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The Voice of The Cary Amateur Radio Club N4NC

March 2001

Unlicensed Operation Noted In Wake County

LOUISBURG/CARY, NC: The FCC wrote Richard Phillip Cantwell on January 23, 2001, citing monitoring information before the Commission alleging that radio signals were transmitted from a vehicle registered to Cantwell "at various times in November and December 2000," FCC Special Counsel for Amateur Radio Enforcement Riley Hollingsworth wrote. "The apparent purpose of those signals was to interfere with repeater operations on 146.88 MHz in the Raleigh, North Carolina, area." Hollingsworth enclosed a photograph of the vehicle, which bears a logo of Consolidated Delivery and Logistics Inc. Hollingsworth said the company informed the FCC that the vehicle was registered to Cantwell as an independent contractor for the company. Hollingsworth cautioned Cantwell that such unlicensed operation would be a violation of federal law and could lead to a fine and seizure of transmitting equipment. Hollingsworth requested that if Cantwell is an FCC licensee he respond to the letter within 30 days with an explanation and list any call signs he holds. **FCC Amateur Radio Enforcement Log, Feb 15, 2001**

Your Electronic Guide to Radio Stations around the World Locate stations in your area. Find a station by Call Letters. This page is maintained by Theodric Young at WMBR-FM. It lists all known sites on the Internet that publish information about broadcast radio stations. <u>http://wmbr.mit.edu/stations/list.html</u>. (http://www.grove-ent.com/)

Repeater Coordination Updates

ROBBINSVILLE, NC [UPDATE]: The FCC wrote Amateur Extra licensee Terrence C. Williams, KR4RR, on January 25, 2001, to follow up on an earlier complaint that the licensee was operating an uncoordinated repeater on 145.110 MHz at Robbinsville, North Carolina, and that the repeater was causing interference to the coordinated WM4T repeater. FCC Special Counsel for Amateur Radio Enforcement Riley Hollingsworth said his office had reviewed the licensee's response of December 29, 2000, which furnished evidence that the repeater was coordinated by SouthEastern Repeater Association, and that it is operating within the coordination parameters. "Therefore, we have determined that no enforcement action is warranted in this matter," Hollingsworth concluded. FCC Amateur Radio Enforcement Log, Feb 15, 2001

For information on the SouthEastern Repeater Association, Inc., go to their website http://www.sera.org/

FREE SPECTRUM CHART! The United States Commerce Department's (NTIA) spectrum chart, dated March 1996, depicts the radio frequency spectrum allocations to radio services operated within the United States. This chart graphically partitions the radio frequency spectrum, extending from 9 kHz to 300 GHz, into over 450 frequency bands, and uses distinct colors to distinguish the allocations for the thirty different radio services. Copies of this chart can be viewed on line at http://www.ntia.doc.gov/osmhome/allochrt.html; and printed copies of this chart are available from the U.S. Government Printing Office (ph: 202 512 1800).(http://www.grove-ent.com/)

Minutes of Feb 22, 2001 Cary Amateur Radio Club

The meeting was called to order by the president, Mike, WA4KE. He welcomed everyone, and asked for introductions from all attendees, and a checkoff list was circulated.

Old Business:

Herb, W3HL, talked about the RARS Hamfest, and the number of tables to be ordered. It was decided to get 3 tables, 2 for CARC use, and one for PCRN. Herb will take pre-registration ticket money for the RARS Hamfest at the break. He will also distribute the Charlotte Hamfest tickets and parking passes, that were ordered last month, at the break.

Will, K4IWW, said that there was nothing new to report on the July Swapfest. There will be flyers for it to be taken to the Charlotte Hamfest. We talked about charging for flea market (only) visitors, and decided to continue last year's policy. We will also follow last year's procedure on selling a combination new club membership and admission ticket.

New Business:

There was some discussion of the CARC reflector, which is on the Internet. Better club publicity was discussed. We discussed having some signs to help visitors and new hams find our meeting place. Also, a request was made to put a better set of directions to the church on the CARC Web Page, instead of referring to the church's web page, which was also spoken of as difficult to follow. Lee, N4AJF, will try to follow up on the plan to get us into the "Cary News" Club Notes. Will, K4IWW, mentioned that the N4NC 'front door' is the CARC Internet Home Page. He has gotten requests for information through that.

Commitee Reports:

Treasurer Report: The Treasurer report was given by Ed, AB4S, as Susan, WA4AKB, was absent due to the weather. He reported that we have "about \$3000". Frank, W4FAL, sent a report to Ed, AB4S, about PCRN and SERA. Ed read the report, summarized below:

PCRN - The Chapel Hill 147.15 machine is ready to go back on the WUNC TV tower, waiting only for ability to get all parties available at the same time. The Brinkleyville (Roanoke Rapids) tower site has problems, so another site in the area is being looked at. The linking (backbone) project is coming along.

SERA - Gary Pierce, KN4AQ, is being groomed to replace Wayne Williams as Editor of the Repeater Journal. Wayne will continue other SERA activities. New SERA NC District Assistant Directors are Bob, K4HA, and Chuck, K4NYS. Some coordination is still going on, both for new machines, and re-coordination of some that are moving.

Announcement was made of some upcoming local hamfests - RARS, Durham, and Kinston.

Program: Ed, AB4S, and Herb, W3HL, presented an interesting demonstration of PSK-31, a method of digital communication using very narrow bandwidth, and requiring nothing special beyond the radio other than a PC with a sound card. It was very interesting and informative. Thanks to both of them.

CARC 2001 dues are due next month. Please be prepared.

The program for next month's meeting will be the annual CARC Auction. Bring your junque and your money. Lee H. Swanson, N4AJF, Secretary, CARC

Spring Weather Brings Stormy Weather, Be Prepared

Skywarn is an organization of severe weather spotters trained by the National Weather Service. Many Skywarn Spotters are Amateur radio operators who make use of portable and mobile radio to report severe weather conditions through their local Skywarn net to the National Weather Service.

Most National Weather offices also have toll free telephone numbers for severe weather reports. Anyone interested in Skywarn may attend training and participate as severe Weather spotters. Training programs are generally conducted in the spring of each year. These spotter training classes are taught by the National Weather Service Personal.

Skywarn is a very Important service to and for the National Weather Service. The Skywarn spotters located in different towns and communities with there eyes and ears and radios help give advance notice to help the Weather service to issue watches and warning early to save lives. http://www.centralcarolinaskywarn.net/



Skywarn Net Frequencies 146.88 MHz (Main) 145.39 MHz [82.5 PL] (Backup/911 Liaison) 444.825 MHz [146.2 PL] (Liaison to NW NC) 444.775 MHz [100 PL] (Administration/SAME Weather Alert)

Local Exam Schedules

Raleigh (W5YI) - Exams 1st Tuesday of even months at RARS meetings (except for April when exams are given at the RARS Hamfest and December, when the club holds it's Christmas Party). Tests also given at the CARY hamfest in July, and the JARS hamfest in November. Contact Charlie Brown, W4VFJ or call 919-556-9551. Email Charlie at w4vfj@aol.com Charlie's mailing address is 13033 Powell Rd., Wake Forest, NC 27587.

Smithfield (ARRL-VEC) - Triangle East ARA conducts exams on 3rd Saturday each month (except July, December). Walk-in testing - registration at 9:30 a.m. Write TEARA-VE, P.O. Box 840, Zebulon, NC. VE manager is Norman Young normany@mindspring.com and the VE Assistant Manger is Tom Lewis w4sis@mindspring.com

When coming to an examination session, be sure to bring your current license and a copy of same, original CSCE's (credits) and a copy of same, your Social Security Number (SSN) or FCC license ID number and a photo ID. If unlicensed, bring 2 ID's with one photo and your Social Security Number.

Please note that ARRL, W5YI, and W4VEC will be charging \$10.00 for exams and also \$10.00 for retakes beginning January 1, 2001.

Member Trivia?

Last month's edition of the Feedline had a photo taken a the Cary Mall. The photo showed three hams at a display. W3HL and AB4S were notated. Who was the third?

PSK 31 Information

PSK31 is a new digital mode:

Translated literally, it's an acronym for "Phase Shift Keying, 31 Baud". PSK31 is a form of modulation (or "mode") that offers a new and higher level of performance in conversational communications (keyboard-to-keyboard) that we "hams" (amateur radio operators) can enjoy. And it's been made instantly usable by all of us, due in part to the proliferation of the personal computer, and in part to the superb and generous efforts of some very talented ham/programmers.

In the short time that PSK31 has been in use, its popularity has grown by leaps and bounds. It may in time replace or at least greatly supplant RTTY and other modes for person-to-person communications. It's fun, easy, and well worth the effort to get set up, which is not very much at all.

It should come as no surprise that the PC is transforming the way we operate. Think about it, in your little PC you've got one of the most powerful tools for digital signal processing, spectrum analysis, database, logging, and much more.

- designed by Peter G3PLX
- that betters SLOWBPSK, an idea and implementation of Pawel SP9VRC
- based on the RTTY mode of operation,
- useful for live keyboard to keyboard QSO
- that works at 31.25 bauds,
- that uses varicode caracter coding what gives 50wpm,
- easy to use and monitor,
- that give very good copy under low Eb/No numbers and is thus suitable for
- QRP,
- that instead of using FSK or on/off keying uses BPSK or QPSK with a
- Viterbi decoder,
- that is available for free for many platforms, including Windows (c) with
- SoundBlaster type Soundcard,
- and uses advanced DSP and narrow band (31 Hz!!) techniques.

PSK31 is not a digital mode that

- will make Pactor, Pactor-2, Clover-II or Gtor obsolete,
- offers error free links,
- can be used to transmit files or acces mailboxes...

Proposed frequencies for PSK31 QSO

The plan for PSK31 activity has always been (since PSK31 started) to concentrate activity starting from the bottom edge of the IARU RTTY bandplan, expanding upwards as activity increased. The exception is in the 10mts band in order to give non full privileges ham to meet. It was defined as 150 Hz above it. Keep in mind that all you need is about 100 Hz as channel separation. These recommended frequencies are in accordance with the IARU bandplan for region 1. There may be differences for regions 2 and 3

- 1838.150
- 3580.150
- 7035.15 for region 1 and region 3, and 7080.15 for region 2 *
- 10142.150
- 14070.150
- 18100.150
- 21080.150 (although most activity can be found 10 kHz lower)
- 24920.150
- 28120.150

 \ast This is due to the fact that the 7 MHz band is much wider in region 2 (the Americas), and the IARU bandplan reflects this.

PSK31 Related Websites:

http://aintel.bi.ehu.es/psk31.html http://www.psk31.com/

Shortwave Information Corner

"The news may be good. The news may be bad. We shall tell you the truth," said announcer William Harlan Hale during the first VOA broadcast in German on February 24, 1942-just 79 days after the United States entered World War II. During the war, VOA operated under the Office of War Information but was moved to the Department of State when the war ended. VOA became part of the U.S. Information Agency (USIA) in 1953, when the Agency was established to carry out the overseas informational and cultural exchange programs of the United States Government. On October 1, 1999, USIA was merged into the U.S. State Department, and the VOA, along with WORLDNET Television and the Office of Cuba Broadcasting (Radio and TV Martí), became an independent U.S. Government entity under the authority of the Broadcasting Board of Governors.

http://www.voa.gov/

Moon Names

As people drive to work early in the morning, prior to the sun rising, the moon becomes a symbol a night ending and another day beginning. Sometimes, early morning repeater discussions lean toward the name of the full moons. The Native Americans named each moon with a name symbolic of the month, in order to keep track of the year.

January	Old Moon, Moon after Yule
February	Snow Moon, Hunger Moon, Wolf Moon
March	Sap Moon, Crow Moon, Lenten Moon
April	Grass Moon, Egg Moon
May	Planting Moon, Milk Moon
June	Rose Moon, Strawberry Moon, Flower Moon
July	Thunder Moon, Hay Moon
August	Green Corn Moon, Grain Moon
September	Harvest Moon
October	Hunters Moon
November	Frosty Moon, Beaver Moon
December	Before Yule Moon, Long Night Moon

The NEC and Amateur Radio

The NEC requires antenna systems to meet certain conditions if installed within a structure. These requirements can be inspected by an Electrical Inspector if noted during the construction phase of a structure.

Antenna receiving equipment must be constructed of hard-drawn copper, bronze, aluminum alloy, copper-clad steel, or other high-strength, corrosion-resistant material. This requirement applies to the antenna and lead-in conductors. Soft-drawn or medium-drawn copper can be employed for lead-in conductors where the maximum span between points of support is less than 35 ft (10.67 m).

NEC 1999, Clause 810-11

Next Month's Meeting Agenda

The time to pay the club dues occurs during the month of March and the yearly auction occurs in March. Yearly dues are \$9.00.