



The Indianapolis Radio Club Newsletter

Founded 1914

"The oldest continuously meeting Amateur Radio Club in the United States"

Reporting news from the Indianapolis Radio Club meeting held on Friday, October 14, 2005, and other items of possible interest to amateurs.

Indianapolis Radio Club 2005 Officers and Phone Numbers:

Here is a list of the names, calls, and phone numbers of the Indianapolis Radio Club officers, in case you need to make contact. A more complete list showing email addresses will be published next month.

- President: Chuck Crist (W9IH) H-787-6674
 - Vice Pres.: Dave Miller (K9RTT) O-921-4548
 - Sectretary: Mike Henney (KE9YA) H-388-9343
 - Treasurer: Tom Chance (K9XV) H-862-8483
 - Chief Op: Trevor Fulk (N9YM) C-496-2386
 - Director: Joe Labraico (K9OOA) H-255-3000
 - Director: Paul Bohrer (W9DUU) H-881-5288
 - Trustee: Don Hemenover (N9DOO) H-890-1235
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October Meeting Highlights:

The meeting was called to order at about 7:30pm at on the top floor of the Indianapolis Training Center, following a half-hour informal social gathering over coffee and cookies provided by the club and the ITC staff. Self-introductions were followed by the President's announcements:

Our 91st year – Get RadioActive!

Bring a youth or Ham friend to the next meeting and get radio active!

Please help Americans displaced by the recent hurricanes anyway you can.

Upcoming Hamfests: November 19th – 20th Ft. Wayne Hamfest

A committee is meeting to select the club Amateur of the Year and the recipient of the Technical Excellence Award for 2005. The results will be announced in future meetings.

Board Meeting:

An Executive Board meeting was held on October 14th at the ITC and called to order at 6:00pm by the club president, Chuck Crist. The significant items of business were reported to the club during the regular membership meeting.

Next Meeting:

The November club meeting will be held at the Indianapolis Training Center on Friday, November 11th, 2005 at 7:00PM. The program for the November meeting is "Software Defined Radio (SDR)" by Hank Wolfa (K9LZJ). For further details, contact Dave Miller (K9RTT) or visit the club website. The club web site can be viewed at www.indyradioclub.org. If you have not visited the Indianapolis Training Center before, the high-rise building is located at 2820 N. Meridian Street In Indianapolis (formerly the Sheraton Inn, and before that, Stouffer's Inn). The talkin frequency is the 146.67 repeater.

Club Elections To Occur at November IRC Meeting:

November 11th is meeting at which we have our club elections. The Nominating Committee consists of: Dave Miller (K9RTT), Tom Chance (K9XV), Ed Conder (N9IZN), and Dave Jarvis (N9KZJ). The nominating committee will present a slate of nominees for election, and nominations will then be opened for nominations from the membership present. The officers to be elected at the meeting include: President, Vice President, Secretary, Treasurer, Chief Operator, and two IRC Board of Directors members. Please see any one of the nominating committee members if you want to suggest the name of a qualified individual for consideration, or to volunteer your time to the club.

Ft. Wayne Hamfest Bus Trip:

The IRC is sponsoring a bus trip to and from the Ft. Wayne hamfest on Saturday, November 19th. The cost is \$20 per person, with a total of 44 seats available. See Tom Chance (K9XV) to reserve a seat, or sign up via the club web site at www.indyradioclub.org.

Program:

The program for the October club meeting was "Microwave Communications" presented by Dave Miller (K9RTT) and Jim Rinehart (K9RU). It became clear during the presentation of the program that these two amateurs are very familiar with the subject of microwaves. Both Dave and Jim are avid experimenters, and Dave also teaches a course in microwaves at Ivy Tech.

Dave started the program with a brief history of radio transmissions, beginning with the spark gap transmitter. Microwaves were present in those early transmissions because, as we all know, a spark gap transmitter emits almost all possible frequencies. However, transmitting significant power and amplifying received microwave signals was beyond the capabilities of vacuum tubes in the 1920s and 1930s. Amplification of microwave signal power had to await the development of the klystron tube and the megatron, both of which were developed in connection with the development of radar in WW II. These tubes could provide signal amplification in the 5-6GHz band and could also generate significant levels output power. This extended practical radio communications into the UHF band (440-3GHz), the SHF band ("C" satellite band: 10GHz), and beyond (100-300GHz). An early observation about microwaves has been extended to a practical product found in many homes: the microwave oven. Many such ovens produce 500 to 1000 watts of output in the 2GHz band and are used for cooking rather than radio communication.

Low levels of microwave power can be generated using the Gunnplexer—a microwave-emitting silicon diode named after its discoverer, Dr. Gunn. The milliwatt output of such a device, combined with a highgain dish or horn antenna can be most easily frequency deviated for transmission and subsequently detected, leading to practical FM transmitters and receivers. Such devices are widely in commercial and hobby use today.

This presentation by Dave was followed by a demonstration of a full duplex microwave station by Dave and Jim using two stations separated by 30 or so feet. Each club member was given the opportunity to use the station to carry on a microwave conversation with Dave or Jim at the other end and to earn an instant official club QSL card confirming the contact.

Thanks to Dave (K9RTT) and Jim (K9RU) for presenting this interesting program and demonstration to the club. Several detailed handouts were available during the meeting, and copies may still be available by contacting Dave or Jim.

Monthly Club Traveling Awards Presented:

The traveling awards for the month were presented by IRC President Chuck Crist, along with hand crafted trophies depicting the nature of the award. Each of the trophies were created at the skillful hands of our first-rate club artisan, Chuck Crist.

The awards presented this month were:

QRP Contact – Steve Wendt (KB9RDS) for his contact with C6ANX on 17m using 5 watts.

Digital – Bob Osterhouse (W9PSE) for a 20m PSK contact with YV4AAX (S. America)

DX – Kenneth Brandy (KC9GLQ) for a 20m SSB contact with Moscow

Mobile – Evan Krall (KC9IAE) for a mobile contact using the 146.70MHz repeater

Mentor – Jerry Allison, (NZ9J), for his Morse code work with the recent ham radio class.

Homebrew – was not awarded

Health and Welfare:

The club has received notice from the post office through a returned newsletter that IRC member Max Kennedy (W9EHY) is a Silent Key. Max apparently became an SK in November, 2004, but the club did not receive notice of that fact until October, 2005. Max was an ARRL member and a member of the IRC for many years. He was also very active on the Indiana Traffic Net (SSB) and CW net for many years. We wish to extend our belated condolences to all family and friends of Max Kennedy (W9EHY), now SK.

Please send any known health and welfare updates to IRC Vice President Mike Henney (KE9YA) at his email address of mickyh@peoplepc.com.

Membership Drive:

The club Membership Drive is continuing. It covers the period from now through November 3rd, 2005. Any IRC member that recruits 3 new IRC Regular Members will receive 1 Free Meal Pass for the 2005 December Annual Dinner meeting. A New Regular Member is defined as someone who joins the IRC and who has not been an IRCmember since January of 2002. [Extending a membership to include 'new' family members does not count. Sorry! --Ed.]

Club Station Report:

Our club station Chief Operator is Trevor Fulk (N9YM), who maintains the club station. The equipment is located on the first floor of the Indianapolis Training Center, while the antennas are located on the roof of the building. The station transceiver is a Yeasu HF unit, and the antenna is a directional beam for 10-15-20m that is mounted on a small tower and rotor on the building roof. That makes its height about 150 feet above ground. Tours of the club station are available following most Indianapolis Radio Club meetings. The club station call is W9JP.

Club Webmaster:

Brian Stone (KC9GSA) is the manager of our Indianapolis Radio Club web site (www.indyradioclub.org). If you have content ideas or suggestions for the site, please contact Brian using his email address of labradog@speakeasy.net.

Homebrew Award Selection Criteria:

Club Vice-President Dave Miller (K9RTT) reminds us that future Homebrew entries will be judged on the basis of the quality of construction and soldering, the schematic diagram, operating instructions, and for antennas, the antenna radiation pattern and SWR chart, if applicable.

Door Prizes:

A number of fabulous door prizes are collected by the club prize-master, Bob Osterhous (W9PSE). These are usually distributed to randomly selected members of the IRC who are in attendance. You can learn more about the potential benefits of the door prize distribution process by attending the next IRC meeting in November! Prize winners this month were: A microwave (5.8GHz) remote extension phone, won by Tom Price(WB9UNG); headphones, won by Jerry Allison (NZ9J) and Merle Young (KB9PDM); and a small instrument case, won by Roland Wilham (WD9JGD). [Apologies to the winners if this information is not quite correct. The prizes are awarded to quickly that correct calls or names could not be verified. ED.] Thanks to Bob Osterhous for doing such a great job locating interesting prizes for this exciting portion of the club meetings.

Announcements:

Are you interested in volunteering your amateur radio operating skills? Michael Palmer (N9FEB) maintains a list of amateur activities in the Indianapolis area. For information about such activities, please visit www.indyhams.org for details and who to contact.

Any Additional News Items:

If you have news that should be included in the next issue of club newsletter, please pass it on to your club newsletter editor, Tom Price (WB9UNG), at the email address pricetr@comcast.net. **HELP Wanted:** The "Ama Chewer" newsletter logotype contains date information that is out of date. If you can help with this minor update, please contact the newsletter editor at pricetr@comcast.net