Newsletter of the TAMIAMI AMATEUR RADIO CLUB, (TARC), Venice, Florida

THE COMMUNIC& TOR

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

W4AC Repeaters: 444.100 MHz (DMR) & 146.805 MHz (-) PL 100 Hz

Incorporated 1984

http://www.tamiamiarc.org

April, 2017

## President's message......KB1HIP

In this issue: President's Message: ..... 1 Meeting Notice: .....1 Meetina Minutes: .....2 DX Jack's Page: ..... 3 **Digital Frank's** Page: ..... 4 Shark's Tooth 10K recap: .. 5,6 Antenna Treatise: .... 7,8 VE Testing .. 9 Club Calendar: .... 10 Membership Application: 11

## Next month:

A wrap-up of TARC members' participation in the 2017 Shark's Tooth Festival with K4S results.

What to expect when 5G networks show <u>up.</u>

dinated our monitoring team for the 10K Sharks tooth race which took place on Saturday 04 March 2017. Ten club members participated as monitors for this race and I want to thank and recognize them for their service: Dexter Atkinson, KB1FY, Larry Bryan, W8LIG, Gary Hagens, K6OC, Glenn Hyde, N4MXQ, Don Jansen, KI4VGE, Roger Schmitt, KY4RS, Jim Shortill, KJ4NDO. Frank Wroblewski.W2XYZ and San Yoder, K3SY. The race went smoothly with no serious problems to report.

The next club sponsored event is the Sharkstooth Festival which will take place on 7 April to the 9 April. If you have not vet signed up to operate the K4S special event HF station please see Jim Shortill, KJ4NDO, and he will put you on the schedule. We have approval again this year to use the K4S call sign thanks to the work of Jack Sproat, W4JS. We will be using the ICOM 756 Transceiver, an Ameritron ALS 600 amplifier (500watt) and a Mosely triband 2 element beam antenna. We hope to have the antenna higher this year with a new portable fiberglass mast.

We are disappointed to report that the 146.805 VHF repeater will be converted from Analog FM to Digital DMR

oger Schmitt, KY4RS, coordinated our monitoring team for the 10K Sharks tooth race which took place ay 04 March 2017. Ten club participated as monitors for

> The club does not own most of the VHF equipment at the repeater site and therefore does not have control of the use of this equipment. We have to look at alternate plans to honor the commitment we have made to DARN many years ago.

> Al Culbert, KOAL, will be organizing our next event, the Florida QSO party, which will take place on the 29 and 30 of April 2017. Al has volunteered the use of his station for this operation. We will discuss the details of this event at the next Club Meeting which will be held on the 12 April.

I hope everyone has an enjoyable April.

VY 73 to all, de Andy - KB1HIP

## **April Meeting**

Our meeting will start at **7:00 PM** on Wednesday, **12 April, 2017** at the Coast Guard Auxiliary Training Center, 1200 South Harbor Drive.



## TAMIAMI AMATEUR RADIO CLUB Minutes of the 3/08/17 Meeting

President Andy Durette, KB1HIP, called the meeting to order at 7:05 PM with the pledge to the Flag. Introductions were made all around by name and call sign.

**MINUTES:** President Durette requested a motion to accept the minutes of the 8 February 2017 meeting as published in the Communicator. Motion was made, seconded and approved.

### CORRESPONDENCE: None

**TREASURER'S REPORT:** Treasurer Frank Wroblewski, W2XYZ, reported a beginning balance of \$7,273.60, income of \$155.00, no expenses, and an ending balance of \$7,428.60

**SUNSHINE:** Jessie Snyder, KW4IT, reported that he was much improved after the repair of an aortic aneurism.

**VE TESTING:** Don Jansen, KI4VGE, reported that there were no exams given as of the date of our meeting.

**LIAISON TO QCWA:** There were 27 members, spouses and visitors present for the 6 March 2017 meeting of Suncoast Chapter 53. The program, modern 3D printers and their products, was presented by Stan Robinson, W9SMR.

**MEMBERSHIP:** The club is composed of 45 regular, 4 first year, 4 life and 1 comp members. There are no student members.

**REPEATER / TECHNICAL:** Both the 146.805 MHz analog repeater and the 444.10 MHz digital repeater are operating satisfactorily. Frank Wroblewski, W2XYZ, noted that a digital repeater had been established in Punta Gorda, FL with a frequency of 442.921 on receive. Additionally, he reminded the club that the owner of the repeater equipment used by the club, would be changing the analogue repeater to digital on or about March 31, 2017.

Additionally, Frank Wroblewski, W2XYZ, discussed creating a local digital network composed of digital stations located in Naples, Ft. Meyers, Laurel, Punta Gorda and Venice under the heading of "South West Florida talk group." Discussion followed on the merits of a state wide vs. a local net. Some members wanted the local net, some the state wide net. By vote of 9 to 4, with many members abstaining, the club voted to create a local net on an interim basis.

**OLD BUSINESS:** The Shark Tooth 10K Road Race after-action comments noted some citizen frustrations due to temporarily closed roads. The club digital radios worked well.

The donated equipment that was offered for auction at the conclusion of the meeting did not sell well. It will be stored and sold at the next Hamcation in Orlando.

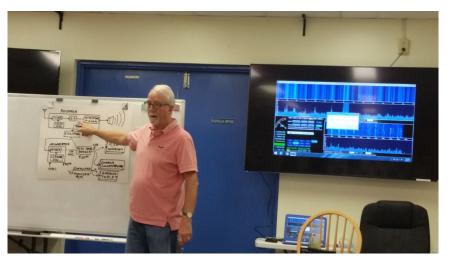
**NEW BUSINESS:** Florida QSO Party - HF operations. This event will be held on April 29th and 30th. Hours are noon to 9 PM on the 29th and 8 AM to 5:59 PM on the Sunday, the 30th. Al Cul-

bert, KOAL, volunteered to provide his station (and maybe cookies) to those wishing to participate in this club fellowship event.

**ADJOURNMENT:** The meeting adjourned at 7:40 PM.

There were 20 club members and four visitors in attendance.

Gary Hagens won \$22.00 in the 50-50 drawing.



#### April, 2017

DX Jack's page....

#### THE COMMUNICATOR

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..... By Jack Sproat, W4JS

MAJOR CURRENT/UPCOMING DX ACTIVITY & PROPAGATION HIGHLIGHTS

CURRENT and/or SCHEDULED DX ACTIVITY										
COUNTRY - CALL SIGN	ACTIVITY	BEAR-	HF BANDS and BEST OPENING TIMES (UTC)							
COUNTRY - CALL SIGN	PERIOD	ING	80	40	30	20	17	15	12	10
Djibouti - J28ND by S53T, SSB/RY, HF+6m	Now Active	61	00-03	23-04	23-01	21-00	20-22	20-21	NO	NO
Mali - TZ8TM by F8DAK, CW/SSB	Now Active	82	23-07	21-09	20-04	14-01	14-02	23-01	NO	NO
Rotuma - 3D2AG/p, 160m - 6m, incl 60m	Now to 22 April	263	06-12	04-14	04-14	01-05	23-04	20-02	NO	NO
Guam - AH2P by EA4AK	Now to 17 April	306	08-11	07-13	10-13	13-16	02-03	NO	NO	NO
Tuvalu - T2TT by NL8F	Now to 13 April	267	05-12	04-13	04-14	12-15	23-03	19-23	NO	NO
Tanzania - 5H3MB by IK2GZU, all modes	Now to 12 April	83	00-04	23-05	00-03	22-01	NO	NO	NO	NO
Guam - KH2BY by EA5BY, incl 60 & 6m	Now to 10 April	306	08-11	07-13	10-13	13-16	02-03	NO	NO	NO
Tuvalu – T2AQ & T2QR, all modes	Now to 04 April	267	05-12	04-13	04-14	12-15	23-03	19-23	NO	NO
Nepal - 9N1MD by 9N1AA	01 to 30 April	13	2000/45	No	Open-	ings	Fore-	cast	10,385	XVERSE
Liechtenstein - HB0/ homecall, 7-op team	01 to 08 April	46	23-06	21-08	20-01	15-20	15-21	18-19	NO	NO
Easter Is - CE0Y/W1MJ, **	02 to 06 April	208	-	23-13	22-06	14-03	-	16-03	-	
Philippines - DU9/ON5SM, SSB/Digital	04 Apr - 24 May	327	1100	10-11	1030	11-12	NO	NO	NO	NO
Papua New Guinea - P29VXG by JA1XGI	06 to 12 April	283	08-12	07-13	07-13	12-16	1400	0200	NO	NO
Vanuatu - YJ0YM by VA7YM, SSB/Digital	06 to 17 April	262	06-12	04-14	04-14	01-04	00-04	20-03	0100	NO
Seychelles - \$79Z by 6-op team	06 to 18 April	68	00-02	23-03	23-03	21-00	21-00	20-21	NO	NO
Guinea Bissau - J5B & J5W, all modes	07 to 15 April	90	23-08	21-09	20-05	12-02	16-01	17-01	NO	NO
Philippines - DX75BDM, 14-op team	08 to 10 April	327	1100	10-11	1030	11-12	NO	NO	NO	NO
Balearic Is - EA6/F5SGI, **	09 to 15 April	55	23-06	21-07	20-01	14-23	16-22	NO	NO	NO
East Kiribati - T32AZ by KH6QJ	11 to 13 April	267	04-12	02-13	-	17-03	-	18-02	-	NO
Mauritania - 5T3MM by 5T0JL	12 to 18 April	81	23-07	21-08	20-04	13-01	17-00	18-00	NO	NO
Laos - XW4XR by 3W3B, CW/RTTY/JT65	12 to 26 April	353	126.02.22	No	Open-	ings	Fore-	cast	N/SPEK	10/029
Palau - T88UW, IH, FT & TA, all modes	14 to 21 April	306	09-11	09-12	11-13	13-15	1430	NO	NO	NO
Isle of Man - GT4BRS by 5-op team	15 to 22 April	41	23-07	21-10	20-01	14-22	14-23	NO	NO	NO
Cape Verde Is - D4T by CT1FFY, incl 6m	18 to 25 April	89	23-08	20-11	19-04	15-01	16-02	23-01	NO	NO
Aland Is - OF0KA by OH3KAV, CW + Digi	22 to 26 April	31	00-05	21-07	21-00	13-20	18-20	NO	NO	NO
Botswana - A25UK by G0VJG + team	25 Apr - 06 May	105	23-05	22-06	21-07	18-01	12-17	1700	NO	NO
South Cook Is - E51AND, JD & BQ, ++	28 Apr - 13 May	246	04-12	02-13	01-13	23-04	18-03	20-04	00-01	NO
South Cook Is - E51BAS & E51DLD	30 Apr - 12 May	246	04-12	02-13	01-13	23-04	18-03	20-04	00-01	NO

Updated 30 March 2017 based on the 27 March 2017 The Weekly DX, the 29 March QRZ DX and, http://www.ng3k.com Notes: Time in bold = the Bands with 75-100% opening; ??? = Call Sign not yet known; ++ = Mostly SSB; \*\* = Mostly CW; NO = No Opening forecast. Long Path bearings and opening times are underlined. All forecasts calculated using W6ELProp propagation software. Solar Flux and K-index varied by dates in accordance with the NOAA SWPC 27-day Space Weather Outlook Table and USAF 45 Day AP Forecast.

#### -- MARCH SOLAR ACTIVITY --

Through 01-30 March, the 10.7 cm Solar Flux ranged from 70 to 86, with a mean value of 74.1 (vs. 93.2 for March 2016 and 129.4 for March 2015), and the  $A_p$  index was  $\geq$  7 on 19 days. Through 29 March, the sunspot number ranged from 0 to 55, with a mean of 13.3.

Solar activity through to 29 March was quiet with nine Class C solar flares. Effective geomagnetic disturbances occurred on 01-02, 06, 21-22 and 27-28 March.

#### -- APRIL FORECAST --

Solar activity is expected to be at very low levels from 01 - 04 April with a chance for isolated C-class flares from Region 2644 during its transit across the visible disk.

No proton events are expected at geosynchronous orbit.

The greater than 2 MeV electron flux at geosynchronous orbit is expected to be at normal to moderate levels with high levels likely from 01 -11 April and again from 18-22 April due to CH HSS influence.

Geomagnetic field activity is expected to be at unsettled to active levels from 01 - 06 April, 17-19 April with G1 (Minor) storm levels likely on 17-18 April, and 23 to 30 April with G1 storm levels likely 23 to 26 April. Heightened activity during these periods is due to recurrent CH HSS effects. Quiet conditions are expected for the remainder of the month.

The 10.7 cm Solar Flux should range from 71 to 78, and average 73.7 during April.

(From NOAA Weekly Highlights and Forecasts, 27 March 2017, NOAA 27-day Space Weather Outlook Table, 27 March 2017, and 45 Day AP Forecast, USAF, 27 March 2017.)

-- 5U5R TEAM --



These Niger-5U5R ops handed out 75,327 Q's to 22,499 stations in 11.5 days on the air.

## Digital Frank's page.DMR Wizardry By W2XYZ

i All, before I say anything else, let me say, bring your DMR radio to the club meeting on April 12. Larry, W8LIG, and myself will have computers available to reprogram your radio with the new Southwest Florida Talk Group (SWFL), and to update your firmware with the latest bells, whistles, and database. Be pre-

pared to come a little earlier to the meeting, or stay a little after the meeting to get the programming accomplished, as the programming will not be done during the meeting.

Beginning Tuesday, April 18, our DMR net will switch to the SWFL Talk Group. Prior to the April 18 changeover, we will meet as we used to meet on our local repeater channel, also known as Local 9. I know this is getting confusing, but please try to follow the reasoning. Originally we met on our repeater, Local 9. Some of us (including me) thought it would be good to expand our coverage area and get more people checking into our net by switching the net to Florida State Talk Group (FL).

In theory that worked well. In practice it worked too well. Our net was being carried on approximately 50 repeaters across the State. Believe it or not, there were some people that were not pleased to hear our melodious voices last Tuesday. It wasn't our voices so much as the fact that we were tying up one of the two available time slots on 50 repeaters. Most repeaters have Florida State on the same time slot as other statewide talk groups. So our net was keeping some Hams from talking to their buddies in Oklahoma, or Vermont, or wherever. To eliminate that problem, we'll immediately go back to our Local 9 repeater channel for nets until such time as we are able to get SWFL programmed into our radios. After that, SWFL will be the talk group to use for our nets.

Phew! With that announcement out of the way, let's get down to business. I have some great information to pass to you this month. Unfortunately I can't take credit for any of it. Larry, W8LIG, has found a terrific web site. The webmaster of the site must have spent hundreds of hours making diagrams, charts, pictorials, etc. to explain how to program a MD-380 radio. He has really simplified the process and answers all the questions you didn't know you should ask on the web site. Go to: http://www.ciarc.org/resources/\_creating\_dmr\_code\_plugs.shtml

If you don't feel like typing the above url, you can also Google Central Idaho Amateur Radio Club

IN A RARE BURST OF CREATIVITY, JIMMY SPAMS THE NEW SGROUPS WITH A QUESTION THAT HAS NEVER BEFORE BEEN ASKED. and go to the appropriate link.

Next month's article I can't take credit for either. Roger, KY4RS, came across some very interesting procedures for installing the "Hacked Firmware" into your MD-380 without having a Linux computer and without being a Unix genius. As a preview of what the new firmware will do for your radio, check out the following video: https://youtu.be/NpnP9qOil14

73, Frank W2XYZ





## TARC members monitor Shark's tooth 10 K race

ine TARC members successfully provided radio coverage for the eighth annual Shark's Tooth 10K race. It was a chilly morning as the hams and runners assembled, but the race came off without major glitches. Here are the TARC participants and their locations:

**Andy, KB1HIP**, served as net control (T1) at the festival grounds command central tent using the 444.1 DMR repeater.

**Frank, W2XYZ**, operated at station T2a at the 0.7 mile mark at Airport Ave. and Ringling Dr. S. as the runners left the airport grounds; and then repositioned to T2b (5.9 mi.) at the entrance gates where the runners re-entered the site.

**Don, KI4VGE**, monitored T3 at Davis and Alba streets as the runners crossed mile 1 (still with lots of energy left).

Jim, KJ4NDO, covered T4 at Davis St. and Field Ave., E. 1.1 miles into the course.

**Glen, N4MXQ**, watched over T5 at the intersection of Field Ave. E. and Cockrill St. at mile 1.35, trying to keep the runners and cars from getting entangled.

**Larry, W8LIG**, (T6), breathed a sigh of relief as the runners began mile three as they headed down Harbor Drive from Shore Road, where traffic was a little more controlled.

**Dexter, KB1FY**, (T7), kept an eye as the participants turned left into the Casperson Beach parking lot at mile 3.6. (Getting tired now!)

**Roger, KY4RS**, bicycle mobile, (T8), chased the runners down at mile four on the Jeep trail loop in Casperson Beach Park. (Rumor has it that Roger had trouble keeping up with some of the road-runner types, even on his bike.)

**Gary, K6OC**, monitored T9 on the Venetian Waterway Trail at the Aid Station just before mile five. (By now they've gotta be tired)! (Did Gary really drive his Smart car out there)?

**San, K3SY**, hung around the Start/Finish line with cell-phone camera in hand, and Tytera speaker/ mike in ear, listening to the radio traffic.

The 444.1 DMR repeater served it's purpose well, and the exercise demonstrated the value of ham radio communications in community service.

Thanks go out to Roger, KY4RS, for his efforts in coordinating this year's outing, and to all TARC participants for their contributions.

The Shark's Tooth Festival itself takes place Friday to Sunday, April 7, 8, and 9. TARC will have special event station K4S on the air from the festival grounds. It's not too late to sign up for a stint operating, logging, setting up, tearing down or just kibitzing at the W4AC tent. This is our opportunity to operate under field-day-like conditions.

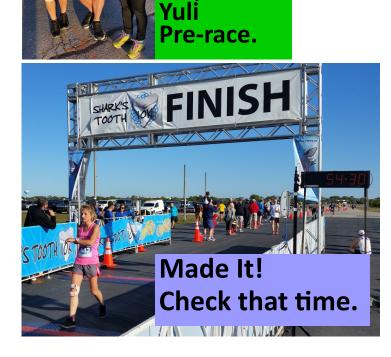
The Shark's Tooth Festival's primary purpose is to support Special Olympics. It may be noted that in past years some hams include donations with their request for QSL cards. Last year TARC members added their own contributions, and we presented a check for \$180 to Special Olympics.

# Scenes From Shark's Tooth 10K





One last pit stop...



he usual

suspects -Jan, Kurt &





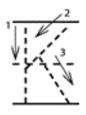
# The Tufnel K

An attractive antenna alternative that offers top performance, high gain, versatility, and easy to find parts for the DIYer.

By Dale, KD3GVD

Still looking for that antenna solution that takes care of all your needs? Look no further, as there is a new configuration that provides numerous advantages and can be easily built. Attractive and functional, the Tufnel K provides good reception, and has a radiation pattern that provides exceptional gain in all the right places. The Tufnel K can be adapted for use across almost all bands.

By combining two half wave elements with a passive reflector, the Tufnel K can be easily built and installed. The only restrictions for materials are that they have resistivity of  $3.2 \times 10-8 \Omega$  m and a relative permittivity of 1.000022. Start by building a PVC center fixture with elements 2 and 3 at 30 degrees from the reflector, as seen in figure 1.



Element 2 should bisect element 1 at the 7/16 $\lambda$  point. Element 3 is projected from the tip of element 1 at 30 degrees and bisects element 2. Suitable angled elbow and T fittings are abundant at your local hardware store in the toilet section. Rigid aluminum or stiff copper tubing are suitable materials for the conductive elements and meet the specifications for resistivity and permittivity. Gauge of materials should be selected to withstand weather but not break the bank. Continue with your construction by cutting pieces of conductive element at a ½ wave length intervals. Proper length can be calculated with the following formula by substituting wavelength for w:

$$L_{1/2} = e^{\ln w - \ln 2}$$

Once your elements are mounted on the center insulator, it is time to find the appropriate feed points for best performance. The use of hose clamps to provide moveable feed points is recommended, but the points should be hardwired once the proper feed points are determined. By using some innovative feed points, a hybrid universal stub/gamma match can be obtained, usually referred to as a fetzer match, requiring no extra match components.

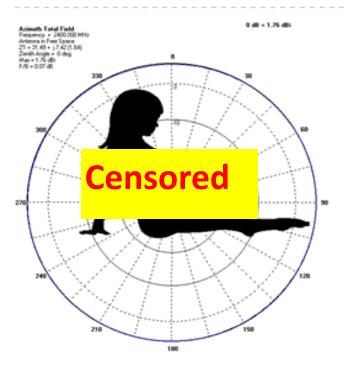
The transmission line shield should be connected to #2 element precisely equidistant from the 1 and 3 elements. Using the following formula, the element 3 feedpoint distance for the fetzer match can be calculated using the standard match equation which will yield  $F_r^1$  or the fetzer input resonance point.

$$\begin{split} \frac{d\rho}{dt} &+ \rho \nabla_x u^z = 0 \ , \\ \rho \ \frac{du^i}{dt} + g^{ix} [\nabla_x (P_g + P_r) + \rho \nabla_x \Phi] = \nabla_x \sigma^{ix} \ , \\ \rho \ \frac{dH_g}{dt} - \frac{dP_g}{dt} = \rho \epsilon - c \rho \kappa (aT^4 - E_r) + \sigma^{x\beta}(u) \nabla_x u_\beta \ , \\ \rho \ \frac{d}{dt} \left(\frac{E_r}{\rho}\right) + \nabla_x F_r^x + \frac{1}{3} \ E_r \nabla_x u^x = c \rho \kappa (aT^4 - E_r) \ , \\ F_r^i = - \frac{c}{3\rho \chi} \ g^{ix} \nabla_x E_r \ , \end{split}$$

Once you've calculated and clamped the feed line on, it's time to hoist it in the air and see how it works. The different spacial configuration of the driven elements may take a bit of getting used to. You may want to try a full rotation during testing as the radiation pattern is quite different than that of a dipole or J-pole configuration. A 2400MHz version was built and the radiation pattern mapped with a high sensitivity field meter. A 20 meter version is currently under evaluation (although only at night due to zoning restrictions). The radiation pattern provided is at best crude, but should provide a good starting point for characterization.

#### THE COMMUNICATOR

#### April, 2017



The Tufnel K Radiation pattern has been described as having gain "in all the right places".

The theory behind the Tufnel K, widely known as the Eleven theory, originates in 1947 by the Baldwin Locomotive works:

The use of "11" as a maximum predates the Tufnel K by almost forty years. In 1947 the Baldwin Locomotive Works and the Chesapeake and Ohio Railway introduced the Chesapeake and Ohio class M-1 steam turbine locomotive. The locomotive's throttle included eleven settings, ranging from one (idling) to eleven (full speed). The locomotive's cruising speed was 70 miles per hour (110 km/h), at which point the throttle was on "seven." During a trial run with a reporter from Popular Mechanics aboard, a C&O engineer expressed his dissatisfaction with a local speed limit of 75 miles per hour (121 km/h), noting that he would "Sure like to be able to pull it back to eleven!"

In the early 1980's the theory was brought back to the mainstream by Nigel Tufnel, the famous glamrock guitarist of group Spinal Tap. See Nigel explain Eleven theory <u>here</u>. https://www.youtube.com/watch? v=KOO5S4vxi00&feature=youtu.be Adapting Eleven theory to antenna technology resulted in the development of the Tufnel K, giving amateur radio enthusiasts the ability to experiment with variations of older designs in an effort improve their performance. The developer of the Tufnel K (Nurn Ficatuntal, KL3ULS) indicated its sole purpose was to be "one better than a J-Pole". After his Tufnel K design, Nurn was spotted in his antenna farm suspending what observers determined to be a new full-wave tripole design under development.

Construction and operation of your new Tufnel K should provide hours of resonant fun, and when you need that little push "over the edge" you can finally make it happen.



The master and his amplifier.



Tired of lugging poles and guy wires all over the place? The Porta-Beam may be just the antenna solution you've been looking for. Porta-Beam travels wherever you go, and at a moment's notice. See all the latest Ficatuntal antenna kits, designs, and accessories at www.yeahright.com

Neck brace and chiropractic services sold separately. Do not operate the Porta-Beam indoors near ceiling fans, revolving doors or elevators. Do not attempt to operate a motor vehicle while operating the Porta-Beam.

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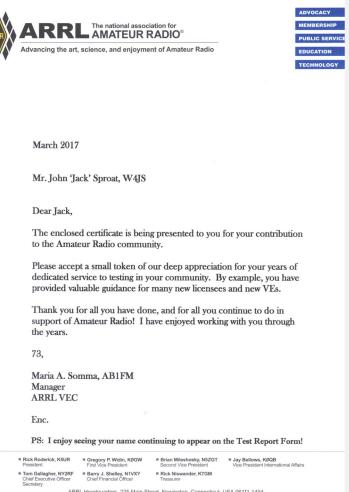
## VE Testing Notes

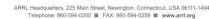
As noted last month, Jack, W4JS has turned over the coordination of TARC VE testing to Don, KI4VGE. As a result of Jack's notification to ARRL of the change, he was rewarded with a certificate of appreciation, along with a nice letter from Maria Somma, AB1FM, Manager of the ARRL VE testing program.

Few of us will ever be able to match Jack's 219 VE sessions. But, we can participate regularly, and carry on this very successful TARC service.

Let's all give our support to Don, KI4VGE, and be there the second Saturday of each month.

Anyone interested in becoming a VE examiner, contact Don, or any one of the TARC VEs for more information.





**FC** Certificate of Appreciation

N VI DAN VI DAN VI DAN VI

Presented to

## John 'Jack' Sproat, W4JS

The ARRL VEC recognizes your outstanding contributions to the Amateur Radio Service through your limitless generosity and dedication in the administration of <u>219</u> Amateur Radio FCC license examinations in the true spirit of **volunteerism**.

RIVERSENSENSENSENSEN

Maria a. Somma Signed: Maria A. Somma, AB1FM ARRL VEC Manager

Dated: March 2017



# April 2017

Sun	Mon	Tue	Wed	Thu	Fri	Sat
		* Peaches opens at 6:00 AM, or- ders taken at 7:00.				1
2	<i>3</i> QCWA 11:30 AM Oriental Buffet 4458 Bee Ridge	4 Breakfast @ Peaches * DMR net @ 7:30 PM W4AC 444.1	5	6 TARC net @ 7:30 PM W4AC / RPT 146.805 **	7 Breakfast @ Peaches * Shark's Tooth Fest / K4S	8 STF TARC VE Session @ Jacaranda Public Library 10:00 AM
9 Shark's Tooth Fest last day K4S teardown	10 DARN Emer- gency net @ 11AM Starts on NI4CE/RPT 145.43 pl100	11 Breakfast @ Peaches * DMR net @ 7:30 PM W4AC 444.1	12 TARC meet- ing @ Coast Guard Train- ing Center 7:00 PM	13 TARC net @ 7:30 PM W4AC / RPT 146.805 **	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 **	21 Breakfast @ Peaches *	22
23	24	25 Breakfast @	26	27	28	29
30	-	Peaches * DMR net @ 7:30 PM W4AC 444.1		TARC net @ 7:30 PM W4AC / RPT 146.805 **	Breakfast @ Peaches *	

\*\* If the W4AC 146.805 Repeater is inoperative, nets may move to 146.580 MHz simplex. Thanks for your cooperation.

## 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. I	E-mail				
Application Date		Amount enclo	sed			
<ul> <li>D - Digital (DMR, PSK, etc.)</li> <li>E - Emergency Comm.</li> <li>F - Field Day</li> <li>I - RFI/TVI</li> <li>Other (Specify)</li> </ul>		<ul> <li>[ ] O - Compute</li> <li>[ ] P - Packet</li> <li>[ ] Q - Publicity</li> <li>[ ] R - Repeater</li> </ul>	rol rs	<ul> <li>[] T - Training</li> <li>[] U - VHF/UHF</li> <li>[] V - VE Testing</li> <li>[] X - DX</li> <li>[] Y - RTTY</li> </ul>		
2017 TARC OFFI President: Vice President: Secretary: Treasurer: Directors:	Nokomis, FL 3 CERS: Andy Durette Gary Hagens Jim Shortill Frank Wroblewski Peter Boers Larry Bryan Don Jansen Tom McDermitt San Yoder	KB1HIP K6OC KJ4NDO	After 10/3 Family Mer Non Voting	- \$10.00 to yr. end 31 \$20.00 thru next yr. nbership \$25.00/yr		

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