SEPTEMBER 2014

HPARC NEWSLETTER

High Point Amateur Radio Club

SPECIAL SERVICE CLUB

SEPTEMBER MEETING

Yes, the club meeting is on Labor Day. Rancho's assures us that the restaurant will be open for business. If you are not traveling for Labor Day, we would love to see you in attendance.

The September program will be on Kit Building. David Macchiarolo will tell about building the Elecraft K2 from a kit, but a lot of his presentation will relate to all kit building in general.

Last month's program was a presentation on circuit simulation also given by David Macchiarolo. (Gosh, we sure are working that guy hard. I hope he is getting sufficiently reimbursed.)

We hate to mention this, but it seems quite a few are behind in their dues. Please check with our treasurer, Warren Gallemore, if you are not sure if your membership dues have expired. Please help us in this matter. 'Nough said.

For those traveling this Labor Day, please be safe. We have all the confidence in the world in you. It's that other guy who doesn't know how to drive that we fear. Enjoy yourself, be safe and return in one piece. For those not traveling, we expect your attendance at the club meeting. Grab a friend and/or neighbor and bring them with you to fill the empty seats for those traveling. See you all there.

NASA'S MARS 2020 ROVER GAINS SEVEN NEW INSTRUMENTS FOR EXPLORATION

NASA plans to add advanced technology to its next Mars rover scheduled to launch in 2020. Reportedly it will carry tools that will allow it to explore the surface of the Red Planet in different ways than ever before.

The space agency says that the next rover will likely have seven research instruments. These include what is called a Mastcam-Z, a SuperCam, a Planetary Instrument for X-ray Lithochemistry and four others.

The Mastcam-Z is described as an advanced camera system with panoramic and stereoscopic imaging capability. It will be used to determine mineralogy of the Martian surface and assist with rover operations.

The Super Cam is an instrument that can provide imaging, chemical composition analysis, and mineralogy. The instrument will also be able to detect the presence of organic compounds in rocks from a distance.

Meantime, the Planetary Instrument for X-ray Lithochemistry is a fluorescence spectrometer that will also contain an imager with high resolution. It will be used to determine the fine scale elemental composition of Martian surface materials.

The new Mars 2020 rover is part the agency's Mars Exploration Program, which includes the Opportunity and Curiosity rovers, the Odyssey and Mars Reconnaissance Orbiter spacecraft and the soon to arrive MAVEN orbiter.

—Amateur Radio Newsline, Report 1930, Aug. 8, 2014

HPARC Meeting
September 1, 2014

Rancho's,
10463 North Main St,
Archdale, NC

Meal at 6:30 pm
Business meeting at 7:00 pm

ARRESTS MADE FOR FLYING SMALL DRONES OVER GEORGE WASHINGTON BRIDGE

Radio remote controlled drone aircraft flown by members of the general public are in the news again and not in a very positive light. This with word that New York City police recently arrested two men for operating a pair of small drone aircraft over the George Washington Bridge on Monday July 7th one of which nearly hit a police helicopter.

The New York Police's Aviation Unit helicopter was on patrol around 12:15 a.m. when it spotted one of the unmanned aircraft near the bridge. The drone continued to circle forcing the chopper to swerve to avoid it. Police said that one of the drones which were operated by remote control came within 800 feet of the police aircraft.

The Aviation Unit followed the drones north as they landed near Fort Tryon Part a few miles north of the bridge and overlooking the Hudson River. Police on the ground then arrested two men and charged them with reckless endangerment.

The Federal Aviation Administration has not yet set standards for certifying the safety of civilian drones. As previously reported that agency is currently looking into creating regulations for their use, but there is very strong opposition coming from many sectors that believe these devices are a menace to public safety.

—Amateur Radio Newsline,
Report 1930,
August 8, 2014

AMATEUR RADIO OPERATORS DELIGHTED

The nearly 300 Radio Amateurs who live in Poway, California, may erect antenna support structures of up to 65 feet with only a building permit and a courtesy notice to their neighbors. The Poway City Council unanimously approved the new ordinance on August 5. According to an August 6 Pomerado News report by Steve Dreyer, the Council "declined to adopt an alternative ordinance that would have required obtaining a special minor use permit" for structures between 35 and 65 feet.

Members of the Poway Amateur Radio Society (PARS) submitted a technical report to the City Council. The report concluded that antenna support structures of up to 65 feet would represent "reasonable accommodation" for Amateur Radio communication under PRB-1, due to the area's varied topography.

The subject of Poway's Amateur Radio antenna ordinance came up at the ARRL Board of Directors January 2014 meeting. ARRL General Counsel Chris Imlay, W3KD, reported that he'd been in contact with attorney Fred Hopengarten, K1VR, on behalf of Howard Groveman, W6HDG, of Poway, who sought to install a 59-foot crank-up antenna support structure. At the time Poway's ordinance set a maximum height of 35 feet and required a variance for anything taller, precluding Groveman's proposed antenna system.

According to the Pomerado account, the option that the city council ultimately approved had been tweaked a bit from the version council members had received earlier from city staffers. That option would have required notification only to abutting property owners. This was expanded to a 250-foot radius, Dreyer's report said, adding that applicants would be responsible for mailing the notices. The notices would alert neighbors that an antenna would be erected, but neighbors would have no legal standing to impede or block construction as long as the proposed structure met the requirements of the city's ordinances.

Installing an antenna support structure taller than 65 feet would require a new antenna permit and the approval of City Council. The Council asked for a report in 1 year regarding how the new procedures are working.

—The ARRL Letter,
August 14, 2014,
Rick Lindquist, WW1ME, Ed.

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 at 6:30 pm at a local restaurant announced in the newsletter. The business meeting starts around 7:00 pm 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.

FCC MANDATES TEXT-TO-911 SERVICE TO ALL U.S. WIRELESS CARRIERS

On Friday, July 8th the Federal Communications Commission voted to require all of the U.S.'s cell phone carriers and popular messaging applications to allow users to text 911 when in need of an emergency response.

The FCC's text-to-911 requirements will apply to mobile carriers and to interconnected text-messaging providers that enable consumers to send text messages to and from U.S. phone numbers. The rules will also apply to so-called over-the-top phone applications that support texting to and from phone numbers, but not to messaging applications that only support communications among users of social media and on-line games.

Since 2012, customers using AT&T, Verizon, Sprint and T-Mobile have been able use text-to-911 service following a voluntary agreement between the companies and the FCC. However the recent FCC decision will require smaller, regional carriers to follow suit by the end of the year.

—Amateur Radio Newsline,
Report 1931, Aug. 15, 2014

HAM RADIO PAYLOAD TO CIRCLE THE MOON

A lunar flyby with a Ham Radio payload transmitting JT65B mode on 145.990 MHz is expected to take place toward the end of this year, giving earthbound Radio Amateurs the opportunity to receive some otherworldly DX signals as the payload flies around the Moon.

China has announced plans to launch a lunar orbiter carrying a 14 kg battery-powered payload known as 4M-LXS, which was developed at LuxSpace. Signals from the Amateur Radio payload can be decoded using the free WJST software by Joe Taylor, K1JT.

The orbiter is one of the test models for Beijing's new lunar probe Chang'e-5, which will land on the moon, collect samples, and return to Earth. The launch, planned for 4th quarter 2014, is aimed at testing technologies that are vital for the success of the spacecraft. The orbiter will be launched into Lunar Transfer Orbit and then perform a lunar flyby before re-entering Earth's atmosphere after 9 days.

The orbiter, which arrived by air in Xichang, Sichuan, on Sunday, August 10, has been transported to the Xichang Satellite Launch Center.

—The ARRL Letter,
August 14, 2014,
Rick Lindquist, WW1ME,
Editor

LITHIUM CARBON BATTERIES MAY OFFER HIGHER ENERGY PORTABLE POWER SOURCE

Yet another new type of battery is on its way that holds promise for more power capacity in a small space. The journal known as Nature Scientific reports on a new chapter in the development of very high energy rechargeable batteries. This using a system called Insitu Induced Fluorination of a Carbon Nanotube Cathode are in development.

According to the report, the advantages of using carbon are that it is cost-effective, safe to use, and the energy output is five to eight times higher than lithium-ion batteries currently on the market. This new battery technology also performs better than two other future technologies being explored. These are lithium-sulfur batteries and lithium-air batteries.

The research team developed the new battery technology for energy storage using carbon nano-materials and a process called induced fluorination. They claim that among other things that the induced-fluorination technology could be used to produce cellphone batteries that would charge faster and last longer.

—Amateur Radio Newsline,
Report 1931,
August 15, 2014

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

HPARC SEPTEMBER CALENDAR

Aug 30-31 — Shelby Hamfest
1 — LABOR DAY
1 — HPARC Membership Meeting
6 — Virginia Beach, VA Hamfest
7 — Grandparent's Day
11 — PATRIOT DAY (in honor of those who lost their lives on Sept. 11, 2001)
13 — Bush Hill Heritage Festival, Archdale
13-15 — ARRL Sept VHF QSO Party
17 — Constitution Day/Citizenship Day
20-21 — ARRL 10-GHz Cumulative Contest
20 — Day In The Park, High Point, NC
22 — First Day of Fall
27 — Everybody's Day, Thomasville, NC
28 — Newsletter deadline

BIRTHDAYS

Jo Young — September 1
Dwight Sledge — September 7
Robert Kirchhoefer — September 27

2014 HPARC OFFICERS

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