





# **Volunteer Opportunity: Tour To Tanglewood**

By: Peter Kapetanakis, KN40CX

Harlan Cobert, W1HRC of the Forsyth Amateur Radio Club needs help with communications for the Tour To Tanglewood bike race. The Tour To Tanglewood bike race is a National MS Society sponsored event.

SAG vehicles (mobile ham radio

operators) and rest stop operators are needed. You may volunteer for either Saturday or Sunday, or both days. It is an all day event.

Click on the following link for more information:

https://fcauxcomm.org/tour-totanglewood/ Sponsor: MS Society September 23 & 24, 2023

Please contact Harlan Cobert, W1HRC for more information at auxc@fcauxcomm.org

# **Amateur Radio Responds to Disasters Across the United States**

Source: ARRL Letter August 24, 2023

<u>The fires</u> are out on the Hawaiian island of Maui but extensive search and rescue operations continue.

President Biden visited the island on Monday, August 21, 2023, and told residents the federal government will provide help "for as long as it takes" to recover from the devastation.

Numerous emergency response agencies and organizations are still arriving, and volunteers are helping to provide coordinated communications on the KH6COM repeater, on 146.520 MHz, and a VHF/UHF countywide system with emergency backup power. Hawaii has many amateur radio repeaters and an

**HPARC Meeting** 

Mario's Pizza & Zoom

2645 N. Main St. High Point, NC27265

September 4, 2023

6:30 p.m.

extensive internet-linked repeater system.

On the west coast of the United States, after a record amount of rainfall, Hurricane Hilary has downgraded to a tropical storm and is heading toward the Northeast. The west coast area is still experiencing flooding and mudslides as residents face major cleanup operations.

Section Manager of the ARRL Los Angeles Section Diana Feinberg, Al6DF, said there weren't any amateur radio activations, but Radio Amateur Civil Emergency Service and ARES groups were on heightened alert. There was minimal damage in the Los Angeles A Basin area. Feinberg also said the City of Los Angeles Auxiliary Communications Service was activated and reported to the Emergency Operations Center, but there weren't any communication outages.

Section Manager of the ARRL Santa Barbara Section John Kitchens, NS6X, said there was more concern for the 5.1-magnitude earthquake that hit his area during the storms. "There were no actual activations, but we were ready. Our folks [took] advantage of the

situation and turned it into a real-time drill," said Kitchens.

The <u>Hurricane Watch Net</u>, <u>WX4NHC</u> <u>amateur radio station at the National Hurricane Center</u>, and the <u>VoIP Hurricane Net</u> were activated on Sunday, August 20, for Hurricane Hilary. Despite having bilingual operators in each group, and the storm's impact to the Baja California

peninsula, there weren't any reports from Mexico, much to the concern of net operators. WX4NHC Amateur Radio Assistant Coordinator Julio Ripoll, WD4R, said, "Hurricanes have no borders and ham radio has no borders."

Ripoll encouraged Mexican stations to



Damaged buildings and vehicles in Lahaina. [Spc. Sean Walker, photo.]

\*DISASTERS Continued on Next Page

check in and pass along reports when the net was active. "We can work together to help each other and those affected by hurricanes," he said.

Tropical storm alerts were issued along the south Texas coast on Tuesday, August 22, as Tropical Depression 9 formed in the Gulf of Mexico. The storm's center moved inland over south Texas by midday, when it became Tropical Storm Harold. It caused rain and wind, but there was little to no damage. The South Texas Amateur Radio Club said their amateur radio operators were ready even though they were not activated.

While tropical storms and an earthquake impacted large portions of the country, much of the Pacific Northwest has been dealing with wildfires.

In eastern Washington, the <u>Spokane</u> <u>County ARES®/ACS</u> was activated to deploy a mobile network unit (MNU) to

the Gray Fire on Friday, August 18. The MNU is a self-contained, satellite-based internet and cell (AT&T, Verizon, and T-Mobile) support system. Volunteers set up the gear at an incident command post used by county officials.

Radio amateurs are encouraged to participate in their local ARES group.



Forecast advisory 17 for Hurricane Hilary, issued on Sunday, August 20, 2023. [NOAA]

# **Hurricane Watch Net Seeks Bilingual Net Control Operators**

Source: ARRL Letter July 27, 2023

The Hurricane Watch Net (HWN) is looking for new members who are willing to train to become Net Control Operators. HWN is especially interested in recruiting bilingual operators who are fluent in Spanish and English or French/Creole and English. Net Control responsibilities can entail hours of duty to ensure all received ground-truth weather reports are forwarded directly to the National Hurricane Center in Miami.

The net generally activates whenever a system has achieved hurricane status and is within 300 statute miles of a populated landmass. This can vary, however, due to the forward speed and intensity of a storm, or at the request of the forecasters at the National Hurricane Center. Once activated, the HWN continuously operates until a storm is no longer a threat to life and property.

The mission of the net is to disseminate the latest advisories issued by the National Hurricane

Center, and to obtain real-time. ground-level weather conditions and initial damage assessments from amateur radio operators in the affected areas. The net then relays that information to the National Hurricane Center by way of WX4NHC, and when required, the Canadian Hurricane Centre. It also functions as a backup communication link for the National Hurricane Center, National Weather Service Forecast Offices, the Canadian Hurricane Centre. **Emergency** emergency Operations Centers, management agencies, nongovernmental organizations, and other vital interests that can involve military relief operations. operations can be involved in the protection of life and property before, during, and after a hurricane event.

HWN Manager Bobby Graves, KB5HAV, says training will be provided and each candidate will go through a probationary period with a mentor. Graves, an ARRL member, says an applicant's station must be reliable. "While having a tower, beam,

and/or amplifier is not a requirement, your station must allow you to hear and be heard. Therefore, directional antennas and amplifiers are preferred," he said.

The net coverage area includes the

hurricane-prone areas of eastern Canada, the US East Coast, the Gulf of Mexico, Central America, and the Caribbean. The net specifically



seeks applicants in the middle-towestern sections of the US, Canada, Central America, and the Caribbean. "As always, the HWN is hoping for a quiet season, yet [we are] prepared for the worst," said Graves.

Those interested in learning more can visit the HWN Net Control Information web page at <a href="https://hwn.org/about-us/ncs">https://hwn.org/about-us/ncs</a> info.html

# **FCC Recruiting Field Agents**

Source: ARRL Letter August 10, 2023

The Federal Communications Commission (FCC) is looking for qualified applicants to fill Field Agent positions in five offices across the United States: New York, Boston, Chicago, Los Angeles, and San Francisco. Applicants will need to be degreed electrical or electronics engineers with experience in tests, measurements, calculations, and

similar work involving radio frequency (RF) engineering, broadcast engineering, or telecommunications engineering. The duties include:

\*FCC Continued ...

- Operate and understand all technical equipment typically used in the field, including RF spectrum analyzers, field strength meters, RF field survey meters, and radio receivers.
- Maintain contacts with and assist other federal agencies, foreign counterparts. local law and enforcement organizations concerning interaction and utilization of the radio spectrum for both authorized and unauthorized activities.
- Initiate Official Notices of Violation, Warnings, Notices of

Apparent Liability for Forfeiture, and other orders to radio operators and licensees to bring unsatisfactory or violative conditions to their attention as a result of monitoring and performing investigations, and inspections.

• Independently initiate correspondence or other communications with complainants and radio users concerning the enforcement functions of the office and region.

The salary range is \$66,134 - \$158,432 per year depending on qualifications and experience.

The New York, Boston, and Chicago job postings are at <a href="https://www.usajobs.gov/job/73654">https://www.usajobs.gov/job/73654</a>
0500

The Los Angeles and San Francisco postings are at

https://www.usajobs.gov/job/736547300

Applications are being accepted through August 24, 2023.



## **ARRL Files Comments Against "Seriously Flawed" Shortwave Rules Petition**

Source: ARRL Letter August 3, 2023

ARRL, as part of its mission to protect Amateur Radio, has filed comments against a proposal that would introduce high-power digital communications to the shortwave spectrum that in many instances is immediately adjacent to the Amateur HF bands.

The "Shortwave Modernization Coalition" (SMC), which represents



certain highfrequency stock trading interests, filed the petition with the Federal Communications Commission (FCC).

coverage can be found on ARRL News.) ARRL responded on behalf of its members and the

760,000 licensees of the Amateur Radio Service in the US.

The ARRL Laboratory performed a detailed technical analysis over several months to determine if the proposed rules would affect operations on the bands allocated to Radio Amateurs that are inter-mixed with the Part 90 bands in the spectrum in question.

ARRL's analysis determined that, if the proposed rules are adopted, the new

inevitably operations will cause significant harmful interference to many users of adjacent and nearby spectrum, including Amateur Radio licensees. Ed Hare, W1RFI, a 37-year veteran of the ARRL Lab and internationally recognized expert on radio frequency interference, was the principal investigator on the study. Hare concluded the petition should not be granted. "This petition seeks to put 50 kHz wide, 20,000-watt signals immediately next to seven different amateur bands with weaker protections against interference than required in other services," said Hare.

In its formal opposition, ARRL stated, "That destructive interference would result if operations commenced using anything close to the proposed maximum levels."

ARRL's filed comments highlight flawed analysis and incomplete data submitted by the petitioners. It noted "...significantly the petitioners understate the harmful interference that is not just likely, but certain, if the rules proposed by SMC are adopted as proposed. It is noteworthy that SMC's proposed rules would provide less protection than the much-lower power radio transmitters amateur are required to provide Part 90 receivers." ARRL's opposition also noted that there was no reported tests conducted with Amateur or other affected stations, but referenced a spectrum capture in the

Comments filed with the Dayton Group that showed actual interference into the Amateur 20-meter band from one of the High Frequency Trading experimental stations.

Part 90 HF rules currently authorize a maximum signal bandwidth equal to a voice communications channel, at up to 1000 W peak envelope power (PEP). The petition seeks multiplication of signal width, greater transmitted power, and weaker rules that protect users of adjacent spectrum. ARRL's comments expose the likely fallout:

"Incredibly, notwithstanding the significant increase in potential interference that would result from using digital schemes with 50 kHz bandwidths and 20,000 watts of power, SMC also proposes to substantially lessen the protections required to protect adjacent and neighboring licensees. SMC proposes [out-of-band emissions] limits that offer less protection than the existing Part 90 limits and would actually permit no attenuation (0 dB) at the edge of adjacent allocations, many of which are bands allocated to and heavily used in the Amateur Radio Service. Consistent lessening protections while increasing the potential for harmful interference, SMC also proposes a lower limit for spurious emissions. SMC would reduce the existing protection of -73 dB for the applicable 1000-watt power \*Seriously Flawed Continued on Next Page

limit to just -50 dB protection for their proposed 20,000-watt limit. Due to the much wider 50 kHz proposed bandwidth, the resulting interference would penetrate deep into the adjacent Amateur bands."

The proposal has been assigned FCC Docket No. RM-11953. While the period for commenting on the petition has now

closed, replies to comments in the record may now be submitted.

Hundreds of licensed Radio Amateurs filed comments in the Docket, expressing overwhelming opposition to the proposal. Those interested may read ARRL's full comments and the results of the technical analysis, which are included in the filing. "If granted as written, this would be devastating to

Amateur operation for many tens of kHz into our bands," said Hare.

ARRL will continue to advocate for its members and the Amateur Radio Service in this proceeding.

Read ARRL's Opposition and the ARRL Lab's technical analysis <u>here</u>.

# **IARU Approves two Digipeating Amateur Satellites**

Source: ARRL Letter August 10, 2023

The International Amateur Radio Union (IARU) has coordinated two European digipeating satellites that are scheduled to launch in fall 2023. At the Technical University of Kosice in Slovakia, satellite Veronika, a 1U CubeSat, is scheduled for launch on a Falcon 9 launcher on the Transporter 9 mission in October 2023.

The satellite will be equipped with a 24/7 digipeater on two different bands, as well as experimental slow-scan digital video (SSDV) transmissions. There is an education and outreach mission planned to involve Slovak grammar and high schools, and to transmit special CW and AX.25 messages on several special occasions. The satellite will be equipped with a novel Attitude Determination and Control System (ADCS) subsystem, including electromagnetic actuators and a global navigation satellite system

(GNSS) receiver. This will also help to identify the satellite during the first days and weeks of orbit.

The satellite will communicate using well-known Spacemanic's Murgas transceivers (BDSat-1, BDSat-2, Planetum-1). Altogether, Veronika will provide: AX.25 telemetry, a CW beacon, a digipeater, AX.25 and CW messages on special occasions for community experimental engagement, SSDV transmissions, SatNOGS integration, a decoder, and a dashboard. A downlink on 436.680 MHz has been coordinated, and it will use 9k6 G3RUH AX.25 and a CW beacon. A SpaceX launch on the Transporter 9 mission will send the satellite to a 500/600-kilometer polar orbit.

The Romanian Federation of Amateur Radio (FRR) is preparing the ROM-3 for launch in October or November 2023. ROM-3 is a 50 x 50 x 100-millimeter picoSAT with three missions and

objectives. Its primary mission is to act as a digital amateur radio repeater. Its secondary mission is to transmit lowresolution SSDV images in a Gaussian frequency shift keying (GFSK) mode. The tertiary

mission is to CWtransmit а beacon that will help radio amateur operators detect the presence of the satellite and measure basic properties of the signals, such as its strength, fading due



to spinning, and Doppler to measure speed. A downlink on 436.235 MHz has been coordinated for 20 WPM on CW, 500 (bps) GFSK telemetry, and 5 (kBps) GFSK SSDV. A SpaceX launch will send ROM-3 into a 500-kilometer polar orbit.

# Air Force and Marines Corps Marathons Need Amateur Radio Volunteers

Source: ARRL Letter August 24, 2023

This fall, amateur radio operators will have the opportunity to volunteer their services and share their communication skills at two different marathons.

The Air Force Marathon will occur on Saturday, September 16, on Wright-Patterson Air Force Base near Dayton, Ohio. The race will begin at 7:30 AM EDT.

Bob Baker, N8ADO, Greene County Emergency Communications Volunteer Lead, for Amateur Radio Support to the Air Force Marathon said, "We need a team of ham radio volunteers to support the event by operating several networks for logistics, [providing] medical information, monitoring and tracking runners, shadowing race officials, and supporting finish line operations."

He went on to say, "We need an excess of 60 volunteers to make all of this happen. Only 75% of the required number of volunteers have signed up and we could use amateur radio operators' help."

Most of the race takes place on the

Wright-Patterson Air Force Base, and to comply with security regulations, all volunteer applications must be submitted by August 31, 2023, to allow for background checks.

To volunteer, visit usafmarathon.com/volunteer/ and click the "Volunteer Now button." You'll be redirected to the portal at raceroster.com, where you'll need to create an account. Once you've created an account, select "Volunteer," and sign in. Select the pull-down list under \*MARATHONS Continued on Next Page

"Volunteer With Us," and then scroll down and select "Volunteer on September 16, 2023." Saturday, Continue to scroll down and fill out the required information.

Be sure to include your call sign in the appropriate box. Below that box,

under "Amateur Radio Operator," click the "Add to Order box." Continue to the bottom of the web page and select your t-shirt size. Then, select "Continue" to

submit your registration. Please report that you have signed in by sending a message with your name and call sign



(and preferred email, if it's different from the account from which you send message) AFM.Hams@gmail.com

As the race date nears, you'll receive

an invitation to a training session and a link to the training materials, assignment list, and communications plan. Please arrive by 5:30 AM to accommodate ID checks and road closures.

The 2023 Marine Corps Marathon (MCM) will take place on Sunday, October 29 in Washington, D.C., and Arlington County, Virginia at 7:55 AM EDT. The MCM Ham Volunteers team is looking for 150 amateur radio operators to support the event by providing racecourse situation reports.

The Marine Corps Marathon, also known as the People's Marathon,

expects to support more than 29,000 runners at this year's event.

Amateurs can register to volunteer www.hamcommunity.com/mcmregister.

The mission of the MCM is to showcase physical fitness and generate community goodwill to promote the high standards and discipline of the Marine Corps. Annually ranked as one of the largest marathons in the US and the world, the

MCM has been recognized as the "Best Marathon in Mid the Atlantic." "Best for Families," and "Best for Beginners."



## In Brief...

Source: ARRL Letter August 24, 2023

The World Association of Christian Radio Amateurs and Listeners (WACRAL) special event, CHurches and CHapels On The Air (CHOTA), is on Saturday, September 9, 2023. The WACRAL organization was started in 1957 in England, by the Huddersfield South Methodist Radio Club. It's been ecumenical since 1978. CHOTA is not a contest; it has been described as an institutional space for using amateur

radio to reach the public, like Parks on the Air (POTA). To date, there hasn't been any participation from amateur radio operators in the US. However, ARRL Delta Division Assistant Director Frank Howell, K4FMH, recently wrote to John Wresdell, G3XYF, manager of the CHOTA event, about getting the US involved by activating his church in Ridgeland, Mississippi. To participate, send an email to Wresdell at jhwresdell@gmail.com with the call sign you intend to use and the location of the church or chapel you plan to activate. Suggested frequencies for CHOTA 2023 are 20 meters on SSB, 40 meters on CW, and FT8. Operating times are 8:00 AM -5:00 PM EDT. Participants who make eight or more contacts will receive an award. More information can be found at Awards - WACRAL.ORG.

## Sign Up Or Renew Your ARRL Membership

By: Peter Kapetanakis, KN4OCX

Are you an ARRL member? Would you like to be? Whether you wish to sign up as a new member, or simply renew your membership, consider doing that through the club. By doing so, the club gets to keep \$15 of new ARRL memberships and \$2 of ARRL renewals.

As an ARRL member, you will benefit from getting the QST Magazine or the On The Air magazine, plus digital access to all four ARRL magazines such as QEX, technical articles, and the National Contest Journal. ARRL members have access to The Learning Center and product reviews, along with e-newsletters. Other benefits include Technical

Information Service, outgoing QSL Service, ARRL E-mail forwarding service, and the availability to Ham Radio equipment insurance; as well as, supporting the ARRL which represents Ham Radio in Washington, DC. To start your ARRL membership or renew, please contact the HPARC Treasurer at Treasurer@W4UA.org.

## **Ham Radio Classes**

By: Peter Kapetanakis, KN4OCX

The Tri-County ARC, High Point ARC, and GARA (Greensboro Amateur Radio Association) have formed a partnership to provided online (Zoom) classes for those seeking to acquire their Technician Class operator's license, or to upgrade to a General Class license.

Each course is comprised of 4 class sessions. Each class session is held via Zoom on Wednesday evenings from 6:30 –

9:30pm ET and is free of charge.

The Technician & General classes are held in alternating months. The next course is the <u>Technician</u> Course scheduled to begin <u>September 6th</u>. Please note, that the courses are meant to prepare you for the FCC license exam, but do not include the license exam itself.

Pre-registration is required for each course. Please contact Richard Weinbaum, KK4RR at 336-687-8001 or

KK4RR@mac.com to register.

The starting dates for each course in 2023 are as follows:

**Technician Course:** 

January 4, March 1, May 3, July 12 September 6

#### **General Course:**

February 1, April 5, June 7, August 9, October 4

### HPARC SEPTEMBER CALENDAR

- 4 HPARC Meeting / Labor Day
- 9 W4VEC Greensboro VE session (Hinshaw United Methodist Church)
- 17 HPARC Newsletter Deadline
- 30 W4VEC High Point VE session

(Hickory Chapel Wesleyan Church, Fellowship Bldg)

#### SEPTEMBER BIRTHDAYS

Matt Flyer, KN4WON - 5 Dwight Sledge, W4EIO - 7 Bobby Draughan, KM4UHU - 11 Thomas L. Evans, NA4U - 28

For W4VEC Test information, call or email Keith Thomas, KA4JAH, (336) 906-2469, KA4JAH@Aol.com

### **2023 HPARC OFFICERS**

David Macchiarolo, AJ4TF — President — Please contact other officers at this time. Terence Crandall, N4TLC — Vice-President — 336-413-9589 — Vice-President@W4UA.org Keith Thomas, KA4JAH — Secretary — 336-906-2469 — Secretary@W4UA.org Peter Kapetanakis, KN4OCX — Treasurer — 336-978-2337 — Treasurer@W4UA.org

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Breakfast every Saturday

8:00 a.m.

Biscuitville, 2709 S. Main St.

The HPARC Newsletter is published monthly by the High Point Amateur Radio Club (HPARC) for its members. The HPARC Newsletter serves as a source of information about Club activities, and general news items of interest to Amateur Radio. Material in this Newsletter be reproduced provided the HPARC is properly credited. Complimentary issues of the HPARC Newsletter are available by writing to the HPARC Newsletter at PO Box 4941, High Point, NC 27263 or emailing your request to w4ua@arrl.net. Membership in the HPARC is open to all licensed Amateur Radio operators. Membership is \$24.00 a year. Associate membership is also available to those who are interested in Amateur Radio but who do not currently hold a license. Associate membership is \$12.00 a year.

The High Point Amateur Radio Club meets the first Monday of each month (except for holidays) at a local restaurant announced in the newsletter. Come early to enjoy dinner. The business meeting starts at 6:30 p.m. followed by a short program of interest. Family and visitors are welcome to attend. For more information, please call or email one of the HPARC officers listed in this newsletter. Contributions and letters/emails to the editor are welcome.