



PEAKS & NULLS



MORRIS RADIO CLUB

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CONSTITUTION CHANGES

At the June meeting a vote was taken to change the wording in Article IV Section 5 of the Constitution regarding the distribution of funds upon dissolution of the club. The change was required to put the Constitution in line with IRS requirements. An additional change will be discussed and voted on at the September meeting.

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FALL IS ANTENNA TIME, BUT WHAT CONNECTOR?

Fall is the perfect time to get those antennas ready for the winter contest season and the feed line is a big part. A lot of people pay close attention to the coax they use but what connector is best for their application? Here's a look at the three most popular connectors for ham use.

UHF (PL-259, SO-239)

The UHF connector was developed before World War II as a video connector used in radar applications. It was designed as a "Shielded Banana Plug". Later it was discovered that it could be used for RF Frequencies. The nomenclatures PL-259 (PL = Plug) and SO-239 (SO = Socket) are the old Army Signal Corps numbers. The Silver Plated version with Teflon dielectric can be used up to 450 MHz but the other versions are only good up to 150 MHz because the impedance of the connector drops to 30 or 40 ohms. This brings up the question of why they are called UHF connectors when they are usually good only to the VHF region. Again we have to go back prior to WWII when UHF was considered any frequency above 30 MHz. The UHF connector is a very robust connector. You can step on it without damage. The PL-259 can handle power levels up to 1 KW and it will mate with the larger coax cables. Using adapters (UG-175/U for RG58/U sizes and UG-176/U for RG-59/U) it can be used with the smaller sizes. This is the antenna connector most commonly found on Amateur rigs.

Type N Connector

The Type N (Navy) connector was designed during WWII and usable to 4 GHz. Improvements in the 1960's and later allowed operation to first 12 GHz and then to 18 GHz. Although it is called a Navy connector it may be named after its inventor Paul Neill of Bell Labs (it may have been Bell Labs in Whippany because Mr. Neill died in Morristown). It can handle 5 KW at 20 MHz and 500 W at 2 GHz. Be careful if you pick up any of these at a flea market as they come in both 50 and 75 ohm versions. The shell is the same but the center pin is much smaller in the 75 ohm version. You can destroy the female 75 ohm socket by mating it with a 50 ohm male. Although some rigs now have N connectors for use at UHF you may have use adapters to

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UPCOMING MEETINGS

September 21, 2015 Regular business meeting

October 19, 2015 Regular business meeting

November 16, 2015 Regular business meeting

December 21, 2015 Holiday Get-Together

SELECTED UPCOMING CONTESTS

CQ Worldwide DX Contest, RTTY	0000Z, Sep 26 to 2400Z, Sep 27
TARA PSK Rumble Contest	0000Z-2400Z, Oct 3
RSGB 21/28 MHz Contest	0700Z-1900Z, Oct 4
10-10 Int. 10-10 Day Sprint	0001Z-2359Z, Oct 10
Oceania DX Contest, CW	0800Z, Oct 10 to 0800Z, Oct 11
RSGB 80m Club Sprint, CW	1900Z-2000Z, Oct 14
JARTS WW RTTY Contest	0000Z, Oct 17 to 2400Z, Oct 18
10-10 Int. Fall Contest, CW	0001Z, Oct 17 to 2359Z, Oct 18
ARRL School Club Roundup	1300Z, Oct 19 to 2359Z, Oct 23
CQ Worldwide DX Contest, SSB	0000Z, Oct 24 to 2400Z, Oct 25
RSGB 80m Club Sprint, SSB	1900Z-2000Z, Oct 29



PREDICTED SUNSPOT NUMBER AND RADIO FLUX FOR OCTOBER 2015

SUNSPOT NUMBER

PREDICTED	HIGH	LOW
57.0	67.0	47.0

10.7 RADIO FLUX

PREDICTED	HIGH	LOW
111.0	120.0	102.0

AUGUST MEETING MINUTES

There was no August meeting. A Get-Together was held at Atlanta Bread in Morris Plains in place of the meeting. 10 members attended.

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mate the N to a SO-239. These adapters are readily available.

BNC (Bayonet Navy Connector)

Widely used on QRP Rigs, Handhelds and rig interconnecting cables the BNC (Also known as the Bayonet Neill-Concelman) was also invented during WWII by Paul Neill of Bell Labs along with Carl Concelman (Who invented the C Connector) of Amphenol. It has wide use up to 2 GHz. Above that the slots in the coupling barrel can radiate energy. To counter this and ensure repeatable connections to 12 GHz, Neill and Concelman came up with the TNC (Threaded Navy Connector or Threaded Neill-Concelman) which is a threaded version of the BNC. These also come in both 50 and 75 ohm versions but can be mated to each other without damage. Because of their size they only work with the smaller (RG58) size cable. There is no power rating for BNC connectors. There is a maximum voltage rating of 500 V. With 1:1 SWR on a 50-ohm line, that would imply a 5-kW rating.

Of course sometimes you have no choice. Someone else has made the decision for you. Your antenna may come with a connector already installed that you have to mate to but, if you're making your own phasing harness you may be able to pick a connector with better characteristics for your application. Just remember if it is outside waterproof it. On Field Day when we got all that rain overnight, regular electrical tape worked just fine. For long term, wrap with electrical tape and then cover it with coax sealant tape like Coax-Seal. Having the electrical tape underneath makes for easier seal removal if you ever have to open the connection.

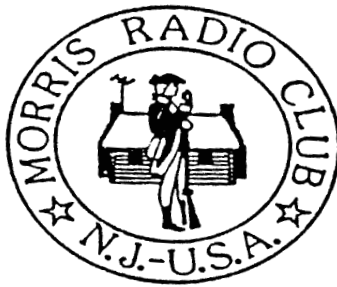


MORRIS RADIO CLUB

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THE MORRIS RADIO CLUB IS AN ORGANIZATION OF AMATEUR RADIO OPERATORS WHICH HAS BEEN IN EXISTENCE FOR OVER SIXTY FIVE YEARS. AS A HOBBY, AMATEUR RADIO SERVES AS A PUBLIC RESOURCE FOR COMMUNICATIONS AS WELL AS AN EDUCATIONAL EXPERIENCE.

ALTHOUGH MANY WHO BECOME INTERESTED IN AMATEUR RADIO ARE INVOLVED IN AN ELECTRONICS RELATED FIELD, THE HOBBY APPEALS TO A WIDE VARIETY OF INDIVIDUALS.

THE MEMBERSHIP OF THE MORRIS RADIO CLUB IS A DIVERSE GROUP MADE UP OF MEDICAL, BUSINESS, EDUCATION, AND LAW ENFORCEMENT PROFESSIONALS, AMONG OTHERS, WHOSE COMMON INTERESTS ARE COMMUNICATION, EDUCATION, AND PUBLIC SERVICE.

HAMFEST CALENDAR

Ocean-Monmouth Tailgate Hamfest

09/26/2015

Location: Infoage Learning Center, Project Diana Site
2300 Marconi Road
Wall Township, NJ

Website: <http://www.n2mo.org>

BARA Fall Hamfest

10/10/2015

Location: Township of Washington Junior/Senior High School
701 Ridgewood Road
Township of Washington, NJ 07676

Website: <http://www.bara.org>