The Transponder

The monthly newsletter of the Hughes Amateur Radio Club, W6HA
- An ARRL affiliated club -

January 14, 2022 **Repeater 445.620 – PL 127.3** **Website**: (see last page) **Vol. XLIX, No. 1**

*** * * CLUB MEETING O-T-A (MOTA)* * ***

Where: **Only Zoom in January (Conf. Room Unavailable)**
Location: **Zoom:** Meeting ID: 817 1297 4188
Passcode: 160795

Meeting Notice: **Date:** **Tuesday, January 18, 2022**

Time: **Pre-Meeting: 11:30 Gather, Exchange Greetings**
Meeting Call to Order: 12 to 1 PM (Zoom Audio on Repeater)
On-Air Roll Call (Sign-In), 11:30 (informal discussion / Greetings)

Featured Presentation:

Ballooning with Ham Radio
by Howard KE6MAK
and Brian AB6UI

Up Coming Events:

Sean O'Brien 50/50 Ultimate Race – Saturday, February 5th, 2022 (See Article Page 3)
Field Day – Last full weekend in June
H-4 Hercules (Spruce Goose) Special Event (75th Anniversary of Flight, Article, Page 2)

Inside: **page**

Lunch: ~~Pizza: 1 Large Veggie; 1 Lrg Pepperoni; 1 Lrg Special; 1 Lrg Sausage, ($3.50/slice)~~
~~**Prices:** 2 slices of Pizza w/salad, $8.00; 1 slice of pizza w/salad $5.00; Salad only $4.00~~
~~**Sodas:** Coke, Coke Zero & Ginger Ale ($1.00) Water (50 cents)~~ Next Month

Nets on the Club's Repeater: *(See Last page for details)*

Wednesday Evenings at 7:30 PM – Hughes ARC net, (then Simplex @ 146.550), then Digital
Thursdays Noon (12:05 PM) Raytheon & other Emergency Communication Teams (ECT)

Transponder Deadline for Submittal of Articles: Wednesday, before next meeting

Club News:

In-Person Meetings - The library has been allowing the meeting rooms to be reserved (masks required) for a three or four months now. For January, the room is not available. For February 15th (the third Tuesday in Feb.) we plan to be back in the "Friends Of The Library (FoTL) Conference Room. We trust that most people wanting to attend In-Person are fully vaccinated, but the library staff has indicated that they are not checking for vaccination cards. It seems the regulation requiring to check vaccination cards is a Los Angeles City regulation, Not a Los Angeles County regulation and the El Segundo Library follows the County's rules and regulations. Hence, the mask is required.

The meeting will also be on Zoom, from the library, for those who are uncomfortable attending In-Person, because of Covid-19, Omicron, a long drive from the valley, or just didn't feel like getting out of their PJs.
Meeting room Host Dale, WB6MMQ

Spruce Goose - On November 2nd in 1947, Howard Hughes' H-4 Hercules prototype (aka 'Spruce Goose') made its one and only flight, in Long Beach Harbor. We have decided that it would be fun for our club to run a special event station(s) to commemorate the 75th anniversary of this historic event in November of 2022.
Dale, WB6MMQ, is currently forming a committee to work out all the details to make this happen.

LOGO Contest - We have started a W6HA logo contest. We have been talking about this for several weeks on the weekly net but I wanted to firm up the contest rules:

- The logo will be used on the club web page and on official correspondence, stationary, QSL cards, etc.
- It should reflect on the legacy of Howard Hughes and his contributions and some of our club's contributions to furthering the art of ham radio.
- Submissions should be made no later than March 31st 2022 and the winner will be announced at the April club meeting.
- The board members will review the entries and choose the best logo.
  - ***A Tri-Band HT awarded to the winner***.

Contests / Special Events : Jan/Feb

Jan 20-21 - Walk For The Bacon -20m

aka PigWalk20 CW Contest

This Is a 2 Hour S L O W CW (13 wpm or less) Contest on 20 Meters Only!
Part 1 One (1) hour Ops every 3rd Wednesday Night of the Month, 4-5 PM PST (0000 – 0100 UTC)
Part 2 One (1) hour Ops The Very Next Night, two hours later: 6-7 PM PST (0200 – 0300 UTC)
Suggested Frequencies from 14061 to 14065 with 14063 the hot spot. If you work the same station both night, points are doubled
There is similar action on the 1st Wednesday of the month on 40 meters. *(See page 5, 'Just Ahead in Radio Sports' for link to the Rules)*

Jan 22, 23 North American QSO Party (SSB)

The North American QSO Parties are favorites of beginners and seasoned operators alike. The NAQPs are low-power only (no amplifiers allowed) which makes for a lot more breathing room on the bands. Small stations can generate very effective "runs" in the NAQP contests. Multipliers count once per-band, which makes for an exciting format, as multipliers can be "moved" from band to band. The NAQPs allow stations from all parts of North America to be in the running for the top spots. The 12 hour format allows participants to do some great contesting, yet still have time for other activities during the weekend. Participants can enter in the single op or multi-op categories and also have the opportunity to combine up to five separate single op scores into a team score.
1. Eligibility: Any Amateur Radio licensee may enter.
2. Object: To work as many North American stations as possible during the contest period.
[For more click on Title for Rules-Ed]

Feb 5 – Ten-Ten International Winter QSO Party – SSB (Good HF activity for Techs)

10-10 QSO Parties are events that are held for fun and to meet old, new and prospective members around the world. The rules listed here are for all general QSO parties.
Phone QSO Parties must be operated in the PHONE area of the 10 meter band and may

be operated using any approved mode (SSB, FM, AM).

QSO Parties are open to all amateurs with operating privileges on the 10 meter band, however, logs will be accepted only from active members as of the date of the event. A condition of membership is having a QSO with 10 members so this party could start you on your way. See web Page for more on membership.

Ten-Ten International Net, or 10-10 for short, is an organization of amateur radio operators dedicated to maintaining high levels of amateur radio communications on the 10-meter amateur band (28.0-29.7 MHz). It was established in 1962, 10-10 has grown continuously, and now has over 77,000 members 10-10 welcomes your membership if your amateur radio license includes 10-meter privileges. *[That's a Technician License in the USA- Ed]*

Sean O'Brian 50/50 Race Support

The Sean O'Brian 50/50 is centered on the Malibu Creek Campground State Park. It is two ultimate races on the same course w/staggered start times. They are a 100 kilometer (60 mile) and a 50 mile trail run. The Aid Stations (AS) are all several miles apart, so our support is to help check that all the runners are accounted for at each AS and finally, at the Finish amd to communicate any issues to the race director.

Volunteer communicators from several clubs support the race communications which is coordinated by the Hughes ARC.

The Club sets up its portable repeater high on the Castro Motor Way ridge, providing communications from the Start-Finish and NCS on one side of the ridge to the Aid Stations, most of which are on the other side of the ridge.

Club members and others interested in volunteering should contact Dale, WB6MMQ.

Dale, WB6MMQ
Race Coordinator, Hughes ARC
WB6MMQ@ARRL.net
310-641-8403

Robert Kaska, S53R, is now on the air from Nepal as 9N7AA, although he is still working on his station.

Nonprofit Status

New in January, an administrative form is filled with the California Secretary of State, Providing information on the officers of the Corporation. In December Paul, KK6TAC, filed the IRS 1023 form, which requests the IRS to make the "Nonprofit Determination." We are waiting on their response.

From November: (One more time, for those who may a have missed it)

November has been an auspicious month for the Hughes Amateur Radio Club. As I started writing this column, I received an email indicating that the Secretary of State of the State of California has accepted our Articles of Incorporation and so, the **"Birth Date" of the Hughes Amateur Radio Club, Inc**. was on **November 2, 2021.**

Curiously, that is exactly 74 years after the First and Only flight of the Hughes H-4 Hercules Flying Boat, aka the 'Spruce Goose' for which we are planning a Special Radio Event, next year on or about November 2, 2022, the 75th anniversary of the flight. Serendipity, I guess!

Dale, WB6MMQ
Chair Nonprofit committee

ARLX016 Special Bulletin #16
QST de W1AW December 3, 2021

W1AW Code Practice Text is Taken from February 1922 QST

To all radio amateurs:

In commemoration of the **100th anniversary** of the **1st Transatlantic Test**, the code practice text material for the week of **December 6 through 10** originates from the **February 1922** issue of **QST.** It was in this issue that the results of the Transatlantic Test were published.

The February 1922 QST text material may also be used for subsequent code practice transmissions. The text is taken from pages 14 to 18, 21 to 27, and pages 37 to 40 of this issue. The text files for each speed will soon be available for viewing online at, https://www.arrl.org/code-practice-qst-source.

Please see http://arrl.org/transatlantic for more details on the event.

From Collin ARC 'Signals' newsletter

HETERODYNE in the Year !!!

By George Cooley, NG7A

You may have heard the ringing of heterodynes if you've listened to the Beach Boys' Good Vibrations, shortwave stations, late night AM radio or CB radios in the 60s and 70s. The distinct ringing tones are produced when two (or more) RF signals are transmitted at the same time at slightly different frequencies. When those slight differences fall into our audible range, ringing (heterodyning) tones are heard in the receiver.

Heterodyning was noticed in early radio, but outside of producing a beat note to detect a CW signal (~1901), nobody had found a practical use for it. Later it was found that a heterodyne contains an exact replica of any modulation on either of the original signals.

Early receivers did not have much selectivity and detected every transmission in the spectrum. Tuned radio Frequency (TRF) receivers first offered inter-channel rejection using expensive custom tuned filters for each frequency.

The superheterodyne receiver (superhet), developed by Edwin H. Armstrong in 1918, mapped incoming frequencies to an intermediate frequency that uses a common filter. The incoming radio frequency signal from the antenna is mixed (heterodyned) with a signal from a local oscillator (LO) to produce a lower fixed frequency signal called the intermediate frequency (IF) signal. The IF signal is filtered, more effectively, amplified and then applied to a detector to extract the information. (cont page 6)

ARRL Letter - Excerpts of Possible Interest

China is Expanding its South China Sea Antenna Farms

A December 17 commentary from the Center for Strategic and International Studies (CSIS) has concluded that over the past year China has taken "major steps" to upgrade its capability to wage electronic warfare near the South China Sea." CSIS cites satellite images of massive antenna complexes to back its claim. Some facilities have already been suspected of jamming the communi-cation facilities of US military aircraft operating in the region.

"The Chinese military is taking major steps toward improving its electronic warfare, communications, and intelligence-gathering capabilities near the South China Sea," said the commentary by Matthew P. Funaiole, Joseph S. Bermudez Jr., and Brian Hart, all associated with CSIS. "Recent satellite imagery reveals that China has rapidly expanded facilities near Mumian, on Hainan Island, providing the People's Liberation Army (PLA) with greater ability to track and counter foreign military forces operating in the region and in outer space."

The commentary said, "Many assets in the vicinity appear dedicated to gathering communications intelligence, a subset of [signals intelligence] that includes the collection of communications between individuals and organizations."

Some of China's land claims in the South China Sea include rare DXCC entities. Scarborough Reef (Panatag Shoal) is one. Conflicting land claims exist for other islands, especially in the Spratlys. Further complicating the situation is a 2016 ruling from the Permanent Court of Arbitration in the Hague that discounted China's claims with respect to Scarborough Reef and the Spratlys. The Court ruled in favor of the Philippines in a dispute with China over Scarborough Reef.

In April 2015, a Chinese naval vessel "harassed a Philippine Air Force patrol flight in the Spratlys," according to one news account, by firing an illumination round. The incident postponed a Philippine Navy flight that was to evacuate an ailing participant of the DX0P Spratly Islands DXpedition. A private aircraft carrying a BBC reporter received radio warnings from the Chinese Navy to stay away from the South China Sea reefs and islands that China claims, strongly suggesting that China has expanded its sphere of influence to include the entire region.

This and the more recent artificial island-building in the South China Sea cloud the possibility of future DXpedition to rare DXCC entities in the South China Sea, whether or not China has laid specific claim. The Spratlys are claimed in whole or in part by China, the Philippines, Vietnam, and other countries, and the Philippines government had issued the DX0P call sign. An international amateur radio team postponed a December 2017 DXpedition to the Spratly Islands operating under Malaysian call sign 9M0W, although the

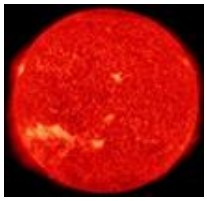
DXpedition did take place the following year. The planned 2012 DX0DX DXpedition to the Spratlys was canceled altogether without explanation after being pushed back at least twice. The last operation from Scarborough Reef was in 2007.

Over-the-Horizon (OTH) Radar Interference in Ham Bands Top All Others

The volume of reports of over-the-horizon (OTH) radar interference from observers working with the International Amateur Radio Union (IARU) Region 1 Monitoring System (IARUMS) dwarfs that of all other interference sources, the November IARUMS newsletter reports. Nearly 800 OTH radars and …more than 4,500 -- although … multiple reports of the same OTH radar systems [are likely]. ….

During November 17 - 21, IARUMS reported a "strange, somewhat washed-out signal" on the order of 7 kHz wide, that "drifted slowly back and forth" in 40 meters and below. Read **an expanded version.**

The K7RA Solar Update


Dec. 2021


Jan – 2022

Tad Cook, K7RA, Seattle, reports: Two new sunspot groups emerged on January 9 and another showed up on January 12. Average daily sunspot numbers rose six points this week to 42.4, and average daily solar flux increased from 91.4 to 101.6.

Geomagnetic indicators were quieter, with average daily planetary A index declining from 7.7 to 6.1, and average daily middle latitude A index from 6 to 4.1.

The higher A index values on January 8 and 9 were from a G-1 class storm caused by co-rotating interaction regions.

Predicted solar flux for the next month shows values peaking at 120 on January 21 - 24 and again around mid-February. Predicted values are 104 and 106 on January 13 - 14; 108 on January 15 - 17; 106 on January 18 - 20; 120 on January 21 - 24; 110 on January 25; 100 on January 26 - 27; 95 and 90 on January 28 - 29; 85 on January 30 - February 1; 95 and 105 on February 2 - 3; 100 on February 4 - 5; 102 on February 6 - 7; 105 on February 8; 110 on February 9 - 10; 115 on February 11 - 12, and 120 on February 13 - 20.

Predicted planetary A index is 5 on January 13 - 14;14, 24, 12, and 8 on January 15 - 18; 5 on January 19 - 22; 10 on January 23; 8 on January 24 - 26; 5 on January 27; 10 on January 28 - 30; 5 on January 31 - February 3; 15, 10, & 8 on February 4 - 6; 5 on February 7 - 11; 12, 10, & 8 on February 12 - 14, & 5 on February 15 - 18.

Sunspot numbers for January 6 through 12 were 35, 38, 31, 36, 38, 51, and 68, with a mean of 42.4. The 10.7-centimeter flux was 93.7, 107.3, 102.4, 102.1, 102.2, 100, and 103.2, with a mean of 101.6. Estimated planetary A indices were 2, 2, 14, 10, 6, 5, and 4, with a mean of 6.1. Middle latitude A index was 2, 1, 9, 7, 4, 3, and 3, with a mean of 4.1.

A comprehensive K7RA Solar Update is posted Fridays on the ARRL website. For more information concerning radio propagation, visit the ARRL Technical Information Service, read "What the Numbers Mean...," and check out the Propagation Page of Carl Luetzelschwab, K9LA.

A propagation bulletin archive is available. For customizable propagation charts, visit the VOACAP Online for Ham Radio website.

Share your reports and observations

Just Ahead in Radiosports (T=Contest; P=Party)

Jan. 15-16 -- North American QSO Party (CW)
Jan. 15 - 16 -- Feld Hell Sprint
Jan. 16 -- RSGB AFS Contest (Digital)
Jan. 15, 17 - ARRL Jan. VHF T (CW, ph, dig)
Jan. 16-17 - Run for the Bacon QRP Contest (CW)
Jan. 20-21- Walk 4 the Bacon QRP T 20m (CW)
Jan. 22,3 – **North American QSO Party (SSB)**
Feb. 3, 4 -- Walk for the Bacon QRP Contest (CW)
Feb 5 -- 10-10 International Winter Contest (SSB)
Feb 5 – Minnesota QSO Party (CW, Ph, Dig)
Feb. 5-6 – Vermont QSO Party (CW, Ph, Dig)
Feb. 5-6 – BC QSO Party (CW, Ph)
Feb 12-13 – CQ WW RTTY WPX T (Dig)
Feb. 17, 18- Walk 4 the Bacon QRP Contest (CW)

See the ARRL Contest Calendar for more information. For in-depth reporting on Amateur Radio contesting, subscribe to *The ARRL Contest Update* via your ARRL member profile email preferences.
All dates & times are UTC.

Heterodyning / Ringing in the Year

(Cont. from page 3) The major advantage of the superheterodyne architecture is that since the IF filters are fixed-tuned, the receiver's selectivity is the same across the receiver's entire frequency band. Another advantage is that the IF signal can be at a much lower frequency than the incoming radio signal, and that allows each stage of the IF amplifier to provide more gain. In the first order, an amplifying device has a fixed gainbandwidth product. If the device has a gain-bandwidth product of 60 MHz, then it can provide a voltage gain of 3 at an RF of 20 MHz or a voltage gain of 30 at an IF of 2 MHz. At a lower IF, it would take fewer gain devices to achieve the same gain. Filters are also easier to implement at lower frequencies and tend to perform better. The Collins mechanical filters are a great example as they have excellent performance that would be hard (if not impossible) to replicate at higher frequencies.

Software defined radios offer an opportunity to emulate the older tuned radio frequency receiver (TRF) designs, where all of the receiver stages had to be simultaneously tuned. However examining the top performing HF radios shows that the superheterodyne architectures still yield the highest dynamic ranges and outperform SDRs while maintaining sensitivities in the -141 dBm range. Examples include:

- Yeasu FT-dx101 110 dB
- Icom IC-R8600 107 dB
- Elecraft K3S 106 dB
- Icom IC-7851 105 dB
- Kenwood TS-890S 105 dB
- Hilbrng PT-8000A 105 dB
- Homebrew Radios 140 dB
- The Collins radios set the bar

with -141 dBm sensitivities and the R-390, held the 80 dB benchmark for dynamic range throughout the 50s, 60s and 70s. Many radios imitated the Collins architecture as they transitioned from tubes to solid state. With the introduction of Phase Locked Loops (PLLs) in the 1980s, dynamic ranges of radios actually suffered. This was largely due to the increased phase noise in the VCOs. In 2002, Elecraft's K2 HF radio kit outperformed many commercial offerings by matching the R-390's 80 dB DNR. Ten-Tec introduced a new mixing architecture in their Orion that produced 92 dB of dynamic range. This set the stage for today's 100 dB+ offerings. The architectures that offer the highest performance are a hybrid of superhets on the front end feeding SDRs.

Reprinted with Permission from the Collins ARC of Cedar Rapids, IA

Amateur Radio in the News

ARRL Public Information Officers, Coordinators, and many other member-volunteers help keep amateur radio and ARRL in the news.

How Amateur Radio Fanatics Launched the World's First Private Communication Satellite / *Inverse*, New York (December 12, 2021).

"Pandemic Project: Trailer renovation allows for extended emergency radio assistance" / *The Spokesman-Review* (Washington) December 30, 2021

Share amateur radio media hits you spot with us

ARRL Section, State and Division Conventions / Hamfest

in the West or near members anywhere:

Jan, 22 -- ARRL Midwest Division Convention (Winterfest), Collinsville, Illinois

Jan. 23-29 QuartzFest, Az

Jan. 28 - 29 -- ARRL Delta Division Convention (Capital City Hamfest 2022), Jackson, Mississippi.

Feb. 10 - 13, 2022 -- 2022 ARRL National Convention at Orlando HamCation®, Orlando, Fl

Feb. 18 - 19, 2022 ARRL Southwestern Division Convention (Yuma Hamfest), Yuma,Az

Mar. 19 - ARRL West Texas Section Convention (66th Yrly St. Patrick's Day Hamfest), Midland, Tx

Mar. 19 -- ARRL West Virginia Section Convention (Charleston Area Hamfest), Charleston, West Va

Mar. 27 -- ARRL Virginia Section Convention (Winterfest), Annandale, Va

Search the ARRL Hamfest and Convention Database to find events in your area..

In Brief...

The 2022 running of the popular International DX Convention (IDXC) in Visalia, California, has been cancelled.

IDXC Co-chairs Bill Kendrick, N6RV, and Mel Hughes, K6SY, posted this announcement on the IDXC website: "It is with regret that the 2022 International DX Convention in Visalia, California, has been cancelled. The convention committee of the Southern California DX Club acted in response to the current [COVID-19] virus threat. We look forward to 2023. Those who had hotel reservations, please contact the hotel to ensure they are cancelled. Note: EVERYONE WHO HAS HOTEL RESERVATIONS, it is your responsibility to cancel your reservation as soon as possible, so that the hotels can resell their rooms."

Announcements

- The Northern Arizona DX Association (NADXA) will hold its third Distance Challenge Special Event at Quartzfest (QF) on January 23 - 29, 2022. The idea behind the event is to see which QF attendee can make the longest-distance portable contact from the Sonoran Desert using whatever radio and antenna they can bring in and set up. NADXA will operate special event W7Q. -- *Thanks to Distance Challenge Co-chairs Bob Wertz, NF7E, and Ron Gerlak, KG7OH*

- The EZNEC antenna-modelling software by Roy Lewallen W7EL, is now a free download.

- Rol Anders, K3RA, will conduct an Amateur Extra-class licensing course on Zoom, January 20 - March 31. The course is sponsored by the National Electronics Museum. Contact Anders for more details.

- Members of the Czech DXpedition group have announced plans for the TU5PCT DXpedition to the Ivory Coast in early February. Plans are to arrive on February 4, with full operation February 7 - 12. Activity will be on SSB, CW, RTTY, and FT8 on 1.8 through 50 MHz.

- PA22L is the commemorative call sign recognizing the city of Leiden as the European City of Science. Leiden is hosting a year-long science festival.

- Minutes of the ARRL Executive Committes's December 13, 2021, meeting are available on the ARRL website.

- 4A90FMRE is on the air to mark the 90th anniversary of the Federacion Mexicana de Radio Experimentadores. Operation is taking place from all 31 Mexican states plus Mexico City.

- W8S DXpedition to Swains Island; sponsors have postponed the previously announced DXpedition.. Organizers say COVID-19 restrictions and a limited number of flights in the first quarter of 2022 have made travel extremely difficult. Also, two W8S team members are on the 3Y0J Bouvet Island DXpedition team set for November/ December 2022. "Our project has certainly not been canceled but postponed to the spring of 2023.

- The London BBC Radio Group has been granted a year-long special event call sign, GB100BBC, to commemorate the centenary of the BBC in 2022. Operations will be carried out by individual members or groups from home stations or BBC premises.

- **Steve Johnston, WD8DAS**, has purchased AF4K Crystals and plans to reopen it soon. AF4K Crystals was a source for vintage and modern radio crystals for nearly 2 decades. The company will fill a gap for those seeking to buy quartz crystals for projects

Select DX News (QRV = Ready! or Are you Ready?)

ARLD002 DX news

This week's bulletin was made possible with information provided by LU5AG, VE7KW, The Daily DX, the OPDX Bulletin, 425 DX News, DXNL, Contest Corral from QST and the ARRL Contest Calendar and WA7BNM websites. Thanks to all.

MAURITIUS, 3B8. Ray, F5UKV will be QRV as 3B8HH **beginning around January 20**. Activity will be on 80 to 2m, and possibly 160m, using CW & SSB. He will also use PSK & RTTY QSL via bureau.

KENYA, 5Z. Barring any COVID-19 restrictions, Ferdy, HB9DSP is QRV as 5Z4/HB9DSP from Malindi **until January 27**. Activity is on 20, 15, and 10m using SSB and FT8. QSL via LoTW.

GUADELOUPE, FG. Ops Pascal, F1MNQ, Pierre, F1TCV, Michel, F5LRL, Didier, F6BCW & Keith, VE7KW will be QRV as TO6S from Les Saintes, IOTA NA-114, **January 20 to February 1st** on 160 to 6 m using CW, SSB, RTTY, FT8 & FT4 with two stations active. QSL via F6KJS.

SCOTLAND, GM. Special event station GB2KW is active near Inverness **until January 28** using vintage equipment. QSL via LoTW.

ALASKA, KL7. Fred, KB4DMQ is QRV as KL7FBI Shemya Island, IOTA NA-037, **until Jan. 24**. Activity is on 40 m using FT8. QSL#1

ARGENTINA, LU. Members of AMSAT Argentina will be QRV as LU7AA f**rom Jan. 15 to 23** to commemorate the launch of Satellite LUSAT, LO-19, 32 years ago. Activity will be on the HF bands using CW, SSB, & FT8. QSL direct.

BRAZIL, PY. Special call sign ZY6A is QRV from Ilha dos Frades, IOTA SA-023, **until Jan. 16.** Activity is on 40, 20, 15, and 10 meters using CW and SSB. QSL direct to PY6TV.

SEYCHELLES, S7. Beverly, S79BMK is a new operator QRV from Mahe Island, IOTA AF-024. She is on the HF bands. [listed Jan. '22 – ed]

SWEDEN, SM. Members of the Skoevde Amateur Radio Club are QRV with special call SK50EI **during 2022** to celebrate the club's 50th anniversary. QSL via bureau.

TURKEY, TA. Members of the Turkish Amateur Radio Association are QRV with special call sign TC60TRAC **during all of 2022** to celebrate the club's 60th anniversary. QSL via the bureau.

MEXICO, XE. Zalo, XE3N is QRV as 6F6F **during 2022** to celebrate the 120th anniversary of Playa del Carmen City, Quintana Roo. QSL via EA5GL.

VIET NAM, XV. Eddy, XV1X has been QRV on 40 meters using FT8 beginning around 1100z. QSL via QRZ.com.

INDONESIA, YB. Agus, YB1TDL/4 and Budi, YC1RQZ/4 will be QRV from Rakata Island, IOTA OC-262, from **January 15 to 20.** They will be active on 40, 20, 15, and 10 meters using SSB & FT8. QSL direct to HA3JB.

THAILAND, HS. Brad, VK2BY is QRV as HS0ZNR from the Nam Yuen district **until January 21**. QSL #1

NETHERLANDS, PA. Special call PG44FF is QRV **until early 2022** as part of various Flora and Fauna park activations. QSL #1.

ANTARCTICA. Sebastian, SQ1SGB is QRV as VP8/SQ1SGB while working on the Halley VIa Base until the end of **January 2022**. Activity is on 40 meters using SSB. QSL via EB7DX.

REPUBLIC OF KOREA, HL. Kang, DS4DRE is QRV as DS4DRE/4 from Komun Island, IOTA AS-060, until **Jan. 31, 2022**, on 80 - 10M using CW & ssb. QSL #1

POLAND, SP. Special event stations SN0ZOSP & SN100ZOSP are QRV until **Feb. 5, 2022** to celebrate the 100th anniversary of the Association of Voluntary Fire Brigades of the Republic of Poland. QSL SN0ZOSP via SP9ODM & SN100ZOSP via SP9SPJ.

MONTSERRAT, VP2M. Thaire, W2APF will be QRV as VP2MDX from **January 9 to February 18.** Activity will be holiday style on 80 to 6 meters using CW and SSB. QSL to home call.

JAPAN, JA. Special event station 8N1MORSE is QRV **until Feb. 28, 2022,** the 230th anniversary of the birth of Samuel F. B. Morse and the 120th anniversary of Guglielmo Marconi's successful transatlantic radio communication by Morse Code. QSL #3

MEXICO, XE. In celebration of the 90th anniversary of the FMRE, look for a number of stations to be using the 4A90 prefix until the **end of March 2022**. QSL #2

ZAMBIA, 9J. Bodo, HB9EWU plans to be QRV as 9J2BG while spending one year on a humanitarian mission at the St. Paul's Mission General Hospital in Kashikishi. Activity will be on 20M. **[until Feb 2022 – ed]** QST#1

Long Term (more than 1 month)

JAPAN, JA. Tashi, JR2TER is QRV as JR2TER/p from Yonaguni Island, IOTA AS-024, until **March 2022** on the HF bands using FT8. QSL via LoTW.

NAMIBIA, V5. Gunter, DK2WH is QRV as V51WH **until March 2022**. Activity is on the HF bands. During contests, he will be active as V55Y. QSL #1.

NAMIBIA, V5. Gunter, DK2WH is QRV as V51WH **until March 2022**. Activity is on the HF bands. During contests, he will be active as V55Y. QSL #1

THAILAND, HS. Lars, SM6NT will be QRV as HS0ZME from Hua Hin **until April 5, 2022,.** on 40 to 10 meters using only CW. QSL #1

COLOMBIA, HK. Lothar, DK8LRF be QRV as HK3JCL **until end of May 2022**. Activity will be mainly on 20 meter SSB. QSL #9, #3

NICARAGUA, YN. Trevis, YN7ZTR is a missionary working in Gaunacastillo for the next two years. He is active in his spare time. **[Until 2022-June-**ed**]** QSL via LoTW.

JAPAN, JA. Members of the radio club in the city of Tama are QRV as 8N1TAMA until the **end of June 2022** to mark their city's 50th Anniversary. Activity is on 160m to 70 cm using CW, SSB & FM. QSL #3

FEDERAL REPUBLIC OF GERMANY, DA. Special event station DM60CSJ is QRV **until July 31. '22** to celebrate the 60th anniversary of Club Station Jesewitz. QSL via bureau.

INDONESIA, YB. Special event stations 7B2C, 7B2E, 7B2T, 7B2H and 7B2O are QRV until the **end of October 2022** to celebrate the Javanese-Hindu Ceto Temple that was built in 1475. Activity is on 80, 40, 20, 15 and 10 meters using SSB and FT8. QSL #1

SWITZERLAND, HB. Members of USKA Schaffhausen are QRV with special event station HB50SH **during 2022** to celebrate the club's 50th anniversary. QSL via LoTW.

NORWAY, LA. Special event station LA100B is QRV **during 2022** to celebrate NRRL's Bergensgruppen 100th anniversary. QSL via LoTW only.

GUINEA, 3X. Jean-Philippe, F1TMY, expects to be QRV as 3X2021 from Conakry **until end of 2022**. He plans to be active on 160 to 6M, and Satellite QO-100. He also plans side trips to the Los Islands, IOTA AF-051. QSL via Club Log.

Until 2023

GEORGIA, 4L. Peter, G4ENL plans to be QRV as 4L1PJ from Svaneti while on work assignment. He expects to be here for the **next few years. [listed Jan. 2021-ed**] Activity is on various HF bands using SSB. QSL via N4GNR.

Until 2025

LAOS, XW. Mike, XW2DX is QRV from Vientiane and is here for the next 5 years. [**Until August 2025-ed**] Activity is on 20, 15 and 10 meters. QSL via RM0L.

Notes:

1. QSL direct to home call.
2. QSL via operators' instructions.
3. QSL via bureau
4. QSL via LoTW
5. QSL via Instruction on QRZ.com
6. QSL via eQSL
7. QSL via QRZ.com
8. QSL via ClubLog
9. QSL via Home Call Sign

Lunch Kitty Financials – for Feb., 2020

Attendance: 21

		Starting Lunch Kitty:	$ 150.75
Expenses: Pizza(1) & Salads	$102.00		
Drinks: Soda: 8 @ 0.375 =	$3.00		
Water 2 @ 0.25 =	$0.50		
	Food Total:	$105.50	$ 45.25
Income:	Lunch:	$108.75	$154.00
	Recycling: 7/17/21	30.00	$184.00
Room Rent-To General Funds:		$00.00	$184.00
	Starting - Kitty for Dec 21, 2021 Mtg:		$184.00

[Gain of $30.25 - $20.00 for room rent = Gain of 10.25]

Lunch Kitty Financials – for Dec., 2021

Attendance: 11

		Starting Lunch Kitty:	$ 184.00
Expenses: Pizza(1) & Salads	$54.00		
Drinks: Soda: 5 @ 0.400 =	$2.00		
Water 1 @ 0.25 =	$0.25		
	Food Total:	$56.25	$128.75
Income:	Lunch:	$82.25	$211.00
	Recycling: 7/17/21	00.00	$211.00
Room Rent-To General Funds:		$00.00	$211.00
	Starting - Kitty for Feb 18, 2022 Mtg:		$211.00

[Gain of $27.00 - $20.00 for room rent = Gain of $7.00]

AMATEUR RADIO LICENSING EXAMS:
TRW Swap meet at the corner of Aviation Blvd and Marine Avenue in Redondo Beach. 10AM in the Northrop cafeteria. Always the last Saturday of the month – no reservation is required. (www.W6TRW.com) **[inactive - Covid-19-ed]**

ARRL Announces Free Exam Review Website
The ARRL has launched a web site that allows users to take randomly generated practice exams using questions from the actual examination question pool. ARRL Exam Review for Ham Radio™ is *free*, and users do *not* need to be ARRL members. The only requirement is that users must first set up a site login (this is a different and separate login from your ARRL website user registration).

Other Free Practice Exam Sites:
http://aa9pw.com/radio/technician/
http://www.eham.net/exams/
This Practice Exam site Requires Registration
https://www.qrz.com/hamtest/

ARRL LAX Section Officers:
Section Manager: Diana Feinberg, AI6DF
PO Box 4678
Palos Verdes Peninsula. Ca 90274-9618
AI6DF@arrl.org or 310-544-2917

Asst. Section Manager: Mark Chung,KK6SMD
mchung@prodigy.net

LAX Section Traffic Mngr: Kate Hutton, K6HTN
For Radiogram formatting instructions go to www.ARRLLAX.org .

RF Safety – Power Density Web site:
http://hintlink.com/power_density.htm

ARRL RF exposure calculator

Links: TRW license test
http://W6TRW.com/index.php/amateur-radio-license-testing/

International Space Station (ISS)

Monitor -**145.800** mHz.

PodCast – Amateur Radio News
(The above is a link to an MP3 audio feed)

YouTube: Call Sign History

On-Line Stores / suppliers:
http://www.impulseelectronics.com/ PowerPole
https://elkantennas.com - LPA VHF/UHF Ant.
http://hamcity.com - Local – Conn, cables, ants.
http://www.aesham.com/ - Ham Radio Outlet
http://www.dxengineering.com
http://www.gigaparts.com/
http://www.AllElectronics.com – Parts
http://TheWireman.com – Ant. Coax, UV Dacron
ARRL http://arrl.org
CQ Mag http://store.cq-amateur-radio.com/product-category/books/
BGMicro https://www.bgmicro.com/

HARC Past & Current Presidents
1973 Doug Erny, AK7E (former W6NPD)
1974 Orson Just, K6JGV, sk
1975, 76 Tom Rothwell, K6ZT, sk
1977 Tom McInnis, WB6ZEB, sk
1978,79 Sam Weise, W6LXR
1980 Bob Poole, AJ6F, sk
1981 Russ Sanford, WA6NQO, sk
1982, 83 Chuck, KN6H
1984 John Bennett,WD6BAI
1985 Scott Fraser, KN6F
1986, 87 Ed, K6GQV
1988 John, WA6LOD
1989, 90 John, KJ6AW
1992 Bruce, WB6ARE
1993 Rick, KD6DYN
1994
1995,6,7,8,9 Brian, AB6UI
2000,1,2 Bruce, W6BLS
2004,5,6 Ed, N6EG
2007 - 2014 Barry, KG6NWJ
2015, 16, 17 – Dale Birmingham, WB6MMQ
2018-19 Mike, N6MDV (Past President)
2020, 21 – Brian, AB6UI (President)

How To: **Wires-X** can be found at K7REA.com

Southern California Band Plans:
Tasma – 2 Meters
http://www.tasma.org/TASMA-2m-Band-Plan.pdf

220SMA Band Plan – 1 ¼ Meters
http://www.220sma.org/index.htm

SCRRBA (Southern California Repeater and Remote Base Assoc.) – 440 mHz (70 cm) and up
http://www.scrrba.org/BandPlans/BandPlans.htm

W1AW Operating Schedule(Edited – Note: Local time stays the same, UTC varies w/DST)

Morning Schedule:

Winter	Summer	Local	Mode	Days
1400 UTC	1300 UTC	(6 AM PDT)	CWs	Wed, Fri
1400 "	1300 UTC	(6 AM PDT)	CWf	Tue, Thu

Afternoon/Evening Schedule:

2100 UTC	2000 UTC	(1 PM PDT)	CWf	Mon, Wed, Fri
2100 "	2000 "	"	CWs	Tue, Thu
2200 "	2100 "	(2 PM PDT)	CWb	Daily, CW Bulletin,18 WPM
2300 "	2200 "	(3 PM PDT)	DIGITAL	Daily, Digital Bulletin
0000 "	2300 "	(4 PM PDT)	CWs	Mon, Wed, Fri
0000 "	2300 "	"	CWf	Tue, Thu
0100 "	0000 "	(5 PM PDT)	CWb	Daily, CW Bulletin,18 WPM
0200 "	0100 "	(6 PM PDT)	DIGITAL	Daily, Digital Bulletin
0245 "	0145 "	(6:45 PM PDT)	VOICE	Daily, Voice Bulletin
0300 "	0200 "	(7 PM PDT)	CWf	Mon, Wed, Fri
0300 "	0200 "	"	CWs	Tue, Thu
0400 "	0300 "	(8 PM PDT)	CWb	Daily, CW Bulletin,18 WPM

Frequencies (MHz)

CW:	1.8025	3.5815	7.0475	14.0475	18.0975	21.0675	28.0675	50.350	147.555
DIGITAL:	-	3.5975	7.095	14.095	18.1025	21.095	28.095	50.350	147.555
VOICE:	1.855	3.990	7.290	14.290	18.160	21.390	28.590	50.350	147.555

Notes:

CWs = Morse Code practice (slow) = 5, 7.5, 10, 13 & 15 WPM
CWf = Morse Code practice (fast) = 35,30,25,20,15,13 &10 WPM
CWb = Morse Code Bulletins = 18 WPM

CW frequencies include code practices, Qualifying Runs and CW bulletins.
DIGITAL = BAUDOT (45.45 baud) BPSK31 and MFSK16 in a revolving Schedule.
Code practice texts are from QST, and the source of each practice is given at the beginning of each practice and alternate speeds.

W1AW Qualifying Runs: [for more info: www.arrl.org/qualifying-run-schedule]
Starting 2020. W1AW will transmit Qualifying Runs up to 16 times per month.
Time is PST: [10 – 35 wpm – **Bold 35, 40 – 10 wpm]** – on CW Frequencies listed above.

Month	6 AM	1 PM	4 PM	7 PM	6 AM	1 PM	4 PM	7 PM	6 AM	1 PM	4 PM	7 PM	6 AM
Jan	1/18		1/20	**1/19**		1/21		1/24	**1/26**	**1/27**	1/28		
Feb		2/2	**2/1**	2/3	2/4	2/8	2/9	2/11	**2/10**			**2/16**	2/15
Feb	2/15		2/17	**2/16**		2/18		2/22		**2/24**	2/25		

West Coast Qualifying Runs:
Wed Jan 26 @ 9 PM PST (0500 UTC on Jan 27) on 3590 & 7047.5 kHz by K9JM, **40 – 10 wpm.**
Wed Feb 23 @ 6 PM HST (0400 UTC Feb 4th) on 7047.5 & 14047.5 kHz by KH6TU 10 – 40 wpm

Earn your Code Proficiency certificate by legibly coping at least 1 minute of text by hand and mailing the sheet to: W1AW Qualifying Runs, 225 Main St., Newington, CT 06111. Include $10 (check or money order) if this is a submission for your initial Code Proficiency certificate; $7.50 if you are applying for an endorsement (available for speeds up to 40 wpm). Your test will be checked against the actual transmissions to determine if you have qualified.

Audio from W1AW's CW code practices, CW/digital bulletins and phone bulletin is available using EchoLink via the W1AW Conference Server named "W1AWBDCT." The monthly W1AW Qualifying Runs are presented here, also. The audio (real-time) runs concurrently with W1AW's regular transmission schedule.

K1USN Radio Club Announces Weekly Slow-Speed CW Contest

The K1USN Radio Club in Massachusetts is launching a new weekly, hour-long, slow-speed contest, the K1USN SST. **Fridays 1:00-2:00 pm PDT** (2000z -2100z) and **Sundays**, **5 to 6 PM PST** (Monday 0000-0100 UTC) Suggested frequencies: 3.532 - 3.539; 7.032 - 7.039 MHz, & 14.032 - 14.039 MHz. Exchange name & s/p/c. Read more.

The Straight Key Century Club (SKCC): http://www.skccgroup.com/member_services/beginners_corner/
SKCC Beginner's Corner - Monthly Straight Key Night (SKN**) is on the 1st of each month. It is not a contest. No logs are submitted. The Elmer frequency** is **7114 KHz**. It's a safe haven for CW newcomers. Elmers are encouraged to monitor the frequency and work the CW beginners, some of whom may have had a license for many years.

July 1, 2021 – June 30, 2022 CLUB OFFICERS

Elected Officers:

PRESIDENT:	Brian, AB6UI	AB6UI at AOL.com
VICE PRESIDENT:	Howard, KE6MAK	Karse1 at DSLextreme.com
SECRETARY:	Dale, WB6MMQ	WB6MMQ at ARRL.net
TREASURER:	Paul, KK6TAC	PAGeisel at Verizon.net
STATION MANAGER:	Michael, N6MHD	N6MHD at ARRL.net
Immediate PAST PRES.:	Vacant	

Committees:

NEWSLETTER EDITOR:	Dale, WB6MMQ	WB6MMQ at ARRL.net
QUARTERMASTER:	Michael, N6MHD	N6MHD at ARRL.net
WEB MASTER:	Richard, KM6FP	RunFarr at Gmail.com
MEMBERSHIP:	Dale, WB6MMQ	WB6MMQ at ARRL.net
SCRRBA REP:	Ray, WA6NVL	WA6NVL at ARRL.net
MEETING HOST:	Dale, WB6MMQ	WB6MMQ at ARRL.net
FoTL Conf. Rm. Coor:	Judi, KI6TKT	
FIELD DAY :		
MEMBERSHIP:	Dale, WB6MMQ	WB6MMQ at ARRL.net
NET COORDINATOR:	Howard, KE6MAK	Karse1 at DSLextreme.com
YAHOO GROUPS MOD:	Richard KM6FP	RunFarr at Gmail.com (http://groups.yahoo.com/w6ha)
CLASS MODERATOR:		

CLUB REPEATER: **W6HA** 445.620 MHz (-) PL 127.3 Hz Location: Bldg. R1 roof
Packet (node :hughes) 145.61s W6HA; **Wires-X** Room: 40909; Node: 30909

HARC Repeater Nets: Wednesdays, 7:30 PM (0330 UTC Thursdays)
Thursdays, 12:05PM (2005 UTC) RTN ECT – All are welcome

South Bay ARC Net: Thursdays at 7:30 PM on W6SBA/R, 224.38, PL 192.8
LAFD CERT Net: 1st Tuesday of the month, 7:00 PM PT

HAC NET: Hughes ARC - 14.233 mHz +/- QRM - Inactive

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Club Shack: The club shack is in E1, Lobby D. There is a Kenwood TS-520 HF radio connected to a 40 –10 meter end fed dipole. This station is open to all club members. (I would be happy to give a tour of the HF station in "Lobby D" to club members. Michael, N6MHD) **But after covid-19 restriction are removed.**

Club Newsletter: If you have items that would be of interest to the club, any comments, letters, or items forsale or trade please email it to Dale, WB6MMQ DGBirmingham (at) Gmail (dot) com. If anyone needs a club application, please contact Membership Chair: Dale, WB6MMQ and one will be sent to you.

Club Roster: Hardcopy available at meetings or contact the club membership chairman Dale, WB6MMQ

Web Site: www.W6HA.org (Usable, but incomplete at this time.)

The Hughes Amateur Radio Club is a California Nonprofit, Public Benefit Corporation and an ARRL affiliated club for FCC-licensed amateur radio operators and their family members. Membership is open to all Amateur Radio Operators and those who are aspiring Amateur Radio operators. *This program is not sponsored by the El Segundo Public Library*

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