



# RCA AMATEUR RADIO CLUB

DECEMBER, 2014

MONTHLY NEWSLETTER

INDIANAPOLIS, IN

*Merry Christmas and Happy Holidays*

THE NEXT MEETING OF THE RCA AMATEUR RADIO CLUB WILL BE  
TUESDAY, DEC 9th, 6:30 PM AT [G.T. SOUTH'S](#),  
5711 E. 71<sup>st</sup> STREET, INDIANAPOLIS, IN

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## RCA ARC NEWS

**SUMMARY OF THE NOVEMBER MEETING** – Thanks to all who attended the 11-Nov meeting! Repeater report: Operating nomally. Echolink still needs a couple tweeks. Our Club liability insurance is due. K9RU is investigating switching back to the ARRL insurance plan. No news was available from the recent repeater linking meeting. Some components and test equipment was received from Technicolor to be sold at the Indy Hamfest in July. Upcoming events which were mentioned include the Ft. Wayne hamfest, CQ WW Sweepstakes, and the 10M Contest.

### NEXT TEST AMATEUR RADIO LICENSE TEST SESSION --

**Time:** Saturday, December 13, 12:00 PM (Walk-ins allowed)  
**Location:** Salvation Army EDS Training Facility  
4020 Georgetown Rd.  
Indianapolis, IN 46254  
**Contact:** Jim Rinehart, 317 495-1933, [k9ru@arrl.net](mailto:k9ru@arrl.net)

**THE FT. WAYNE HAMFEST WAS SATURDAY, NOVEMBER 15<sup>TH</sup>** and provided a great place to meet old friends, shop the flea market, look at the new ham radio gear and we had a great time.

There were several dealers including R &L Electronics. Flex Radio and MFJ had displays. The flea market was good and had a lot of ham related stuff. If you are collecting the old radios like Drake, the prices are going up as more hams are collecting them.

This year the show area only occupied between one half to two thirds of the auditorium. They did use a dividing wall to block off the unused section auditorium which was great idea and made it look better.

The IRCC conducted the ARRL Wouff Hong ceremony which is a lot of fun if you've not done it before. The Ft Wayne Hamfest is one of the largest in the state and overall was a great show. – K9RU

## HAMFESTS, OPERATING EVENTS, VOLUNTEER OPPORTUNITIES

- Dec 5 -7 ARRL 160 Meter Contest <http://www.arrl.org/160-meter>
- Dec 6 -7 EME 50 – 1296MHz Contest <http://www.arrl.org/eme-contest>
- Dec 13-14 ARRL 10 Meter Contest <http://www.arrl.org/10-meter>
- Dec 21 Rookie Roundup CW <http://www.arrl.org/rookie-roundup>
- Jan 17-19 [Purdue Outing Club Adventure Race \[POCAR\]](#)
- Feb 14 Hendricks County Hamfest, Brownsburg, IN <http://www.hcars.org/>
- Mar 21 [Sam Costa Run \(Hamilton County\)](#)
- Mar 28 Columbus ARC Hamfest, Columbus, IN <http://carnet.net>
- Apr 18 [Carmel Marathon \(Hamilton County\)](#)

## MARS VOLUNTEERS REACH OUT TO AMATEUR COMMUNITY TO TEST INTEROPERABILITY

The Army and Air Force branches of the Military Auxiliary Radio System (MARS) merged their long-distance radio networks in late October for a 48-hour Department of Defense-sponsored contingency communications exercise. The MARS volunteers provided communication support in the wake of a simulated disruption to the nation's telecommunications infrastructure. In addition to passing message traffic for the Defense Department (DoD), the scenario for the October 27-28 exercise also required MARS stations to interface with the Department of Homeland Security Shared Resources -- or SHARES -- HF network. The plan also called for MARS members -- using their Amateur Radio call signs and operating on amateur frequencies -- to establish two-way communication with Amateur Radio Emergency Service (ARES) leadership or members in as many US counties as possible.

"During the exercise, MARS Headquarters tasked MARS members to reach out to ARES and Amateur Radio operators in as many counties across the US as possible, using amateur HF as well as VHF and UHF frequencies," explained Army MARS Program Manager, Paul English, WD8DBY. According to English, preliminary results showed that MARS-to-Amateur Radio contacts were made with approximately one-half of the more than 3000 US counties. Direct radio contacts with Amateur Radio operators or contacts made via an Amateur Radio net during the 48-hour exercise were counted as county contacts, he said.

Planning for this particular portion of the MARS exercise began in late September between English and ARRL Emergency Preparedness Manager Mike Corey, KI1U. English said the Defense Department and MARS intend to continue developing this relationship with the Amateur Radio community for future MARS exercises.

"This communications exercise [was] sponsored by the DoD to provide MARS operators the opportunity to develop and train interoperability procedures with their state/local ARES Emergency Coordinators and their Amateur Radio colleagues," English explained. Read [more](#). --ARRL Letter

## HOMELAND SECURITY'S 2014 NATIONAL EMERGENCY COMMUNICATIONS PLAN INCORPORATES AMATEUR RADIO

The US Department of Homeland Security's 2014 *National Emergency Communications Plan (NECP)* has incorporated Amateur Radio in its mix of media that could support and sustain communications in a disaster or emergency. The 2014 *NECP* is the first update since the original plan was released in 2008. The *NECP* is "the nation's over-arching strategic plan for enhancing emergency communications capabilities and interoperability nationwide," DHS said in announcing the updated plan on November 12.

"[A]mateur radio operators...can be important conduits for relaying information to response agencies and personnel when other forms of communications have failed or have been disrupted," the *NECP* states.

The *NECP* also describes changes that lie ahead for emergency communication systems, such as 9-1-1 systems. "In the future, Next Generation 9-1-1 will enhance the capabilities of current 9-1-1 networks, allowing the public to transmit pictures, videos, and text messages that will provide additional situational awareness to dispatchers and emergency responders," the *NECP* says.

The updated *NECP* stresses the importance of interoperability. It recommends that state, regional, and local administrations "assess their existing governance structures to ensure they are positioned to address current and emerging policy, technology, and planning developments." This effort, the *NECP* continues, could include the addition of representatives from the Amateur Radio community to statewide interoperability governing bodies and executive committees.

The *NECP* also recommends that federal, state, local, tribal, and territorial jurisdictions "identify domestic and international entities with potential roles in information sharing and the delivery of emergency communications during emergencies," such as Amateur Radio operators. "As appropriate,

these entities should be incorporated into training and exercise activities on a more regular basis," the NECP suggests.

The Federal Emergency Management Agency (FEMA) -- a part of the Department of Homeland Security -- is headed by ARRL member, W. Craig Fugate, KK4INZ. --ARRL Letter

## AMATEUR RADIO VOLUNTEERS TURN OUT EN MASSE TO SUPPORT CHICAGO MARATHON

A huge turnout of Amateur Radio volunteers supported communications October 12 for the 2014 [Bank of America Chicago Marathon](#) and its 2000 volunteer medical teams. For the first time this year, the Amateur Radio volunteers also shadowed the nine triage units that attended to runners within Grant Park, the marathon's finish line. The hams communicated with the ambulance service, if further medical support was needed. Some of the 120 radio amateurs taking part in the event ended up walking as many as 9 miles just within the park during their volunteer stints. Some 45,000 runners from every US state and more than 100 countries took part in the Chicago Marathon. Approximately 2.5 million onlookers also enjoyed the ideal weather.

This marked the sixth year that the ham radio community has supported this event. Operators came from four states and from cities as far away as Madison and Milwaukee, Wisconsin; Indianapolis, Indiana; Peoria, Illinois, and Pittsburgh, Pennsylvania. Twelve local ham radio clubs were represented.

The ham radio volunteers made use of six local repeaters and several simplex channels, starting off at 6:30 AM on race day -- to let organizers know when the medical teams were on site and to assure that medical services and supplies were in place and ready. Eight operators worked at the forward command tent, side by side with event officials, Chicago city services, and other agencies, to provide health-and-welfare traffic to the physician in charge. The ham radio volunteers also interfaced with the medical logistics teams and the ambulance service.

The 120 radio amateurs were among some 12,000 volunteers at the race event. [Rob Orr](#), K9RST, who serves as the volunteer lead, has already put out the call for volunteers at next year's marathon. -- [ARRL Illinois Section News via The ARES E-Letter](#)

## RILEY HOLLINGSWORTH TO NORTH CAROLINA CLUB: AMATEUR ENFORCEMENT "VERY MUCH ALIVE"

Former FCC Special Counsel for Enforcement Riley Hollingsworth, K4ZDH, [told the Forsyth Amateur Radio Club](#) that the FCC is still active in the Amateur Radio enforcement arena, even though it's not always apparent. He spoke to the Winston-Salem, North Carolina, club on November 10.

"You may not think so, but enforcement is very much alive," said Hollingsworth, who -- although retired -- still keeps up with goings on at the FCC and with the enforcement activities of his successor, FCC Special Counsel Laura Smith. "You just don't hear a lot about it, as you used to," he said, because ham radio news media report only the "big announcements" these days. During his tenure, Hollingsworth routinely released preliminary letters of inquiry and warning notices to radio amateurs suspected of breaking the rules. Now, he said, the FCC is using "the IRS model" of releasing information, partly in response to privacy considerations.

"You only see final actions [now]," he said. "So, you don't think a lot's being done, but it's all behind the scenes, and you don't know about it."

What is *not* helpful, he told the club members, is e-mailing or writing Laura Smith or the FCC proper to demand Commission attention to particular enforcement issues. Hollingsworth said the FCC has received "nasty e-mails to FCC personnel" concerning suspected ham radio rule breaking.

"I'm talking about horrible e-mails, threatening e-mails, threatening to the degree that the security office sometimes gets involved," he said. "We've got to stop this." Hiding behind the anonymity of the

Internet, he stressed, gives some within the FCC a bad impression of ham radio and could prove counterproductive.

In remarks now familiar to many who have heard him speak at Dayton Hamvention and elsewhere, Hollingsworth also warned his audience members against getting into on-the-air spats with rude or careless operators.

"Don't engage people, and don't humor the idiots," he said. "Stupidity can't be regulated, no matter how good the rules are. Just turn the big knob. Every rig has one."

Hollingsworth's complete talk appears as [Episode 174](#) of the online Amateur Radio television series [HamRadioNow](#), produced by Gary Pearce, KN4AQ. Read [more](#). — ARRL Letter, HamRadioNow, *Gary Pearce, KN4AQ*

## JAPANESE SATELLITE LAUNCH POSTPONED, SPINSAT DEPLOYED FROM ISS

The launch into deep space of two Amateur Radio satellites, [Shin'en 2](#) (Abyss 2) and [ARTSAT2: DESPATCH](#), has been postponed again until December 3. The two spacecraft will hitch a ride with the Japan Aerospace Exploration Agency ([JAXA](#)) [Hayabusa 2](#) asteroid mission, which had been scheduled to launch initially on November 29 and then on December 1. Shin'en 2 will identify as JG6YIG, while ARTSAT2:DESPATCH will use the call sign JQ1ZNN. The launch has been delayed twice due to unfavorable weather conditions.

Shin'en2 will carry a 0.1 W CW beacon on 437.505 MHz and telemetry on 437.385 MHz (0.8 W) using a [mode](#) similar to [WSJT](#). It also will carry a F1D digital store-and-forward transponder with an uplink of 145.942 MHz with 435.270 MHz (0.4 W) downlink, but *not* the Amateur Radio Mode J linear transponder announced earlier. The [data format](#) is posted on the Kagoshima University website.

A linear transponder had been part of the initial design, but, according to Hideo Kambayashi, JH3XCU, Japanese regulations would not allow it and that it would have taken a long time to negotiate a variance with regulatory authorities. "So, they gave up the use of the transponder," he said on the AMSAT-BB last month.

ARTSAT2:DESPATCH carries a 7 W CW transmitter on 437.325 MHz and will have onboard the first sculpture ever to be carried into deep space.

The two spacecraft will have an elliptical orbit around the Sun and travel to a deep space orbit between Venus and Mars. With an orbital inclination of nearly zero, the spacecraft should stay in Earth's equatorial plane. The distance from the Sun will be between approximately 6.5 million and 12 million miles.

Meanwhile, the US Naval Research Laboratory [SpinSat](#) satellite was successfully deployed from the International Space Station on November 28 using the Cyclops deployment system. SpinSat was carried to the ISS on September 21 via the [SpaceX Falcon 9](#) resupply vehicle.

The 125-pound SpinSat is a 22- inch diameter sphere carries a 2 W 9600 bps AX.25 packet radio store-and-forward system on 437.230 MHz. The satellite's primary mission is to demonstrate a new micro-thruster technology, from which SpinSat derives its name; its 12 electronically controlled solid-propellant thrusters will be fired in pairs to spin the spacecraft.

While in space, SpinSat will be used in a test to calibrate the [Space Surveillance Network](#). Lasers will be aimed at the spacecraft from Earth, and the reflected light measured to determine the where the satellite is passing overhead. SpinSat also will model the density of the atmosphere.

Equipped only with primary batteries and just 4.8 grams of fuel, the satellite's working phase is expected to last up to 6 months. — *ARRL Letter, AMSAT, AMSAT-UK, Southgate Amateur Radio News*

## ARRL SEEKS INPUT ON RECOMMENDED VHF-UHF-MICROWAVE CONTEST RULE CHANGES

The recently formed "Ad Hoc Subcommittee on VHF and Above Revitalization" -- created by the ARRL Board of Directors' Programs and Services Committee (PSC) -- is seeking member [input](#) by December 15 on updating various aspects of the League's VHF-UHF-Microwave and EME contest program. In the subcommittee's solicitation for input, Chairman Kermit Carlson, W9XA, said members can help the work of the committee "by providing additional insights and ideas for our consideration."

"Contest participation benefits both individual amateurs and the Amateur Radio Service as a whole," said Carlson, who is ARRL Central Division Vice Director. "Individual operators gain overall operating experience, increase their knowledge of band characteristics, test the results of changes in equipment, antennas and locations, and have incentive to add bands and modes to their station complement, all in the context of enjoyable, yet challenging, activities."

He said operating in contests also helps the Amateur Radio Service increase its pool of skilled operators and can demonstrate more intense use of our allocations, "some of which may be under threat from ever-expanding commercial and consumer services."

Subcommittee members have recommended one set of changes that would apply across all ARRL VHF-UHF-Microwave and EME contests. These include:

Removing the current prohibition on the use of amateur and non-amateur forms of assistance for all operator categories, with such use having no impact on entry category.

Removing the current prohibition on self-spotting for all operator categories.

Allowing single operators to transmit on more than one band at a time.

"Unlike most HF contests, operating skill and knowledge of propagation may not be enough to find stations to work. You can't just point your antenna to Europe or Asia at the right time and find a ready supply of potential contacts," Carlson explained. "The less-predictable nature of VHF+ propagation and the necessarily higher-gain, narrow-beamwidth antennas used make finding someone to work largely a matter of chance. Indeed, most microwave contacts would never occur at all without the use of real-time coordination."

Carlson said the League's current prohibitive stance toward assistance and self-spotting "is the most often-heard complaint about our VHF contest program." He said subcommittee members believe that removing those prohibitions "will foster greater participation and result in more contacts and a more positive experience for participants without impacting the existing challenge of actually completing contacts."

Similarly, he continued, the present restriction of Single-Operator stations to one transmitted signal at a time precludes such activities as calling CQ on one band while soliciting or completing contacts using digital modes on another. "Such restriction constrains the number of potential contacts among participants while yielding no apparent benefit," he said.

The [full announcement](#) details and explains the rationale behind the specific recommended rule changes.

"You can help us by considering the potential impact of each proposal and sharing any specific observations about it," Carlson said. "We're not tallying votes; rather, we want to be sure we have considered all foreseeable results of the proposed changes." Carlson said that *collective* input from user groups would be more helpful and expedient than receiving multiple versions of the same position from individual group members.

[Submit](#) comments prior to December 15, 2014. Only comments received through [vhf-input@arrl.org](mailto:vhf-input@arrl.org) will be assured of reaching all the members of the Subcommittee. –ARRL Letter

## ARRL ASKS FCC TO KEEP ISSUING PAPER LICENSE FOR RADIO AMATEURS

The ARRL is giving partial thumbs down to virtual licenses for radio amateurs. This in comments filed November 5th, where the League has recommended the FCC continue to provide paper license documents to amateur radio licensees who want them.

According to the ARRL Letter, the League's comments were in response to an FCC Public Notice in WT Docket 14-161. Among other issues it proposes the regulatory agency wants to cease the routine issuance of hard-copy license documents to all Wireless Service licensees but will permit the agency to continue the issuance of paper documents during the transition period to specific classes of licensees that specifically request them.

Under the FCC proposal once a license application is granted, the Universal Licensing System will generate an official electronic license but will no longer mail a paper copy license unless notified that the licensee wishes to receive such a document. Until new procedures are finalized, however, the Commission will continue to print and mail paper licenses, unless notified to stop.

The FCC claims that the proposed elimination of most paper documents is an action being taken under the Report on FCC Reform issued earlier this year. It says that to the extent permitted by Federal records retention requirements that licensing bureaus should eliminate paper copies of licenses.

You can read the entire twelve pages detailing proposed changes on the FCC website at [tinyurl.com/no-more-paper-license](http://tinyurl.com/no-more-paper-license). The ARRL's comments are at [tinyurl.com/arrl-paper-license-response](http://tinyurl.com/arrl-paper-license-response). -ARRL

## CALIFORNIA SCIENTIST-HAM ON THE AIR FROM ANTARCTICA'S MCMURDO STATION, ROSS ICE SHELF

Ham radio is not the primary reason that Ron Flick, K6REF, is in Antarctica, but it's proving to be an enjoyable diversion to his scientific activities at McMurdo Station and the Ross Ice Shelf. He's put a few hundred contacts in the log since arriving late last month from California. Flick, an oceanographer with the California Department of Parks and Recreation, Division of Boating and Waterways, and colleagues are conducting ice [vibration studies](#) on the Ross Ice Shelf, sponsored by Scripps Institution of Oceanography. McMurdo is home to KC4USV, but Flick's initial experience at the station -- once he was able to locate the key to unlock the door -- was less than optimal.

"The view is spectacular!" he enthused. "After I plugged the radio into power and the Yagi, I was able to hear a few stations on the lower end of 20, but was not able to contact anyone. The Yagi is fixed in an east-west orientation."

Flick subsequently learned that the Antarctic winds had shifted the Yagi's orientation. He'd been using 14.243 MHz -- the "usual" KC4USV frequency -- and 14.290 MHz, which he called "my personal favorite." He was also using 21.260 MHz, generally getting on the air around 2200 UTC for a few hours, depending upon his work schedule.

According to the Scripps Institution of Oceanography, Amateur Radio operations are part of the outreach and education efforts of the "Dynamic Response of the Ross Ice Shelf to Wave-Induced Vibrations" expedition.

Starting this week, Flick will be on the air as time and conditions permit as KC4/K6REF from Yesterday Camp near the International Date Line on the Ross Ice Shelf, running 100 W to dipole antennas. He hopes to be active for a few hours during the Antarctic afternoon and evening, starting at about 0300 UTC. He will be in the field until December 5.

The US Antarctic Program has a [webcam](#) at McMurdo Station. Read [more](#). -- *Thanks to Joe Garza, AB6RM, ARRL Letter*

## AMSAT INVITES IDEAS AND SUGGESTIONS FOR NEXT-GEN SATELLITES

AMSAT has invited the Amateur Satellite community to submit ideas and suggestions for the next generation of AMSAT satellites. AMSAT Vice President-Engineering Jerry Buxton, N0JY, announced the plan at the 2014 AMSAT Space Symposium in Baltimore. AMSAT asked that ideas be based on the CubeSat platform, as "this is the standard through which we will look for launches in the foreseeable future," its announcement said.

"The door is open for everyone to submit their ideas," Buxton said. "AMSAT Engineering has a long-term strategy, and this is the first step." He outlined the goals of that strategy:

- Advance Amateur Radio satellite technical and communications skills.
- Enhance international goodwill.
- Grow and sustain a skilled pool of Amateur Radio satellite engineers.
- Establish and maintain partnerships with educational institutions.
- Develop a means to use hardware common to all opportunities.

"Within the bounds of the type of satellite it takes to achieve any of the various orbit opportunities, let's consider in those plans the possibility of developing a platform that can suit any and all orbits," Buxton said in reference to the last goal.

Buxton pointed out that the purpose of the proposal is not just collecting suggestions. "Being an all-volunteer team," he said, "AMSAT needs your help in carrying out the idea." He asked that submissions be thorough. The deadline is May 30, 2015. Read [more](#). -- AMSAT News Service

## SHORTS

**READ ABOUT RCA'S INVOLVEMENT WITH THE INVENTION OF THE BLUE LED!** - [The work of this year's winners of the Nobel Prize in Physics](#) cannot be understated. As the Nobel Foundation said when they awarded the prize to Isamu Akasaki, Hiroshi Amano, and Shuji Nakamura - the three inventors for the blue light-emitting diode - "Incandescent light bulbs lit the 20th century; the 21<sup>st</sup> century will be lit by LED lamps."

But there's more to this story. "The background is kind of being swept under the rug," says Benjamin Gross, a research fellow at the Chemical Heritage Foundation in Philadelphia. "All three of these gentlemen deserve their prize, but there is a prehistory to the LED." In fact, almost two decades before the Japanese scientists had finished the work that would lead to their Nobel Prize, a young twenty-something materials researcher at RCA named Herbert Paul Maruska had already turned on an LED that glowed blue.

In the 1950s and 60s, RCA was a television giant. David Sarnoff, founder and CEO of the company, was pushing for a technological replacement for the bulky picture tube in color TVs. An LED TV was naturally seen as the next step. Read more: <http://spectrum.ieee.org/tech-talk/geek-life/history/rca-forgotten-work-on-the-blue-led> --IEEE Spectrum

**INTERNATIONAL SPACE STATION BRIEFLY "HAM-LESS" AFTER CREW MEMBERS RETURN TO EARTH** – The only two radio amateurs on the International Space Station (ISS) were among three crew members who returned to Earth on November 10, and another ham-astronaut won't arrive on board the ISS until later this month. An exciting 2015 appears to be in store.

NASA Flight Engineer Reid Wiseman, KF5LKT, and European Space Agency Astronaut Alexander Gerst, KF5ONO, joined Expedition 41 Commander and Russian Cosmonaut Max Suraev on the flight home this week. Traveling in a Soyuz space capsule, the trio touched down safely in Kazakhstan after some 6 months on the station. Wiseman and Gerst were active on Amateur Radio during their time in orbit, handling questions from curious Earthlings during Amateur Radio on the International Space Station ([ARISS](#)) educational contacts and, in Wiseman's case, his first ARRL Field Day in June -- an activity he [discussed](#) in a recent #askAstro YouTube post. --ARRL Letter

**NEW AND INEXPENSIVE RASPBERRY PI PICO COMPUTER** - Christened the model A+ has been released selling at only about \$20 US depending on where you buy it, this is a truly updated version that features among other things a 700 MHz Broadcom CPU with 256MB RAM; a 4 pole Stereo audio output, a composite video port and a full size HDMI connector. Also included are ports for connecting a CSI camera and Raspberry Pi screen display that are sold separately.

The Raspberry Pi A+ measures only 56 by 65mm with standard mounting holes already drilled into the PC board. A full article on this latest single board tiny computer at [tinyurl.com/raspberry-pi-model-a](http://tinyurl.com/raspberry-pi-model-a) (G7VFY) --Amateur Radio Newswire

**COMMEMORATING B36 CREW LOSS** - The Sun City Amateur Radio Club of El Paso Texas will be operating a special event station K5WPH on December 13th and 14th from 1600 to 0100 UTC. This to commemorate the crew of a B-36-D bomber that crashed in the near-by Franklin Mountains on December 11th 1953. If you make contact, please QSL with a self addressed stamped envelope to the Sun City Amateur Radio Club, B-36 Special Event, 3709 Wickham, El Paso, Texas, 79904. (KD6CUB) [Follow the link on this page for a look around the cockpit of a B-36 [http://flightaware.com/squawks/view/17\\_days/popular\\_new/45171/An\\_inside\\_look\\_at\\_the\\_cockpit\\_of\\_a\\_B\\_36](http://flightaware.com/squawks/view/17_days/popular_new/45171/An_inside_look_at_the_cockpit_of_a_B_36)]

**FCC EYES NEW RULES TO PROTECT CONSUMERS AS VOICE NETWORKS TRANSITION TO IP** - The Federal Communications Commission will likely consider new rules to ensure consumer choice and safety as the nation shifts from copper-based networks to Voice over Internet Protocol or VoIP transmission. This, when it meets on November 21st.

In making the announcement agency officials said that Chairman Thomas Wheeler will offer a set of proposals during the meeting designed to protect voice customers. This will likely include network-sharing rules and possibly requiring power backup systems on VoIP networks. Traditional copper wire based telephone networks supply power to connected telephones, but phones connected to fiber based networks require their own power source.

During natural disasters and other emergencies utility supplied power can be disabled. The FCC believes it to be important for VoIP customers to be able to make phone calls, FCC officials said. --(Published reports)

**NBC APPEARS POISED TO LAUNCH A TELEVISION SERIES BASED ON THE 2000 MOVIE "FREQUENCY"** - in which ham radio -- aided by some spectacular solar phenomena -- plays a central role in the sci-fi thriller.

According to a November 13 [article](#) in *The Hollywood Reporter*, NBC has already committed to the series. Jeremy Carver is writing the script for Warner Brothers Television and will be the series' executive producer. Toby Emmerich, who wrote the movie, will be a co-producer.

In the movie, a New York City fireman, Frank Sullivan, played by Dennis Quaid, re-connects via a bizarre ham radio link with his son, John, 30 years in the future. Jim Caviezel, now a star in the CBS drama, "Person of Interest," portrayed John Sullivan, an NYPD detective.

John Sullivan comes across his late father's 1960's-era Heathkit transceiver, through which -- with the help of a quirk of nature and some Hollywood magic -- he is able to communicate with his father through time and space. Read [more](#). -- *Thanks to John Bigley, N7UR, Nevada Amateur Radio News-wire*

**THANKS FOR READING. HAVE A SAFE AND HAPPY HOLIDAY SEASON!**

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