



The Feedline

Newsletter of the Cass County Amateur Radio Club, Logansport, IN



FCC unleashes BPL

Broadband over power lines (BPL) has been approved by the FCC, which opens the door for utility companies to start providing internet access by placing signals in the HF band on their power lines.

"We recognize that some radio operations in the bands being used for Access BPL, such as Amateur Radio, may occur at distances sufficiently close to power lines as to make harmful interference a possibility," conceded the FCC in its Report and Order.

The FCC declined to reduce the Part 15 radiated emissions limit for BPL,

maintaining that emissions are localized and at low levels precluding harmful interference.

But observations by others seem to dispute the low-interference claim. Early tests showed that BPL interference could be heard hundreds, even thousands of feet away.

The FCC said it had no evidence before it that BPL operation will significantly contribute to generally raising background noise levels. At the same time, it seemed to put some of the onus on Amateur Radio licensees to take steps to avoid power-line interference--and, by inference, BPL interference--in advance. This seems to be the first time that a licensed service



BPL system installed in Cottonwood, AZ, is being monitored by local ham club.

is responsible for dealing with an interference complaint from an unlicensed entity.

Where hams (and others) experience

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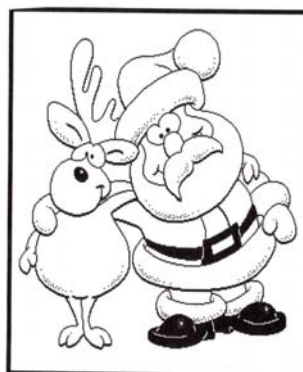
Election planned

Like Christmas, it happens every December: the annual election of officers.

Members will be voting for a President, Vice President, Secretary, Treasurer, and three Directors at Large.

Club members elect officers for annual terms. Other positions are appointed: Testing Coordinator, Repeater Trustee, Emergency Coordinator, and Feedline editor.

Plan to attend Saturday's meeting at 9:00 AM.



Happy Holidays from the FEEDLINE!

Full impact of BPL not fully known:

- FCC admits that "harmful interference may be possible."
- Hams will be expected to take steps to avoid BPL interference, the first time a licensed service is responsible for dealing with QRM from an unlicensed operation.

Long distance member is DX champ

If it's a DX location and it's on the air, chances are that John Norris, WA9HMN, has worked it. From his Brazil, IN, shack, John currently has logged and confirmed 336 countries, most of them many times over on different bands and modes.

His single band accomplishments well exceed most other HF enthusiasts totals for all bands together.

The numbers are impressive: 86 countries on 160 meters, 197 on 75/80 meters, 275 on 40, and 209

countries on 30. Adding to the totals are 333 countries on 20, 316 on 17, 327 on 15 meters, 300 on 12, and 302 countries on 10. Rounding out the list are the 41 countries logged on 6 meters.

John works virtually all modes besides SSB, including CW, PSK31, RTTY, FM, and has an SSTV contact.

The station setup is above average but not the extreme of other promi-



nent Dxers: An Icom 756 ProII, and a Mosley PRO 67B up 60 feet covering 40 to 10. The tower is loaded for 40, 75 and 160 meters and there is a dipole for 30, plus a 4-element quad for six meters. A Kenwood TL-922 amp is used when needed and conditions less favorable.

Only three countries remain to be worked: Scarborough Reef, Laccadive Island, and Kerguelen Island. But the ham populations there are pretty slim!

FCC unleashes BPL (continued)

(Continued from page 1)

RF noise, "such noise can often be avoided by carefully locating antennas; in many instances an antenna relocation of only a relatively short distance can resolve noise interference," the FCC claims.

BPL operators would be required to avoid certain bands, such as those used for life and safety communica-

FCC: "Such RF noise might be avoided by relocating their antennas. Place antennas as far as practical from power lines."

tions by aeronautical mobile or US Coast Guard stations. The FCC makes clear, however, that similar rules will not apply to the Amateur Service, saying Amateur Radio frequencies don't warrant special protection.

BPL providers are to try to resolve interference complaints but will not be required to shut down as other Part 15 unlicensed services would be required to do. "Shutting down would be a last resort," says the FCC.

(Some info via ARRL)

Heathkit: ham radio icon remembered

Heathkit was the name for the popular electronic kits once offered by the Heath Co. of Benton Harbor. The company started by selling electronic parts in the 1940's then began to offer electronic test equipment in kit form at reasonable prices.

The success of those kits prompted the Heath Co. to enter the

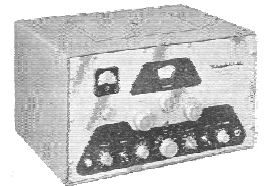
amateur radio market in the 1950's.

The creation of the Novice Class license in 1952 opened up Amateur Radio to more people. These folks needed a transmitter and receiver. Heath Co. saw the potential sales opportunity and the kits were born.

Customers received all the parts they needed, a schematic diagram,

and step-by-step instructions, at a much cheaper price.

The first transmitter, the AT1, sold for \$29.95 and was a huge success.



Many hams started with a DX100 transmitter, popular in the 1960's. Cost: \$189.50.

edited from World Radio

FCC clarifies unlicensed ops at field day

John Johnston, W3BE, of the FCC says there must be widespread misunderstanding about the FCC rules as they apply during Field Day. Contrary to the belief of some, the FCC rules are not suspended during this event!

Johnston says the FCC's rules apply every day. Sponsors of contests and other events can impose additional requirements but they cannot overrule the FCC rules.

Read Part 97, which applies to



Amateur Radio shows the only "loophole" allowing unlicensed operators is Sec. 97.115 (a). It authorizes an amateur station to transmit third party messages for

a third party, and Sec. 97.115(b) authorized the station's control operator to allow the third party to participate in stating the message under two

conditions:

- (1) the control operator is present at the control point and
- (2) the control operator is continuously monitoring and supervising the third party's participation.

Johnson says having a licensed ham "in the area" falls well short of the conditions set forth in the rules! Only a licensed operator may operate the amateur transmitter, field day or not.

NORAD to track Santa's journey!

NORAD, the acronym for North American Aerospace Defense Command, will once again keep Santa under close surveillance during his journey around the United States Christmas Eve.



has 47 installations strung across Canada's North, and Alaska. NORAD makes a point of checking the radar closely for indications of Santa Claus leaving the North

Pole on Christmas Eve.

The moment the radar shows that Santa has lifted off, the same satellites used in providing warning of possible missile launches aimed at North America are monitored. The satellites have infrared sensors, meaning they can see heat. Rudolph's nose gives off an infrared signature similar to a missile launch that can be spotted by the satellites with practically no problem.

The third system used is the Santa Cam. NORAD Santa Cams are high-tech high-speed digital cameras that are pre-positioned at many places around the world. NORAD only uses these cameras once a year - Christmas Eve. The cameras are

turned on about one hour before Santa enters a country then switched off after images of him and the Reindeer are captured. Santa Cams produce both video and still images.

The last system used is the NORAD jet fighter. Canadian NORAD fighter pilots, take off out of Newfoundland to intercept and welcome Santa to North America. Then

at numerous locations in Canada, other CF-18 fighter pilots escort Santa, while in the United States American NORAD fighter pilots in either the F-15 or F-16 get the thrill of flying with Santa and the famous Reindeer. About a dozen NORAD fighters in Canada and the United States are equipped with Santa Cams.

From the NORAD website

"NORAD uses four high-tech systems to track Santa - radar, satellites, Santa Cams and jet fighter aircraft."

Cass Co. Amateur Radio Club

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The Cass County Amateur Radio Club is an Indiana Not For Profit Corporation in continuous existence since 1953.

We're on the web!
www.culcom.net/~ccarcinc

Bits, bytes and beyond

- More than 145 FM stations around the country are programming Christmas music exclusively during the season.
- The total number of countries on the ARRL's DXCC list is 335. Some countries have been removed from the list over the years, like Czechoslovakia, South Sudan, German Democratic Republic, and Walvis Bay, so it's possible to have worked more than 335 countries total.
- According to Andy Borowitz, a school district in Georgia mandated last year that stickers be applied to the district's science text books saying the "law of

gravity is a theory, not a fact."

The district superintendent didn't want to eliminate the teaching of the law of gravity altogether, but merely to inform students that there may be equally plausible explanations for why things fall down.

But after coming under fire, the district might stop teaching the law entirely and may ban teaching the law of supply and demand, and Murphy's Law. The superintendent said that, "There's absolutely no proof that Murphy's Law is true, except maybe in Iraq."

(No one reading this actually believed it, did they? - ed)

Repeaters

Primary repeaters operate on 147.180 MHz, and 443.650 MHz. The VHF repeater is located at the Chase Park water tower with an open receiver. Additional receive sites are located at the Cass County EMA building and in Delphi. These are accessed with a 77 HZ sub-audible tone. The UHF repeater is located at the EMA building. The VHF transmitter also transmits a 77 Hz tone. Setting your receiver to *decode* will reduce unwanted signals. A second VHF repeater located at the Logansport Municipal Airport operates on 145.230 MHz. Autopatch is available on the main VHF repeater to members. Repeaters may be out of service from time to time for repairs or upgrades. The club station is W9VMW.

CCARC Meetings

Meetings are held the third Saturday of each month at 9:00 AM at the Cass County Emergency Management Agency building, 2 miles North of Logansport on SR17. Dues are \$15.00 per year. Immediate family members may join for an additional \$5.00.

Amateur License Tests

Test sessions for all classes of amateur radio licenses are offered the first Friday of each odd month at 6:30 PM at the Cass County EMA building, 2 miles North of Logansport on SR17. Pre-registration is not necessary.

Cass County Amateur Radio Club Officers

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