Second Prize: \$100 HRO Gift Certificate

Third Prizes: (4 prizes) \$50 HRO Gift Certificate

Mark the date on your calendar!

Friday night, December 10th - gather at 5:30pm.

Location:

Mimi 's Cafe 17231 E. 17th St., Tustin, CA 92780 Located East of the 55 Freeway at the 17th St. Tustin exit. Restaurant is on North side of street next to the freeway.

• Easiest way to pay and reserve your spot is to go to our weblink below:

https://www.w6ze.org/XMAS/Christmas-Paypal.html

This will allow you to reserve a place for you and your party.

• You may also RSVP to purchase your tickets (this is a "binding-RSVP"). Then please e-mail "Treasurer" at W6HHC@w6ze.org to arrange purchasing your holiday party dinner tickets at the Christmas Dinner! Remember to bring your spouse and friends too! Amateur entertainment will be provided.

location map: https://www.google.com/maps/place/17231+17th+St,+Tustin,+CA+92780



MIMI'S Menu

The special \$25 price from OCARC includes the Entrée, and Soup-or-Salad and Coffee-Tea-or-Soda and also Tax and a modest tip and any PayPal fees.

Served with your choice of coffee (0 Cal), tea (0 Cal), lemonade (120 Cal) or soft drinks (0-150 Cal).

ENTRÉES Served with House Salad (190 Cal), Caesar Salad (220 Cal) or a Cup of Soup (200-240 Cal).

Grilled Strip Steak*
28-day aged 10 oz. USDA Choice New York Strip.
House-made herbes de Provence butter (100 Cal) available upon request.
Served with mashed potatoes and broccoli. (990 Cal)

Grilled Atlantic Salmon*
Grilled to perfection. Served with mashed potatoes and broccoli. (560 Cal)

French Pot Roast
A classique! Slowly braised and simmered with carrots, celery and onions.
Served on a bed of mashed potatoes. (510 Cal)

Tuscan Style Grilled Chicken*
Grilled chicken, mashed potatoes, sautéed vegetables and artichoke hearts served in a savory sauce.
(610 Cal)

Dessert (\$5 extra)

Molten Lava Cake

Hot molten cake served with a scoop of vanilla ice cream and garnished with a drizzle of chocolate and a fresh strawberry. (510 Cal)

Bread Pudding

Made from scratch bread pudding with raisins
topped with whiskey sauce and whipped cream. (1060 Cal)

DO NOT CLICK THE JPEG IMAGE OF THE PayPal BUTTON BELOW GO TO THE OCARC WEBSITE AT

https://www.w6ze.org/XMAS/Christmas-Paypal.html

OCARC 2021 Christmas Dinner Tickets

Friday Dec 10 - gather at 5:30 PM

Paying at Dinner:

If you are paying at the OCARC Christmas Dinner, please RSVP your seats by Monday night Dec 06 - - by e-mail to W6HHC@W6ZE.org and bring cash or a check. Dinner tickets are \$25 per person

Paying by Mail:

Send a check or money order to: OCARC, PO Box 3454, Tustin, CA 92781-3454 (no cash please.)

Paying by PayPal:

First select the proper quantity of dinners you want to pay for from the pull-down menu. Dinner ticket prices are \$25 per person. Then click on the button to be taken to PayPal to finish your payment. Note that dinner-payments price already includes a reasonable tip and PayPal fee to the amount per person.

Dinner Tickets 1 ea Dinner Ticket \$25.00 USD Buy Now VISA CLOSE

Revised 2021-11-12

H.B. "Corky" Corcorran, W5BYG SK January 6, 2021

•••-

Longtime friend of the OCARC and the community, H.B. "Corky" Corcorran, W5BYG (formerly N6HQI) passed away due to COVID earlier this year. The family is holding a remembrance on Saturday, November 20, 2021. Please RSVP to Allen Corcorran allaran@hotmail.com if you plan on attending. Attendees will have the opportunity to give a brief recollection of Corky to those present.

Corky's Celebration of Life

Christ Community Church - Family Life Center 25382 MacKenzie St.
Laguna Hills, 92653

Saturday, November 20th, 2021, 12-3pm Lunch will be provided Square dancing likely

Please RSVP for catering headcount



OCARC GENERAL MEETING MINUTES 2021-10-15

Due to the ongoing pandemic, the tenth General Meeting of the year was via Zoom on Friday, October 15, 2021. The meeting was called to order by our president Nicholas Haban AF6CF at 6:59 PM PDT. There were thirty (30) members, guests and visitors present, including our speaker.

Pledge of Allegiance

Nicholas starts a video to lead the Pledge of Allegiance.

Introductions

Nicholas AF6CF starts the meeting and welcomes all, including our newest member, Willy Bustamante N6OKU.

Meeting Presentation

Nicholas AF6CF introduces Ken Konechy W6HHC, a member since 1967. Ken presents "End-Fed Half-Wave Antennas."

Ken tells us an "End-Fed Half Wave Antenna" is a very simple multi-band antenna. There are three possible orientations, horizontal, vertical, and sloping, and it does not need radials. Instead, it uses counterpoises or a ground-rod.

A PDF of Ken W6HHC's presentation on EFHW Antennas can be downloaded at https://www.W6ZE.org/HR-related/OCARC_EFHW-antenna_W6HHC.pdf



EndFed-HalfWave Antenna (EFHW)

Ken Konechy W6HHC W6HHC@W6ZE.org

Fig 1 – The link to the entire presentation (in PDF) is listed on the Figure 5 slide below



What is an End Fed Half Wave antenna...

- · EFHW is a simple multiband antenna
- · EFHW Wire can be oriented as horz or vert or sloping
- Does NOT need 1/4-wave RADIALs
- · Can use short "counterpoise" wires or Ground-rod
- The End-Fed impedance is around 2400 ohms, so requires 49:1 impedance transformer for 50Ω coax

Fig 2 - The short description of "What Is an End Fed Half Wave Antenna"

EndFed-HalfWave Antenna

Prob #4) Resonance on 10M was > 29 MHz



Each wire sees half wavelength on its Freq
My first cut was 28.0 MHz

Fig 3 – The SWR screen capture shows a 14 MHz wire can also resonate on 28 MHz



Block Diagram of EFHW concept

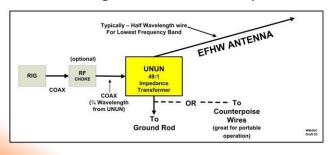


Fig 4 – A Block Diagram of components for a simple End Fed Half Wave antenna

EndFed-HalfWave Antenna



Useful Web Sites

- EndFed HalfWave Antenna
 Google K1RF End-Fed Half-Wave antenna
- EFHW Antenna --- Building The Transformer
 YouTube Steve Ellington N4LQ
 YouTube EFHW MULTIBAND ANTENNA with 49:1 UNUN OM0FT
- Weak Signal Joe Taylor (WSJT) Digital Modes
 Google WSJT-X User Guide
- Facebook group End Fed Half Wave Antennas >7000 members
- DigiMode Monitoring Stations Propagation Reporter Google – PSKReporter.INFO
- This OCARC EFHW Presentation by Ken W6HHC (PDF)
 https://www.W6ZE.org/HR-related/OCARC EFHW-antenna W6HHC.pdf
- 49:1 Transformer End Fed Half Wave (EFHW) Antenna for W6ZE by Al6ZV Select the May 2020 issue of OCARC RF Newsletter at https://www.W6ZE.org/Newsletter/RF-Newsletter-2020-05.pdf

Fig 5 – A list of useful websites for the EFHW Slide Show

Questions and Answers

Ken calls for questions from the audience.

•Arnie N6HC asks what model of uninterrupted power supply Ken had. Ken tells us it was from Bioenno Tech. Arnie clarifies he is asking what Ken did to solve the interference problem from his

UPS. Ken says the DC output from the switching power supply was the RFI problem, and he replaced it with a LiFePO₄ battery and a different switching power supply.

- •Paul Herrick N6HXF asks if Ken disconnected the DC output from the UPS to solve the interference. Ken says it has a switch for the DC, and that turned-off the interference.
- •Jeff KK6TRC asks if the long antenna elements for each band are connected together to the base. Ken says yes, he used crimped tongue-rings for each on the impedance transformer lug.
- •Jim AF6N asks if a heavy-duty clamp ammeter would work to find the high current locations on the feed line. Ken says, only if it works in the RF range you are looking for. Jim says he will try it and let Ken know.
- •Doug Britton W6FKX asks what the best initial antenna set-up would be for newbies. Ken says a vertical orientation is best, if you can get the antenna elements up that high. A tall tree may work, if you use a pulley and weight for the wind.
- •Ken adds that next he plans to put the impedance transformer close to the ground, and use a nearby ground rod instead of a counterpoise.
- •Tim N6TMT asks what antenna wire Ken used where aesthetics are concerned. Ken says he used the black Vibroplex wire from DX Engineering.
- •Frank Doting W6NKU asks how many turns of the feed-line coax he used through the choke toroids to remove the interference coming down the braid. Ken says he used two turns of the ABR coax through the choke toroids.

Ken turns the meeting back to our president, Nicholas AF6CF. Nicholas thanks Ken for the fascinating and informative presentation.

Business Meeting

Our president, Nicholas AF6CF, tells us an interesting anecdote about switching power supplies, and starts the business meeting at 8:19 PM PDT. Nine (9) Board members were present for a quorum. Steve N1BKB was absent. Twelve (12) topics were brought to the Board tonight, and one (1) motion carried, adjournment.

Visitor Introductions

Nicholas welcomes two visitors. Hank Welch W6HTW says they are from Prescott, Arizona, and Cascade, Idaho.

Director Reports

Nicholas AF6CF reminds us to consider the Christmas Party finances, and starts the Director Reports.

- **-Vice-President:** Tim N6GP has a presenter lined-up for the November General Meeting. It is Keith Schlottman KR7RK who will present "10-10 International and the 10-meter band."
- **-Secretary:** Corey KE6YHX reports he went to the mailbox at the Tustin Post Office today. There was no mail.

- **-Treasurer:** Ken W6HHC directs us to the October *RF Newsletter* for the Cash Flow Report. We have good inflows, and are in a better position than we were at the beginning of the year. The YTD increase in our cash assets now total about \$3,704.
- **-Activities:** Ron Mudry W6WG reports on the California QSO Party from the first weekend of the month. He reminds participants the deadline for submitting your logs is October 28th (already passed). He thanks Jim AF6N and Thomas KA9FRH for joining him for the event. Ron also reports he sent the three menus for the Christmas Party to the Board, and confirmed our reservation at Mimi's for December 10th.
- **-Publicity:** Tom W6ETC shares his screen and shows us the Club brochures he dropped-off at HRO. They are all already handed-out.
- **-Membership:** Bob AF6C reports we have 120 members.

Ask the Elmer

Tom W6ETC has a question about the GAP Titan DX 10m-80m antenna on his roof. He has pulsing QRM across all the bands. Dan and the others say it is often a switching power supply, such as a vehicle charger, or one in the house. Tom says he tried switching off the power to the house, and it is still there. Tim N6GP says a tape measure antenna can be used as an interference-sniffer in AM mode in the neighborhood.

Good of the Club

-Board Member Nominations:

Nicholas AF6CF says we have very few nominations to the Board, and we will probably call for continuing officers for next year. Any member of the Club can email the elections committee, Nicholas af6cf@w6ze.org, Ron W6WG ron@mudry.us, or Tim G. N6GP n6gp@w6ze.org with nominations to the Board.

-Newsletter Editors:

Dan KI6X calls for newsletter editors for the coming months. Jim AF6N volunteers for February. January and March are open.

-Echolink Node:

Jeff KK6TRC reports on the KK6TRC-L node on 146.550MHz. He now has a dedicated computer for it now. He noticed a test transmission in Spanish from Panama was on the node tonight. The problem was sorted-out, and Jeff hopes it did not cause interference on our frequency. No one else noticed the transmission.

-Net-at-Nine:

Tom reminds us about the Net-at-Nine on twice every weekday on the CARA Repeater, 147.090MHz FM, + offset, no PL.

Opportunity Drawing

Due to the lack of a prize, there is no opportunity drawing tonight.

Adjournment

A motion to adjourn was made, seconded and carried at 8:51 PM PDT.

--Respectfully submitted by Corey KE6YHX OCARC Secretary

OCARC BOARD MEETING MINUTES 2021-11-06

Due to the ongoing pandemic, the eleventh and final Board Meeting of the year was via Zoom on Saturday, November 6, 2021. The meeting was called to order by our vice president, Tim Goeppinger N6GP at 8:22 AM PDT. Seven (7) directors were present for a quorum. Nicholas AF6CF, Ron W6WG, and Tom W6ETC arrived later. There were seventeen (17) topics brought to the Board this morning, and five (5) motions carried, including adjournment.

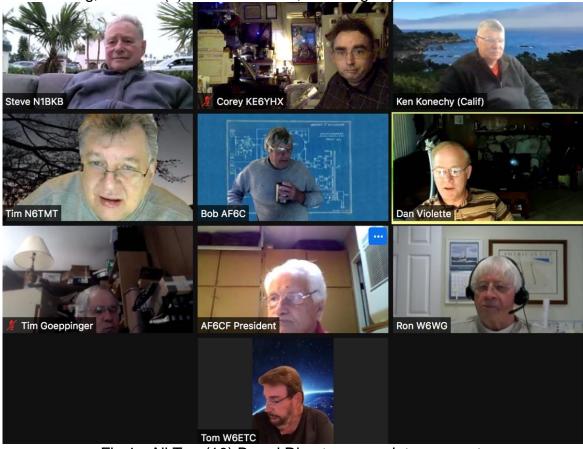


Fig 1 - All Ten (10) Board Directors were later present.

Director Reports

-Secretary: Corey KE6YHX got the mail at the Tustin Post Office yesterday, there were only two pieces of junk mail.

Corey has been in contact with Shakey's Anaheim, just north of Disneyland on Harbor. Their maximum capacity for the Club Auction, deemed a "fund raiser," is 120 persons. Corey has some further questions for them, and plans on calling on a Friday.

-Treasurer: Ken W6HHC provided a copy of the October YTD Cash Flow Report to the Board about a week ago. At the end of October, we had about \$5,827 of inflows, and about \$2,038 of outflows, for a net increase of about \$3,788. Our insurance premium of about \$300 for the year of 2022 is sent-in, but is yet to be confirmed as paid.

- **-Activities:** Ron W6WG sent the three options for the dinner menus for the Christmas Party at Mimi's to the Board. This will be covered as an agenda item.
- **-Technical:** Steve N1BKB reports he visited the Chatham Maritime Museum on his trip this past week. He is working on an article for the *RF Newsletter* on the museum, and the WCC Radio Station, the largest ship-to-shore radio station on the east coast.

-Membership: Bob AF6C reports we have 121 members.

Old Business

•Newsletter Editors:

November: Corey KE6YHX December: Tom W6ETC

January: --open to volunteers—

February: Jim AF6N

March: --open to volunteers—

•General Meeting Programs:

November: Keith Schlottman KR7RK:

"10-10 International and the 10-meter band"

Plus: Club Elections

December: Christmas Dinner January: --to be determined--

•New Club Generator:

Nicholas AF6CF says the electrical for the new generator is finished and tested. He has yet to put together and test the propane lines. The new generator should be ready for Winter Field Day in January.

•Old Generator Disposal:

Bob AF6C will be away for the end of the year, so he plans to work on it starting in 2022.

•Christmas Party:

The presentation for the Christmas Party is discussed. Tim G. N6GP and Ron W6WG are putting-together a talk, and the Board decides to go-ahead with it. We plan on arranging for a projector and a screen.

We have some very nice prizes for the opportunity drawing. The Board agrees on a "mystery box."

The prize budget is discussed. Dan KI6X moves for a radio for the grand prize, and a purchase of \$200 in miscellaneous prizes, a one hundred dollar gift card (\$100), and four (4) fifty dollar gift cards from HRO, all totaling \$500. Tim M. N6TMT seconds the motion. It is discussed briefly, and carried unanimously by all the Board members at 9:00 AM PDT.

Ron W6WG proposes we have one free ticket for each attendee, and further tickets for sale. Each extra ticket is \$1, 6 tickets for \$5, and the grand prize is drawn from only the free tickets from each attendee. The Board agrees to this.

•PayPal Account Ownership:

Tim Goeppinger N6GP needs the current owner's contact information again, and will get to this action item soon.

•Election Committee Report:

Nicholas AF6CF sent the current slate for 2022 to the November RF Newsletter editor.

Christmas Party Budget and Menu Cost:

The budget for flowers for the ladies is discussed. A budget of \$100 is agreed on.

The menus are reviewed. Steve moves that we charge each attendee \$25 for the \$30 dinner, and the Club covers the difference. Dessert is \$5 extra, and each attendee will pay for theirs. Alcoholic drinks are also extra. Corey seconds the motion, and it is carried unanimously at 9:17 AM PDT.

New Business

•KK6TRC Offer to Rename Echolink Node:

A motion is made by Tom W6ETC to allow Jeff KK6TRC to rename his Echolink node from "KK6TRC-L" to "OCARC-L". It is seconded by Tim M. N6TMT, and carried unanimously at 9:31 AM PDT.

•Social Media Account:

Ken takes it as an action item to first establish a Google account for the Club, then to move it to YouTube as soon as it is finalized. The process is underway.

•No December Board Meeting:

The Board decides to hold no Board Meeting in December, unless the president calls one for urgent business, with none opposed.

•Honorary Members:

Dan KI6X moves to renew all four honorary members for another term. It is seconded by Bob AF6C and carried by unanimous vote of the officers present at 9:38 AM PDT.

OCARC Honorary Members (in alphabetical order by last name):

- -Bob Evans WB6IXN
- -Chip Margelli K7JA
- -Janet Margelli KL7MF
- -Jerry VerDuft AD0A (lifetime)

•Audit Committee:

Three officers are appointed Audit Committee Chairmen:

- -Ken Konechy W6HHC
- -Steve Belasco N1BKB
- -Bob Eckweiler AF6C

Good of the Club

No items were presented for the Good of the Club.

Adjournment

A motion to adjourn is made, seconded, and carried at 9:46 AM PDT.

--Respectfully submitted by Corey KE6YHX, OCARC Secretary

A Visit to the Chatham Marconi Maritime Center

By Steve Belasco N1BKB



Fig 1 - Steve at the Marconi-RCA Wireless Museum

Last month on our first vacation away from California after more than two years of stay at home first because of my one-year service with the Orange County Grand Jury followed by another year of the pandemic, my XYL, Steffanie, and I flew east starting in Boston and toured New England for just over two weeks, ending the trip with a weekend visit in New York City. During the two days we spent on Cape Cod, we got the chance to travel out to the site where in 1903, Marconi had set up the antennas for his first trans-Atlantic radio communication with the US on Cape Cod. On our way, we passed the Chatham Marconi Maritime Center, which had already closed for the day... so we changed our plans for the next day so we could visit the museum the following morning.



Fig 2 - Chatham Building

The Chatham Marconi Maritime Center is housed in the same building where first Marconi and later Radio Corporation of America operated the foremost ship-to-shore radio station on the East Coast with the call sign, WCC. Its history is quite interesting...

The building was built by the Marconi company in 1914 along with an associated antenna field and remote

operation transmitter facility built in Marion, MA, 40-miles away from Chatham, but then WWI intervened and in 1917, the facility was requisitioned by the US Navy. It reverted back to Marconi in 1919. However, because of improvements in spark gap generation technology and a series of patent issues and to assure a US company controlled domestic radio communications in the US, Radio Corporation of America was formed, Marconi sold his rights in the US to RCA, and as a result, RCA took over control of the commercial communications facilities on Cape Cod.

The primary method of point-to-point radio communications during that era was radiotelegraphy using long-wave technology at 2100, 2200, and 2300 meters (142, 136, and 130 kHz) with multiple long-wire antenna systems on 350-foot towers spanning many

acres. In 1922, RCA decided that its Long Island, NY station would be the primary site for radio communications with Europe while the Chatham site would become the primary radiotelegraph location for its ship-to-shore traffic. In 1926, as the result of an experiment conducted by WCC with the ship RMS Carinthia, a major step was taken when more reliable short-wave frequencies replaced the use of long-wave, operations.

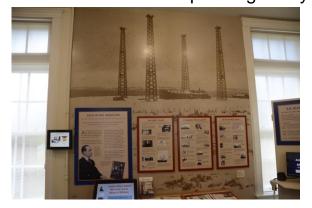


Fig 3 – Original Marconi Antenna System

In its heyday, WCC advertised that it serviced traffic from LF through 22 MHz. Over the years, WCC established itself as the center for RCA handling East Coast operations foremost many historic communications exchanges. For example, in 1926, Chatham operator Leslie H. Strong was decorated by the British government for his aid in facilitating the rescue of the disabled freightliner Antinoe. While Adm. Richard Byrd pioneered radio communications from aircraft, he maintained contact with WCC throughout his flight from New York to Paris. When Charles and Anne Lindbergh made many of their pioneering air survey flights, Anne Lindbergh, a skillful telegrapher in her own right, maintained contact through WCC. Interestingly, it was because of an "all is well" communication exchange early on the day of May 6, 1937, between the airship Hindenberg and WCC that got forwarded to Germany, that the Germans initially rejected any later messages that the airship had crashed and been destroyed that evening.

With the onset of WWII, ship-to-shore traffic was indefinitely suspended and in 1942, the Navy leased the facility for use in the war effort. Near the end of the war, the center was ultimately returned to RCA and because of advances in technology, in 1948 the need for multiple mile separation between transmitter and receiver sites was eliminated and a much closer South Chatham, MA, site replaced the distant Marion, MA, transmitter and antenna field.

Radiotelegraphy remained the primary means of ship-to-shore communications for many years and in the early 1970s, WCC was the largest and busiest marine communications station in the US. During that period, the WCC customer base included worldwide container shipping companies, super tankers bringing oil from the Persian Gulf, and oil drilling rigs in the Red Sea.

In 1977, the Marisat satellites were in-place and their use sanctioned by international



Fig 4 - WCC Teletype Equipment

communications authorities. As a result, the reliance on coastal maritime communications stations relying on Morse code began to wane. Thus, in 1978, WCC installed its first SITOR (Simplex Teletype Over Radio and its first use was with the RMS Queen Elizabeth II. This communications technology automatically received messages and printed them, replacing the skilled Morse operator with his typewriter.

Over the next few years, INMARSAT (International Maritime Satellite Organization) and GMDSS (Global Maritime Distress Safety System) began to take over handling ship-to-shore traffic and the need for WCC's services began to decline. Over the next few years, a number of corporate consolidations occurred: GE acquired RCA in 1986; in 1988, GE sold RCA Global Communications (including the WCC facility) to MCI Communications. By 1993 with the increased reliance on satellites and more advanced technologies wherein messages could be handled more economically, the operations of WCC and KPH in California were merged and the automation meant that WCC controlled KPH and personnel staffing at WC was reduced to one rigger and two technicians.

In 1994, the buildings and towers at WCC were placed on the National Register, and in 1997, the Chatham operation was closed. In 1999, the Town of Chatham purchased all the WCC facilities and the two antenna fields. Subsequently, the South Chatham site and its antennas and associated buildings were razed. The museum housed in the main WCC operations building began operation in 2002 with full restoration of the original site completed in 2010 and the rest of the remaining buildings on the 13-acre Chatham site were finished by 2014.

Technology in use at WCC

Initially, three-ball spark-gap transmitters were used by Marconi, but when RCA acquired the facility, these were replaced with more efficient rotary/alternator spark-gap equipment. Vacuum tube technology soon replaced the spark gap equipment and the number of transmitters and antennas were increased too. With the switch from long and medium wave servicer to short wave, large long-wave aerials gave way to nested rhombic systems. Kleinschmidt punch-tape teletype systems were installed to handle broadcast messages, such as storm warnings and general news messages. In fact, from the late 1940s through the 1970s, worldwide news was broadcast using teletype on multiple HF frequencies. Thus, in 1969 when I was in Viet Nam and was the OIC of MARS station, AB8AAO, when phone patch traffic conditions were poor, we left one KWM-2A transceiver on the next expected MARS traffic net frequency and the other KWM-2A was tuned to AP Worldwide and the audio connected to a modem and page-print teletype machine so we could copy the latest news from the US.

CW Operations

During our visit to the Chatham Marconi Maritime Center, Ron Faris, WA1RF, a former employee at WCC and volunteer docent at the museum, acted as out tour guide. Besides showing us his former operating position in the facility, he explained much

about how traffic was handled. It was an all-Morse Code exchange and most were handled at around 30-WPM. He commented that by far, the Russian operators were the most precise and efficient sometimes pushing up to 40-WPM. However, accuracy and efficiency were the name of the game and since time was money, every effort was made to avoid repeats and fills in the message handling. For example, if an operator called in at 10-WPM, Ron said he would respond at that same slow speed.



Fig 5: Ron Faris, WA1RF, Docent

Since multiple frequencies were in use during the day, the operating procedure was that a central calling frequency in each band was used and every 15-seconds, at 20-WPM the message "V-V-V V-V-V de WCC WCC" was sent. During the time interval between this message and the next automated transmission, a shipboard



Fig 4 - WCC Operating Position

operator would call WCC on that calling frequency. Ron said he would then switch off the automated identifier message and respond to the client using a (it looked like a Vibroplex) bug telling him to QSY to a near-by open frequency so he could handle the traffic. Once the client operator had acknowledged the frequency change request, Ron would switch the identifier message back on to await the next caller to be handled by another WCC operator while he serviced the current call on the alternate frequency.

WA1WCC

To commemorate the operational history of the facility, of course a radio club was formed and Ron showed me the club station, WA1WCC. Interestingly, there are no microphones present at WA1WCC and while the club permits guest operators to use the facility, they request that each guest operator be proficient at CW at over 20-WPM. It was truly a fascinating hour and a half and well worth the time to view a significant piece of radio history hidden and a really out-of-the-way place.

--73, de Steve N1BKB

RadioActivity

November 2021

Upcoming Activities:

NOVEMBER

- *ARRL Sweepstakes CW: 2100 UTC Saturday Nov.5 through 0300 UTC Monday Nov. 7.
- WAE DX Contest, RTTY: 0001 UTC Saturday Nov. 12 through 2359 UTC Sunday Nov. 13.
- 10-10 Fall Contest, Digital: 0001 UTC Saturday Nov. 12 through 2359 UTC Sunday Nov. 13.
- Run for the Bacon QRP Contest, CW: 0200 0400 UTC Sunday Nov. 21
- *ARRL Sweepstakes SSB: 2100 UTC Saturday Nov. 19 through 0300 UTC Monday Nov. 21.
- *CQ World Wide DX / CW: 0000 UTC Saturday Nov. 26 through 2400 UTC Monday Nov. 27.

DECEMBER

- *ARRL 160 Meter Contest: 2200 UTC Friday Dec. 2 through 1600 UTC Sunday Dec. 4.
- FT Roundup, FT8/FT4: 1800 UTC Saturday Dec. 3 through 2359 UTC Sunday Dec. 4.
- ARS Spartan Sprint: 0200 UTC through 0400 UTC Tuesday Dec. 6.
- *ARRL 10 Meter Contest: 0000 UTC Saturday Dec. 10 through 2359 UTC Sunday Dec. 11.
- QRP ARCI Holiday Sprints Homebrew Sprint/CW: 2000 UTC through 2300 UTC Sunday Dec. 11.
- 4 States QRP Group Second Sunday Sprint: 0100 UTC through 0300 UTC Sunday Dec. 12.
- RAC Canada Winter Contest: 0000 UTC through 2359 UTC Saturday Dec.17.
 - * Indicates club entries are accepted
 - ** Indicates team entries are accepted

Repeating Activities:

- Phone Fray: Every Tuesday night at 0230Z to 0300Z.
- **CWops Mini-CWT:** Every Wednesday at 1300 to 1400 UTC, 1900-2000 UTD and Thursday 0300-0400 UTC.
- **SKCC:** Weekend Sprintathon (Straight Key CW) on the first weekend of the month after the 6TH of the month. 1200 Sat. to 2359Z Sunday.
- **SKCC:** Sprint (Straight Key CW) 0000Z to 0200Z on the 4th Tuesday night (USA) of the month.
- K1USN Slow Speed Test: (CW, 20WPM Max.) Every Friday 2000 UTC to 2100 UTC
 Every Sunday night at 0000 UTC to 0100 UTC Monday

OCARC Club Nets:

75 Meter Net: Every Tuesday night at 8:00 PM to 8:30 PM Local Time. SSB
 3.883 MHz
 10 Meter Net: Every Wednesday night at 7:30 pm to 8:30 pm Local Time. SSB
 28.375 MHz

2 Meter Net: Every Wednesday night at 8:30 pm to 9:30 pm Local Time. FM Simplex 146.55 MHz

Other Nets:

• **Net-AT-9:** CARA Wellness & Support Monday thru Friday 9:00 AM and 9:00 PM local Time 147.090 MHz (+600 MHz) No PL

Send an email to Ron W6WG, <u>w6wg@w6ze.org</u> to have your favorite activity or your recent RadioActivity listed in next month's column.

73, Ron W6WG

Chip Margelli K7JA Honored with E.T. Krenkel Medal for Outstanding Global Contributions to Amateur Radio

Chip Margelli, has been awarded the Russian E.T. Krenkel Medal, a prestigious award granted to individuals and organizations for outstanding global contributions to amateur radio. This is the 179th award to date. Chip was shocked when he received it via email last month.

The award's namesake, Ernst Teodorovich Krenkel, was a radio amateur who, over the years, used the call signs RAEM, U3AA, and UA3AA. Born in Poland, Krenkel was an Arctic explorer who took part in the first Soviet "drifting station," North Pole-1. In 1934, he was directly responsible for the rescue of 104 sailors aboard the Icebreaker "Cheluskin," which had been destroyed by powerful ice floes; they pitched camp on the ice, and Krenkel diligently maintained radio contact with Russian authorities so as to secure their rescue. He was made a "Hero of the Soviet Union" in 1938 for his life-saving work. A more detailed biography of Ernest Krenkel can be found here:

http://hamgallery.com/Tribute/RAEM/krenkel.pdf

Krenkel's son, T.E. Krenkel, is among the four signatories to the award certificate, this being the 76th certificate presented. The younger Krenkel, a professor at the Moscow Technical College of Telecommunication and Informatics, said his father was an avid radio amateur who served as the first

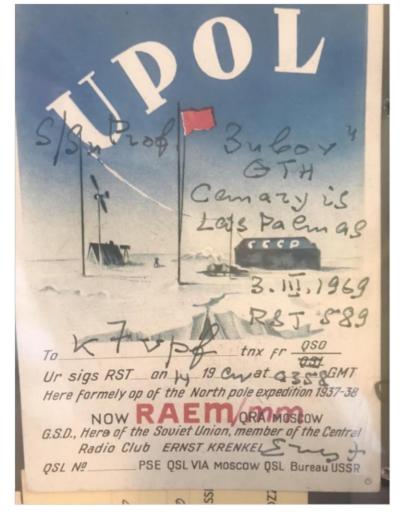
chairman of the Central Radio Club in the USSR.

Making this award even more special to Chip is the fact that he had a QSO with Krenkel in 1969, and has a QSL card to prove it. Note Chip's prior callsign of K7VPF.

For more info on the Krenkel Award, please visit their website:

http://krenkelmedal.org/index.php?id=49

Congratulations, Chip!







OCARC Cash Flow - Year to Date

1/1/2021 through 10/29/2021

Category	1/1/2021- 10/29/2021
INFLOWS	
2021 SK Special Disposal Effort (Net)	1,311.00
Badge Income	1.64
Donation -new FD Generator	500.00
Dues, Family (PayPal)	129.50
Dues, Membership	487.50
Dues, Membership (PayPal)	1,651.27
Dues, Membership (Paypal) 2022	86.12
Sale Of Equipment	1,660.07
TOTAL INFLOWS	5,827.10
OUTFLOWS	
Field Day - Propane	45.20
Field Day Rental - Tent	200.00
Generator - new Firman	915.87
OCARC Historian	97.91
PayPal Fee	1.75
PO Box Rental	118.00
Storage of Equipment - Ann Millard	250.00
Web Site Hosting	190.00
Web Site SSL Fee	69.99
ZOOM subscription	149.90
TOTAL OUTFLOWS	2,038.62
OVERALL TOTAL	3,788.48



MiniTiouner-Express







Available at DATV-Express.com

- Operates with Windows PC using free MiniTioune software from Jean-Pierre F6DZP
- · Smaller than a stack of 2 decks of cards (picture above is full size)
- · Two independent simultaneous RF inputs with internal preamps
- High sensitivity -100dBm @1288MHz at 1/2 FEC
- · Fully assembled/tested in aluminum enclosure
- Covers 144-2420MHz (ideal for Space Station DATV reception)
- Symbol rates from 75 KSymb/s to >20 MSymbols/sec
- Uses external 8-24VDC supply or +5V from USB-3 port (with small modification)
- Real time signal modulation constellation & dBm signal strength display
- Price: US \$75 + shipping order with PayPal

