



HPARC NEWSLETTER

High Point
Amateur Radio
Club




AUGUST MEETING

PLEASE NOTE NEW TIME! The HPARC voted at the June meeting to change the time of the club meeting. The HPARC will now start the membership meeting at 6:30 p.m. Come for the meal at 6:00 p.m.

Haven't heard from our program committee what program may await us at the August meeting. I'm sure David has something up his sleeve.

For July, David Macchiarolo reviewed what the HPARC did for Field Day. We had a great turnout with great weather. The score may be slightly higher than last year. David also said that since it is not a contest, he is not turning in the

scores this year. Naw, that ain't going to happen.

I know we thanked everyone at the meeting for helping with Field Day no matter what part you played, but I would like to again thank everyone for your participation. Couldn't do it without you. Thank you.

HPARC Meeting
6:30 p.m. / Meal: 6:00 p.m.
July 5, 2021
J&S Cafeteria
5835 Samet Drive, HP
& on the Zoom app

David Macchiarolo is in charge of sending out Zoom email invitations to the club

meeting. If you are planning to attend the meeting via Zoom and have not gotten an invitation, please contact David and let him know (email under Officers in this newsletter).

Please send your club dues directly to Warren Gallemore, HPARC Treasurer. His email address is listed in this newsletter if you need to contact him.

I am pleased to see our club members once again coming to our in-person club meeting at J&S Cafeteria. We are still missing a few of our members we haven't seen in awhile. Hope you are well and hope to see you at a club meeting very soon. Please be safe.

MOST 2021 FIELD DAY PARTICIPANTS ENTERED IN CLASS D

In the second ARRL Field Day with rule waivers in place, some 4,815 entries were received at ARRL Headquarters by July 13 — the majority in Class D (Home Stations). Last year saw more than 10,213 entries and 18,886 participants. Before the pandemic, in 2019, 3,113 entries were submitted, with 36,420 total participants.

"It appears that larger groups were more the norm in pre-pandemic times, as expected,"

ARRL Contest Program Manager Paul Bourque, N1SFE, observed. "From the discussions I've been having with participants, even though some groups gathered in larger numbers this year, many participants chose either to gather in smaller groups or to operate solo from home as Class D or Class E stations. Although I don't think we'll see the number of entries that we did last year, we're close in terms of the

number of participants."

"FD was already a success on Saturday, with the stations

Class D continued inside...

HPARC/Zoom Meeting
August 2, 2021

J&S Cafeteria,
5835 Samet Drive, HP
& on Zoom

Meal at 6:00 p.m.
Business meeting at 6:30 p.m.

TECHNICIAN CLASS COURSE

Rick Weinbaum, KK4RR, is starting another Technician Class Course. It will have started by the time you receive this newsletter. The dates will be July 27 through August 17 at 6:30 pm.

There is no fee for this class. The recommended study guide is The ARRL Ham Radio

License Manual, Level 1, Technician. The recommended test preparation website is www.hamradiolicenseexam.com.

The classes will take place at Rick's Ham shack at 331 Woodrow Ave. High Point.

There will be a limited number of applicants that will be

accepted due to the limited space. Rick is asking that everyone who attends please wear a mask.

If you miss this class, reach out to Rick to see when he might again have another class session. For any more information, contact Rick Wienbaum at KK4RR@mac.com.

MASSACHUSETTS COURT OKAYS AMATEUR RADIO TOWER, CITING BOARD OF APPEALS' ERROR

A judge in the Massachusetts Land Court has ruled that the Zoning Board of Appeals in the City of Framingham "erred" in revoking a building permit for an 80-foot Ham Radio tower as an accessory use. The Building Commissioner in Framingham had granted ARRL member Mikhail "Misha" Filippov, KD1MF, a building permit for the tower, and Filippov had begun pouring concrete for the tower footings. Neighbors complained, however, and the Zoning Board of Appeals revoked the permit, citing the setback requirements of the city's wireless communications facilities (WCF) special permit bylaw. Land Court Judge Howard Speicher reversed

the Zoning Board of Appeals' decision and ordered the town building commissioner to reinstate the permit.

"The City of Framingham has provided, for the benefit of Amateur Radio operators, exemptions from its zoning requirements from the construction of radio antenna towers for Amateur Radio operators," the court noted. This case was not settled on the basis of PRB-1 considerations, but strictly on which setback requirements should apply. PRB-1 requires local governments to reasonably accommodate Amateur Radio installations.

The Zoning Board of Appeals had argued that Filippov's

project plans failed to meet setback zoning requirements, but the Land Court determined that the board could not enforce this, because of an exception that exempts structures, including Amateur Radio towers, from these requirements as long as a building permit is issued.

The court ruled the Zoning Board of Appeals "erred in overturning the decision of the Building Commissioner to issue a building permit for the erection of the proposed radio antenna tower." Read an expanded version.

—*The ARRL Letter*,

July 15, 2021

Rick Lindquist, WW1ME,
Editor

HPARC SATURDAY BREAKFAST AT BISCUITVILLE

Just a reminder that the HPARC has an informal meeting of members at Biscuitville on South Main Street (across from Walmart). Biscuitville

recently opened its inside dining area, and club members began meeting there after more than a year ago.

HPARC members meet infor-

mally beginning at 8:00 a.m. with some members arriving later than that. Everyone is welcome to join the crew and eat breakfast with us.

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. Opinions expressed herein are not necessarily those of the HPARC or its officers. Material in this newsletter may 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. Subscriptions are available to non-members for \$12.00 a year. Contributions and letters/emails to the editor are welcome.

Membership is open in the HPARC 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. Student membership is also available for \$12.00 a year.

The High Point Amateur Radio Club meets the first Monday of each month (except for holidays) at 5:00 p.m. at a local restaurant announced in the newsletter. The business meeting starts at 6:00 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.

...Class D continued from cover

working smoothly, and lots of local visitors dropping by,” said Andy Goss, AA5JF, at Augusta University Amateur Radio Club’s WA4AUG. “An hour after sunrise on Sunday, we were counting our points, when

Darby, KK4PEQ, announced he had just worked a station on 6-meter phone — just playing around on 50 MHz using the 20/15/10 tribander,” Goss said. “He stayed on 6 [meters] for five QSOs, but we quickly [moved] to 10 and 15, finding

those bands were open to just about everywhere, and we doubled our score in just 3 hours. What a rush!”

—*The ARRL Letter*,

July 15, 2021

Rick Lindquist, WW1ME,
Editor

FIRST X-CLASS MAJOR SOLAR FLARE OF SOLAR CYCLE 25 BLACKS OUT HF ON JULY 3

For a brief time on July 3, a lot of Radio Amateurs were wondering, “Where did the bands go?” as the first X-class solar flare in 4 years blacked out HF propagation for a time.

“I was on 20-meter FT8, and my waterfall display went from solid red signals to solid nothing in the blink of an eye,” Scott Craig, WA4TTK, told “K7RA Solar Update” Editor Tad Cook, K7RA. “It lasted about 10 minutes.” Craig was not alone.

“Many American Radio Amateurs reported sudden HF propagation blackouts on Saturday morning, July 3, when solar active region 12838 produced an X1.5 major solar flare that reached maximum intensity at 1429 UTC, the first X-class solar flare of Solar Cycle 25 and the first since 2017,” said Frank Donovan, W3LPL. “HF propagation blackouts are caused when x-ray and extreme ultraviolet radiation from X-class solar flares strongly ionizes the absorbing D-region in the Earth’s sun-facing dense lower ionosphere,” he explained. Such a radio blackout occurs when a pulse of x-rays ionize the top layer of the atmosphere, the exosphere.

In this instance, it caused what NOAA’s Space Weather

Prediction Center (SWPC) calls an R3-level or “strong” radio blackout (on a scale of R1 – R5). An R3 incident can cause a “wide-area blackout of HF radio communication [and] loss of radio contact for about an hour on [the] sunlit side of Earth. Low-frequency navigation signals degraded for about an hour.”

Donovan said that X-class major solar flares are necessary consequences of steadily increasing Solar Cycle 25 activity. “95% of all X-class solar flares occur when the solar flux index is 90 or greater. The remaining 5% can occur any time during the solar cycle,” he points out. “X1-class major solar flares typically degrade HF propagation for only an hour or two at mid and high latitudes, only on Earth’s sunlit side.”

X-class major flares are measured on an open-ended scale. The strongest one ever recorded was an X28 flare in 2003, hundreds of times more powerful than the July 3 X1.5 solar flare. X10-class and stronger solar flares typically have effects that last for most of a day and affect the entire sunlit side of the Earth. Fortunately, X10-class solar flares occur only about once every 20 years or more.

“Much more severe and long-

lasting HF propagation degradations are often caused by the coronal mass ejections (CMEs) often associated with — but not caused by — major solar flares,” Donovan explained. “HF propagation degradation caused by CMEs typically begins about 2 days after the effects of the associated solar flare, the duration of the delay depending on interactions between the CME and the solar wind.”

The CME associated with the July 3 X1.5 solar flare is likely to have little to no effect on HF propagation going forward, because the active region was very close to the western edge of the visible solar disk when the CME erupted. Region 12838 rotated off the visible disk on Sunday, July 4.

Solar flares have no significant effect on VHF ionospheric propagation, but can degrade satellite communications passing through the ionosphere. More frequent, less powerful M-class medium solar flares produce short-duration degradation at high latitudes. Very frequent, much weaker A-, B-, and C-class solar flares do not degrade HF propagation. — Thanks to Frank Donovan, W3LPL

—*The ARRL Letter*,

July 8, 2021

Rick Lindquist, WW1ME,
Editor



High Point Amateur Radio Club
PO Box 4941
High Point, NC 27263

HPARC AUGUST CALENDAR

- 1 — Air Force Day
- 2 — HPARC Club Meeting**
also on Zoom
- 4 — Coast Guard Day
- 7-8 — 222 MHz and Up Distance Contest
- 14 — VJ Day (WWII Surrender of Japan 1945)
- 21-22 — ARRL 10-GHz & Up - Round 1
- 22 — ARRL Rookie Roundup - RTTY
- 29 — High Point VE Session, Hickory
Chapel Wesleyan Church
- 29 — HPARC Newsletter deadline

BIRTHDAYS

- Terence Crandall — August 1
- Peter Kapetanakis — August 4
- Layman Idol — August 6
- Bob Witt — August 6
- Chris Riewe — August 13
- Derek Brown — August 14
- Mike Walker — August 14
- Eddy Byerly — August 19
- Mike Cumbo — August 23
- Warren Gallemore — August 27

For W4VEC Test information, call or email David Macchiarolo, AJ4TF, (336) 420-9424, aj4tf@arrl.net

2021 HPARC OFFICERS

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Breakfast
every Saturday
 —
8:00 a.m.
 —
Biscuitville,
2709 S. Main St.