



Mailing Address: P. O. Box 976, Nokomis, FL 34274

W4AC Repeaters: 444.100 MHz (DMR) & 146.805 MHz (-) (PL100Analog)

Incorporated 1984

<http://www.tamamiarc.org>

June, 2019

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LIFE IS SIMPLE



Next Month Report on



President's message.....KB1HIP

The May monthly meeting was well-attended with a terrific technical presentation on Global Positioning System (GPS) by our speaker Steve Phillips, WA1ZKN. Thanks to Steve we now have a more fundamental understanding of how GPS has transformed our everyday lives.

As I mentioned in last month's message, we obtained approval from the Coast Guard Auxiliary to set up our 2019 ARRL Field Day at their facility. The event will take place on June 24 and 25. At our last monthly meeting, a signup sheet was passed around and several members volunteered to set up and take down the tents, antennas and equipment. Although many signed up to operate the radios, we will need additional operators to man the 24 hour schedule. We will continue the planning at our next club meeting on June 12.

Again this year we decided to cancel the monthly meetings for July and August and we will resume the meetings starting in September.

I am leaving for New Hampshire at the end of June for a three month snowbird vacation and so Gary Hagens, K6OC, our Vice President, will chair the September meeting.

I hope everyone has an enjoyable June and the rest of the summer.

VY 73 to All de Andy-KB1HIP



SRQ ARES Orientation Training

In advance of hurricane season the newly formed SRQARES group has scheduled orientation training for its members during the first week in June. This training is **open to any amateur radio operator** that would like to learn about EmComm in Sarasota County.

All SRQ ARES members are asked to attend one of the following training sessions in Sarasota:

- Tuesday, June 4, 1830 hrs local time at the ARC on Cantu Ct.
- Thursday, June 6, 1830 hrs local time at the ARC on Cantu Ct.
- Saturday, June 8, 0900 hrs local time at the ARC on Cantu Ct.

The Orientation training takes approximately 90 minutes. Participants are asked to download and print the following course handouts to be used during the training:

<https://www.dropbox.com/sh/q4nn9hfswm00lis/AAAGeZWpTQEM1ChHiWRyj4xa?dl=0>

Please register in advance for this training by contacting Paul Nienaber, KN4BAR at 941-468-3843 or by email to paul9aber@gmail.com.



Next meeting June 12, 2019

Our meeting will start at **7:00 PM** on Wednesday, **12 June, 2019** at the Coast Guard Auxiliary Training Center, 1200 South Harbor Drive.

TAMIAMI AMATEUR RADIO CLUB *Minutes of the 05/08/19 Meeting*

The meeting was called to order at 7:00 PM by President Durette, KB1HIP. The pledge to the flag followed. Introductions were made by name and call sign.

MINUTES: The minutes of the April 10, 2019 meeting as published in the Communicator, were accepted by motion made, seconded and approved.

CORRESPONDENCE: Two notes were received from the Red Cross thanking the Club for listening to the Nurses Assistant Training Program presentation during the April 10 meeting.

TREASURER'S REPORT: Treasurer Frank Wroblewski, W2XYZ, reported an ending balance as of April 30, 2019 of \$4,506.80. The Treasurer's report was approved.

SUNSHINE: N/A

VE TESTING: Steve Phillips, WA1ZKN: We had a very busy and successful session in April. We had 13 candidates for examination. We had 10 graduates from the TARC General prep class, and all passed the General exam. We had two candidates for the Technician exam and both passed. We had one take the Extra exam, and he passed. Thus all examinees had a 100% pass rate. I would like to commend Paul Nienaber, KN4BAR, Chet Fennel, KG4IYS, and Andy Durette, KBIHIP, on a stellar job of preparing their students for the General exam.

LIAISON TO QCWA: The QCWA end-of-season meeting was held at Denny's Restaurant on Bee Ridge Road, Sarasota, FL at 11:00 AM on Monday, May 6. There were 32 members, spouses and guests present. The program was "European Vacations."

REPEATER / TECHNICAL: Frank Wroblewski, W2XYZ, reported that both the digital and analog repeaters were working well. The frequency for the digital operations is 444.10 MHz, talk group TAC 311. The Club 2 meter analog repeater frequency is 146.805 MHz (-) PL 100. The digital net opens Tuesday at 7:30 PM. The 2 meter net opens Thursday at 7:30 PM. The 10 meter net is on frequency 28.450 MHz, upper side band, and begins immediately after the conclusion of the 2 meter net. Steve Phillips, WA1ZKN, is net control. The 10 meter frequency was chosen so Novice/Technician licensees could participate. About 10 to 12 members on average participate in these nets every month. Paul Nienaber, KN4BAR, noted that the Manatee Amateur Radio Club, Inc. (MARCI), also runs a 10 Meter net every Thursday at 8 PM. The frequency is 28.495 MHz. Steve, W4OEP, is net control.

MEMBERSHIP: Chet Fennel, KG4IYS, reported that there are 78 Regular members, 29 First Year members, 7 Life and 1 Comp. member, for a total of 115.

OLD BUSINESS: 1. The second tent for field operations, now known as tent number 2, was successfully deployed at the Shark Tooth Festival. It is being stored at Paul Nienaber's house until needed. Using two tents created an open and welcoming space for festival goers to see ham radio in operation.

2. Status of Technician and General Licensing courses: Andy Durette, KBIHIP, advised that the county school board would be running hurricane shelters in the county schools. Principals and custodians would be the primary information contacts. The club discussed providing amateur radio licensing classes to principals and custodians so they could communicate effectively with the EOC during disasters. Paul Nienaber advised that classes for Technician and/or General class licensees could be scheduled for the fall.

3. Amateur Radio Emergency Support program for Sarasota, FL.: Paul Nienaber, KN4BAR, reports that the ARES group is coming together and has published an operating plan and a training course. Volunteers are still needed and are welcomed. See the TARC web site, tamiamiarc.org for a link to ARES information.

4. Shark Tooth Festival: Andy Durette, KB1HIP, advised that the set up and operation of the stations went smoothly. The two TARC tents were well positioned with tent openings facing the fairway, thus allowing the general public to easily see ham radio in operation. The station looked neat and professional. Club members made 240 HF, 50 CW, and 140 FT8 contacts, for a total of 430 US and foreign contacts.

We had the usual problem with the sun bleaching out the FT8 computer screen. The cardboard shield (ham ingenuity) helped, but this challenge is not yet resolved.

Continued >>>

Minutes, con't

5. The Florida QSO party was held Saturday, April 27, starting at 10:00 AM and ran 10 hours. On Sunday, April 28, the event started at 8:00 AM and concluded 10 hours later. The QSO party was held at Al Culbert's house and used his antennas. Club station operators made 569 contacts last year 1017 contacts this year. This improvement is attributable to good teamwork, sound operating practices and quality antennas.

6. Groups.io program: 33 club members have signed up. This flexible net has the capability of becoming the primary Club communication between Club members. Members can gain access to the Groups.io site and create their own profile. See the TARC web page, tamiamiarc.org, for sign up information.

7. President Durette noted that \$17.00 in donations for the Special Olympics was included in various QSL cards sent to TARC after the Shark's Tooth Festival. A club member added \$3.00 more to make it \$20.00 and the club, by motion made, seconded and approved, authorized the donation of \$80.00 more to make a \$100.00 donation to the Special Olympics.

NEW BUSINESS: Summer Field Day: This event will be held at the US Coast Guard Auxiliary station, Venice, FL, on June 22nd thru to June 23rd. Operating hours will be from 2:00 PM Saturday to 2:00 PM Sunday. We will be working stations on the 160, 80, 40, 20, 15 and 10 meter bands, as well as all bands 50 MHz and above.

This exercise is designed to help amateur radio operators learn to operate in abnormal situations in less than optimal conditions. Members discussed scheduling an event food truck for a donut sampling experience under field conditions. Contact Andy Durette, KB1HIP, to volunteer.

ADJOURNMENT: The meeting adjourned at 7:36 PM. There were 30 members and visitors present. The 50-50 winner was Fred Zimmerman, K9WRH, who won \$23.00.

Program: How GPS works, by Steve Phillips, KA1ZKN.

DX Jack, W4JS, shows one of his many certificates of his accomplishments working DX. This one requires someone fluent in Russian to decipher what it's all about. Jack explains:

From 03 through 09 May, some 135 stations in Russia, Ukraine, Bulgaria and Serbia operated Special Event stations commemorating the 74th Anniversary of the end of the European sector of World War II. The Russian stations used the RP74 prefix and the stations in the other countries used their usual country letters plus 74, e.g., LZ74, as their prefix. While the "rules page" showed current spots of the various SE stations and provided tables showing the status of stations working these SE stations in English, all other info on those pages was in Russian. Putting my call sign into one box took me to a page where all my Q's were tabulated. Near the end of the operation a new line in red appeared and when I clicked on it a PDF version of my certificate showed up, ready to be printed.



THE COMMUNICATOR is a publication of the Tamiami Amateur Radio Club (TARC). It is published monthly; except during the summer months, the June/July and August/September issues will be combined. The Communicator is made available to all members via e-mail, and is available for viewing on the club's web site - www.tamiamiarc.org.

Editor - San Yoder, K3SY, who acknowledges and thanks these contributing writers: Bob Marchese, K1NOK

Andy Durette, KB1HIP (Pres.) -- Frank Wroblewski, W2XYZ (Treas.) -- Steve Phillips, WA1ZKN, (Dir.)

Jim Shortill, KJ4NDO (Sec'ty) -- Paul Nienaber, KN4BAR, (PIO, Dir., & Webmaster) -- Jack Sproat, W4JS.

Articles of general interest to club members are solicited and welcomed. Please submit photos and/or copy (preferably in Word) to: k3sy@arrl.org. 73, San





DX Jack's page....

..... *By Jack Sproat, W4JS*

MAJOR CURRENT/UPCOMING DX ACTIVITY & PROPAGATION HIGHLIGHTS

CURRENT and/or SCHEDULED DX ACTIVITY										
COUNTRY – CALL SIGN	ACTIVITY PERIOD	BEARING	HF BANDS and OPENING TIMES (UTC)							
			80	40	30	20	17	15	12	10
Eritrea – E31A by 6-op team, all modes	Now to 03 June	60	NO	01-03	23-05	20-00	14-20	NO	NO	NO
Reunion Is – FR/F4HPX, ++, FT8	Now to 05 June	91	--	02-04	--	1200	--	NO	--	--
Dodecanese – SV5/DL3DRN, CW/SB/RTTY	Now to 14 June	49	NO	00-04	23-05	12-00	12-23	NO	NO	NO
Samoa – 5W0H by 5-op team, **	01 to 10 June	257	07-09	04-12	03-13	00-10	17-05	18-04	01-03	NO
Vietnam – XV9DXB by HB9DXB, focus 20	01 to 15 June	348	NO	NO	NO	1200	23-24	NO	NO	NO
Sao Tome – S9A by 7-op team, all modes	06 to 18 June	90	01-05	23-03	21-01	12-00	12-22	16-21	NO	NO
Ghana – 9G5GS by IZ4YGS, mainly FT8	07 June – 02 July	88	01-05	23-07	22-07	19-23	15-21	19-21	NO	NO
Svalbard – JW/EA3NT & JW/OJ0Y, all mod	12 to 16 June	13	NO	02-06	01-06	11-02	NO	NO	NO	NO
Sint Maarten – PJ8SK by JI1DFO, FT8	13 to 15 June	114	--	20-14	00-24	11-05	15-02	--	--	--
St. Martin – FS/AG5CR by JI1DFO, FT8	15 to 18 June	113	--	20-14	00-24	11-05	15-02	--	--	--
Micronesia – V6K by JA1XGI, CW/Digital	17 to 24 June	293	NO	08-11	06-12	04-05	20-03	01-02	NO	NO
Saba & St Eustatius – PJ5/W9DR, 6m Op	25 June – 02 July	114	Look	for	Six	Meter	Es	Prop-	aga-	tion

Prepared 29 May based on 22 May! *The Weekly DX*, <https://dx-world.net/> and <http://www.ng3k.com>

Notes: Times shown are for S-5 or better signals and 60% or better opening probability; ??? = Call Sign not yet known; ++ = Mostly SSB; ** = Mostly CW; NO = No Opening forecast. Long Path bearings and opening times are underlined. Propagation forecasts are calculated using *W6ELP* propagation software and VOACAP <http://www.voacap.com/hf/>.

-- MAY SOLAR ACTIVITY --

Through 29 May, the 10.7 cm Solar Flux ranged from 67 to 79, with a mean value of 71.5 (vs. 70.9 for May 2018 and 73.6 for May 2017). The A_p index was ≥ 7 on 13 days. The sunspot number ranged from 11 to 26 on 16 days thru 29 May.

-- JUNE SOLAR FORECAST --

Solar activity is expected to be very low throughout the month.

No proton events are expected at geosynchronous orbit.

The greater than 2 MeV electron flux at geosynchronous orbit is expected to range from normal to high levels. High levels are expected on 01-02 and 25-26 Jun, and moderate levels are expected on 03-12 Jun. Enhancements in electron flux are due to the anticipated influence of multiple CH HSSs. The remainder of June is expected to be at normal background levels.

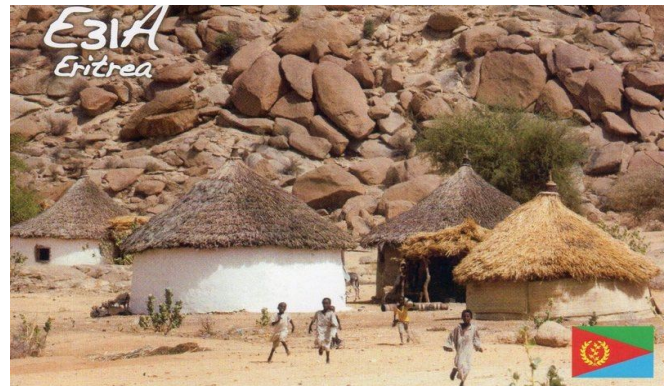
Geomagnetic field activity is expected to range from quiet to active levels. Negative polarity CH HSS influence is expected to produce quiet to unsettled conditions from 01-02 Jun, unsettled to active conditions 24-25 Jun and quiet to unsettled conditions 26-29 Jun.

The remainder of the month is expected to be mostly quiet under nominal solar wind conditions.

The 10.7 cm Solar Flux should range from 67 to 72 and average 69.7 during June.

(From *NOAA Weekly Highlights and Forecasts*, 27 May 2019, *NOAA 27-day Space Weather Outlook Table*, 27 May 2019, and *45 Day AP Forecast*, USAF, 27 May 2019)

-- BIG SIGNALS FROM ERITREA --



Zorro-JH1AJT, CEO of SEISA and the FGC (Foundation for Global Children) and his team are in Eritrea to participate in the Eritrean Independence Ceremony. The main purpose of this trip is to support the Eritrea National Olympic Committee (E.N.O.C), but the skilled ops have also been active on the bands.

-- UPCOMING MICRONESIA ACTIVITY --

In addition to the 17-24 June V6K operation by JA1XGI, JA1FMN will be active with FT8, FT4 and JT65 from Weno Island, Chuuk, Micronesia (OC-011) as V63PSK 19-22 June.

(TNX to <https://dx-world.net/> for the above.)

TARC Goes to Hamvention 2019

It's May and to amateur radio operators worldwide that means one thing – Hamvention! The “Dayton” Hamvention, held every year since 1952, is generally considered the world's largest hamfest. It's the place where hams from all over the world come to see the latest in amateur radio technology, and some of the oldest. There are demonstrations, forums, a huge flea market and generally something for every ham.

Hamvention gives us a chance to talk directly to some of the engineers who design and build the gear we use and is also a great chance to hold an “eyeball QSO” with friends from other clubs, places we have lived, and DX stations we have worked,

This year TARC had several members in attendance, taking full advantage of all the event had to offer. TARC attendees included:

Al - KOAL

Tom - W8QJF

Frank – W2XYZ (and daughter Denise)

Will – WB8FXJ

Steve – WA1ZKN

Patti – N4IGI

Of course, one of the first questions that comes up with respect to Hamvention is “How was the weather?”. And this year the weather was beautiful. Other than a bit of rain very early Friday morning that dampened some of the entrepreneurs that set up early in the flea market, not a drop of rain fell during the event. The sky was sunny, the ground was dry, and the temperatures were moderate. Of course, those of us that hail from less sunnier climes than Florida had to scramble to find some sunscreen.

As you may know, for the last three years Hamvention has been held at the Greene County Fairgrounds in Xenia, OH. It seems that most folks were happy with the facility, with a few comments (tongue in cheek maybe) about “when are we going back to Hara Arena?”. New (huge) ceiling fans in the main exhibit halls kept things cool and there were plenty of vendors supplying vittles and libations. Traffic seemed to flow smoothly thanks to the Greene County Sheriff's deputies and scores of volunteers. Free remote

Part one - by Steve, WA1ZKN

parking was available at several sites with free parking and free shuttle busses running continuously.

Many of the major manufacturers were in attendance, with Yaesu, Kenwood and Elecraft showing off new HF rigs. Bigger and better displays seem to be the order of the day – the new Yaesu rig has an especially cool “3D” waterfall. Flex was demonstrating their latest software update that allows multiple operators to control a single rig. Remote operation continues to be an important area of development, and MFJ was showing off their new remote suite.

Many of the TARC attendees were spotted carrying parcels of significant size and weight, both from the exhibit halls and flea market. The specific contents were shrouded in mystery, probably to be revealed at some upcoming breakfast.

Several TARC members took advantage of the opportunity to buy the latest Anytone DMR handheld, which includes a GPS (that actually works!) and APRS functionality. Thanks to Will and Frank, we have the start of a code plug for this (and other Anytone handhelds) that covers the Venice area repeaters. Spectral analysis of the Anytone handhelds at the ARRL test bench showed that they are very “clean”, with the 3rd order harmonic well below the FCC limit.

As far as the prize drawing goes, only Frank won anything from Hamvention. Steve won a t-shirt at the Icom booth, but his 43-year long streak of never winning a Hamvention prize remains unblemished.

Based on all the reports, it seems that TARC members had a very good time at the 2019 Hamvention. Some are already making plans for next year – hopefully you can go too!



More >>>>

Scenes from Hamvention

photos by WA1ZKN



Frank wins a bonus prize!
We wonder what's in the box.



Steve wins a T-shirt!



Need a key???



Steve and Patti working
Talk-In.



Wow! A brand new
watt meter!



The crowd waiting for the Icom prize drawing.



Hams identify their home QTH all over the world.

TARC Goes to Hamvention 2019

Part two

by Frank, W2XYZ

The Green Shirts invaded Xenia and have successfully returned from their conquest. No invaders were lost in the operation and all returned with various booty and stories of treasures beyond your imagination. (I won a significant prize for the third time in 23 years). Of course I'm talking about the 2019 Dayton Hamvention. The current venue for this event is Xenia, but it wasn't always so. Hamvention actually started 67 years ago, that's 1952 if my math is correct. The first Hamvention was held at the Biltmore Hotel in Dayton.

In 1964 Hamvention moved to Hara's Arena. Hara's, located in the Dayton suburb of Trotwood, was basically a hockey arena. In a hodge-podge way, there were several connected buildings and a very large parking lot. An ideal place to hold such a world class convention, and the ideal city to host it. Fifty percent of the US population lives within 500 miles of Dayton. Dayton is served by a first-class international airport, and the city is large enough to have adequate hotels, restaurants, and other attractions (such as the Wright-Patterson museum).

All went well for Hamvention at Hara's, until Hara's started falling apart. Some years back, Hara's lost its hockey franchise and began a downward spiral. Repairs to the buildings and parking lot were done only on an as needed basis, and sometimes not even that. The city's code enforcers ensured the buildings maintained a minimal standard for the safety of convention goers, but the parking lot looked like it was carpet bombed. Pot holes the size of small craters pocked the flea market area. Indoor plumbing also became a problem, and who from the 2011 Hamvention doesn't remember "Old Faithful" when a sewer pipe under the flea market area ruptured and sprayed attendees and merchandise with raw sewage.

Enough is enough. Attendance steadily dropped at Hara's from its peak of 35,000 in 1994 to around 20,000 near its final days at Hara's. DARA (Dayton Amateur Radio Association), which hosts Hamvention encountered contract difficulties with the owners of Hara's over a number of

issues. A decision was made to find a new home for Hamvention. Several sites were considered with the winner being the Greene County Fairgrounds in Xenia, Ohio. A decision was made that the 2017 Hamvention would be held in Xenia.

The fairgrounds are about 20 minutes or so from Dayton and although the acreage is adequate there were other short-comings...like buildings, and a decent flea market area, parking, hotels, restaurants, etc. I don't know how they did it, but they pulled it off successfully. Somehow things got coordinated and things happened. In addition to the three large and two smaller buildings, two large tents were erected for vendors. Off-site parking was coordinated with frequent shuttles. Basically everything came together in the right way, except for the weather.

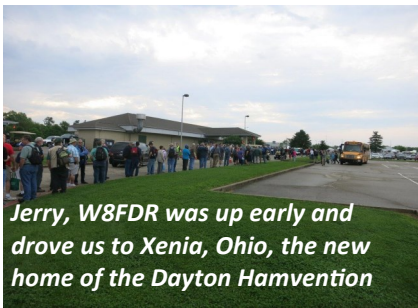
It poured Hamvention weekend in 2017. The on-site parking became a green soup with tow trucks and tractors abounding to haul out stuck conventioners. The flea market fared no better. You needed boots, or no shoes at all, to traverse the marketers. In spite of the new venue and the discomforts provided by Mother Nature, attendance was 29,000. Bad news travels fast (especially via airwaves) and 2018 showed a slight drop in attendance to 28,000.

Much to the surprise of the 2018 attendees, a number of improvements were made, especially in the area of parking and the flea market. Good news travels almost as fast as bad news and the word got around that Hamvention is back. This year things went great. The weather was perfect (can you believe it, no rain the whole weekend). The flea market had crushed asphalt for pathways, free shuttle busses ran about every five minutes. Police presence was everywhere directing traffic and providing security. The locals absolutely loved us and told us how pleased they were to have our convention there. Attendance for 2019 has not been published yet, but it was announced that attendance was significantly above 30,000. When you consider 67 years ago attendance was 600 with 7 vendors, things have really changed.



TARC Goes to Hamvention 2019

Part three
by Bob, K1NOK



Jerry, W8FDR was up early and drove us to Xenia, Ohio, the new home of the Dayton Hamvention



The hit of the show. The new Elecraft K4. The wait was 1 hour to purchase this radio and you won't see it until November!!



What more can I say...



I heard later that the food vendors we very pleased with their sales



You know you are at the Dayton when you see Toni Towerhead!



The home-made ice cream line was 5 1/2 miles long! Well, not really, but it was long!



Frank, W2XYZ (from my Tamaimi Radio Club) was there with his pretty daughter, Denise. He is smiling because he had just won a convention prize! He's buying my ticket next year!!



Almost every radio you can think of was available for sale and at very favorable prices

Tons of stuff for the kids this year. I can't believe some of their accomplishments at very young ages!



WOW! Go Figure!



Every state was represented along with 31 countries



Lots of birds in the flea market too.

This is for real! A very serious event in southern Ohio



The old venue bites the dust!



We have connections!

I have always maintained that every cable ever made has two ends, and to make the cable useful, each end must have some sort of termination. When it comes to coax cables connecting our rigs to our antennas, the selection of connectors can be confusing. It seems that each new radio requires a different connector. Here is some information that may help to clarify (or confuse) what's needed to get that RF to the antenna. Thanks to Wikipedia for the descriptions published here. de K3SY

SMA (SubMiniature version A) connectors are semi-precision coaxial RF connectors developed in the 1960s as a minimal connector interface for coaxial cable with a screw-type coupling mechanism. The connector has a 50 Ω impedance. SMA is designed for use from DC (0 Hz) to 18 GHz, and is most commonly used in microwave systems, hand-held radio and mobile telephone antennas

SMC (SubMiniature version C) connectors are coaxial RF connectors developed in the 1960s. The interface specifications for the SMC and many other connectors are referenced in MIL-STD-348. They use a #10-32 UNF threaded interface (screw type). They offer electrical performance from DC to 10 GHz. Female (a.k.a. plug) SMC connectors have a socket for the center contact, and male (a.k.a. jack) SMC connectors have a pin for the center contact. SMC jack connectors have an external thread while SMC plug connectors have the mating hex nut. Available in 50-Ohm and 75-Ohm characteristic impedance, they provide an interconnect means for small form factor coaxial cables (e.g. 50-Ohm RG-174, 75-Ohm RG-179) and printed circuit boards where small footprint is important.

The **BNC (Bayonet Neill–Concelman) connector** is a miniature quick connect/disconnect radio frequency connector used for coaxial cable. The interface specifications for the BNC and many other connectors are referenced in MIL-STD-348. It features two bayonet lugs on the female connector; mating is fully achieved with a quarter turn of the coupling nut. BNC connectors are used with miniature-to-subminiature coaxial cable in radio, television, and other radio-



The **Type N connector** is a threaded, weatherproof, medium-size RF connector used to join coaxial cables. It was one of the first connectors capable of carrying microwave-frequency signals, and was invented in the 1940s by Paul Neill of Bell Labs, after whom the connector is named

The **TNC (Threaded Neill–Concelman)** connector is a threaded version of the BNC connector. The interface specifications for the TNC and many other connectors are referenced in MIL-STD-348. The connector has a 50 Ω impedance and operates best in the 0–11 GHz frequency spectrum. It has better performance than the BNC connector at microwave frequencies. Invented in the late 1950s and named after Paul Neill of Bell Labs and Carl Concelman of Amphenol, the TNC connector has been employed in a wide range of radio and wired applications.













The abbreviation TNC is sometimes given as standing for **Threaded Navy Connector**.



frequency electronic equipment, test instruments, and video signals. The BNC was commonly used for early computer networks, including ARCnet, the IBM PC Network, and the 10BASE2 variant of Ethernet. BNC connectors are made to match the characteristic impedance of cable at either 50 ohms or 75 ohms. They are usually applied for frequencies below 4 GHz and voltages below 500 volts.

Con't >>>>>

Connectors.....continued

Type	Standard		Reverse Polarity	
	male	female	RP male	RP female
SMA	 Threads inside Pin in the middle Diameter: about 6mm	 Threads outside Hole in the middle Diameter: about 5mm	 Threads inside Hole in the middle Diameter: about 6mm	 Threads outside Pin in the middle Diameter: about 5mm
TNC	 Threads inside Pin in the middle Diameter: about 12mm	 Threads outside Hole in the middle Diameter: about 10mm	 Threads inside Hole in the middle Diameter: about 12mm	 Threads outside Pin in the middle Diameter: about 10mm
N	 Threads inside Pin in the middle Diameter: about 17mm	 Threads outside Hole in the middle Diameter: about 14mm		
UHF	 Threads inside Pin in the middle Diameter: about 17mm PL-259	 Threads outside Hole in the middle Diameter: about 14mm SO-239		

SMB (*SubMiniature version B*) connectors are coaxial RF connectors developed in the 1960s. SMB connectors are smaller than SMA connectors. They feature a snap-on coupling and are available in either 50 Ω or 75 Ω impedance. They offer excellent electrical performance from DC to 4 GHz. An SMB jack has a male center pin, while an SMB plug has a female basket.

The **UHF connector** is a dated name for a threaded RF connector. The connector design was invented in the 1930s for use in the radio industry, and is a shielded form of the "banana plug". It is a widely-used standard connector for HF transmission lines on full-sized radio equipment, with BNC connectors predominating for smaller, hand-held equipment.

The name "UHF" is a source of legitimate confusion, since the name of the connectors did not change when the frequency ranges were renamed. The design was named during an era when "UHF" meant frequencies over 30 MHz. Today Ultra high frequency (UHF) instead refers to frequencies between 300 MHz and 3 GHz, and the range of frequencies formerly known as UHF is now called "VHF". Further adding to the confusion, the so-called "UHF" connectors are only well suited for the lower-VHF range and lower; they perform poorly for the higher modern UHF region. A more appropriate name would be "HF" connectors.

There is no active specification or standard governing the mechanical and electrical characteristics of the so-called "UHF" connector system making it effectively a deprecated design.

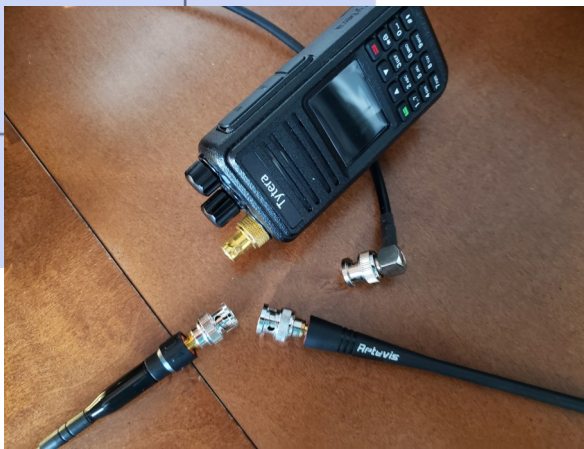
The connector reliably carries signals at frequencies up to 100 MHz. The coupling shell has a $\frac{5}{8}$ inch 24 tpi UNEF standard thread. The most popular cable plug and corresponding chassis-mount socket carry the old Signal Corps nomenclatures **PL-259** (plug) and **SO-239** (socket). These are also known as Navy type 49190 and 49194 respectively.

Want to connect an external antenna to your new DMR hand-held? You will need a few adapters to make that happen. When checking in to the TARC DMR chat-net, I like to attach my Tytera to a home-brew Quagi in the attic. To make the transition quickly from the rubber-duckie to the external, I use BNC connectors.

First, a cable adapter from UHF to BNC makes the antenna available. Next an SMA to BNC adapter on the radio allows a quick connect. (Buy the one with a broad shoulder to avoid breaking the SMA on the rig). Adding an SMA to BNC on the duckie(s) will allow a quick return to full hand-held operation.

All of these adapters are available at no great cost on e-Bay – **BUT** – be very aware of gender on the connectors! I've been told the new Anytone radios have a reverse gender than the Tyteras.

de K3SY








MCX (**micro coaxial connector**) are coaxial RF connectors developed in the 1980s. They have the same inner contact and insulator dimensions as the SMB connector but are 30% smaller.

MCX connectors use a snap-on interface and usually have a 50 Ω impedance (some are 75 Ω). They offer broadband capability from DC to 6 GHz

Mini-UHF connectors are miniaturized versions of UHF connectors, designed primarily for use in bag-type mobile phones and similar applications where size is an important consideration. Introduced in the 1970s, Mini-UHF has a 3/8-24 thread size and operates up to 2.5 GHz. It is similar only in basic construction, a threaded outer portion, center pin, and toothed ends intended to prevent twisting and loosening. Its performance is much better than the standard UHF.



June, 2019

Sun	Mon	Tue	Wed	Thu	Fri	Sat
DMR net meets on TAC 311 + 10 meter net follows the 2 meter net at 28.450 mhz						1
2	3 QCWA 11:30 Sweet Tomatoes 4994 S. Tamiami Trail, Sarasota	4 Breakfast @ Peaches * DMR net @ 7:30 PM W4AC 444.1	5	6 TARC net @ 7:30 PM W4AC / RPT 146.805 ** +10M net	7 Breakfast @ Peaches *	8 TARC VE Session @ Jacaranda Public Library 10:00 AM
9	10 DARN Emergency net @ 11AM Starts on NI4CE/RPT 145.43 pl100	11 Breakfast @ Peaches * DMR net @ 7:30 PM W4AC 444.1	12 <u>TARC meeting @ Coast Guard Training Center</u> 7:00 PM.	13 TARC net @ 7:30 PM W4AC / RPT 146.805 ** +10M net	14 Breakfast @ Peaches * 	15
16 	17	18 Breakfast @ Peaches * DMR net @ 7:30 PM W4AC 444.1	19	20 TARC net @ 7:30 PM W4AC / RPT 146.805 ** +10 M net	21 Breakfast @ Peaches * 	22 
23 	24	25 Breakfast @ Peaches * DMR net @ 7:30 PM W4AC 444.1	26	27 TARC net @ 7:30 PM W4AC / RPT 146.805 ** +10 M net	28 Breakfast @ Peaches *	29 * Peaches opens at 6:00 AM, orders taken at 7:00.
30						

**The W4AC 146.805 Repeater is ANALOG, PL100. [If the 2-m repeater is down, please QSX to 146.58 simplex]

**TAMIAMI AMATEUR RADIO CLUB, INC.
MEMBERSHIP APPLICATION**

Name _____ Call sign _____ Class _____ ARRL, (Y/N) _____

Local Address _____ City _____ Zip _____

Phone _____ Cell _____ E-Mail _____

Summer Address _____ City _____ St. _____ Zip _____

Phone _____ Alt. E-mail _____

Application Date _____ Amount enclosed _____

Please check items of interest:

- | | | |
|---|--|---|
| <input type="checkbox"/> A - ATV/SSTV | <input type="checkbox"/> L - Echo Link | <input type="checkbox"/> S - Special Events |
| <input type="checkbox"/> C - Contests | <input type="checkbox"/> N - Net Control | <input type="checkbox"/> T - Training |
| <input type="checkbox"/> D - Digital (DMR, PSK, etc.) | <input type="checkbox"/> O - Computers | <input type="checkbox"/> U - VHF/UHF |
| <input type="checkbox"/> E - Emergency Comm. | <input type="checkbox"/> P - Packet | <input type="checkbox"/> V - VE Testing |
| <input type="checkbox"/> F - Field Day | <input type="checkbox"/> Q - Publicity | <input type="checkbox"/> X - DX |
| <input type="checkbox"/> I - RFI/TVI | <input type="checkbox"/> R - Repeater | <input type="checkbox"/> Y - RTTY |
| <input type="checkbox"/> Other (Specify) _____ | | <input type="checkbox"/> Z - QRP |

**For payments by mail send to:
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**Web site payments accepted via PayPal.
(Add \$1.00 convenience fee.)**

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	Paul Nienaber (PIO)	KN4BAR
	Steve Phillips	WA1ZKN
	San Yoder	K3SY

Dues:	
Regular member	\$20.00/yr.
After 6/1 -	\$10.00 to yr. end
After 10/31	\$20.00 thru next yr.
Family Membership	\$25.00/yr
Non Voting Student	\$5.00/yr
New licensee - first year free.	
For office use:	
RR <input type="checkbox"/> EM <input type="checkbox"/> CR <input type="checkbox"/> MC <input type="checkbox"/>	

*The Communicator is a monthly publication of
The Tamiami Amateur Radio Club, Inc. Editor: San Yoder, K3SY
<http://www.tamiamiarc.org> Webmaster: Paul Nienaber, KN4BAR*