



THE COMMUNICATOR

Newsletter of the TAMAMI AMATEUR RADIO CLUB

Incorporated 30 November 1984 – Venice, Florida
Mailing Address: 1419 E. Manasota Beach Rd., Englewood, FL 34223-6341
W4AC Repeater – 146.805 MHz(-) w/100 Hz PL
Web Site – <http://tamiamiarc.org>



-- NOVEMBER 2009 --

PRESIDENT'S MESSAGE

If you read over the Minutes of our October meeting, you will see that the TARC has entered into a working agreement with the Sarasota Emergency Radio Club and the Pine View School ARC with regard to the use of the SERC's 145.130 MHz repeater. While the primary use of the repeater is for emergency traffic, otherwise it could be dedicated to the PVSARC for its use. This provides immense support to the student members of the PVSARC, and should enhance their interests in ham radio. We respect the SERC for giving such support.

We have recently provided the EchoLink mode on the 145.130 repeater—another means of broadening the interests of the PVSARC members.

One further mention of the PVSARC: There's an excellent write up on the club by long-time ham radio educator Carole Perry-WB2MGP in the November issue of *WorldRadio Online*.

I've been on the go again; most recently over to Texas to attend a "Six Meter BBQ." While there, I had to chance to visit the 57-acre Sky-moon ranch and antenna farm of Dave Blaschke-W5UN. Dave is living proof of what you can do with antennas, if you have enough space!!



He has 4-square arrays for 160 and 80 meters, a 4-element 40-meter yagi at 100', a 2-element 6-band quad at 75', and a 7-element 6-

meter yagi at 115'. However, he gets really serious with his 2-meter array: 32 17-horizontal element yagis and 32 11-vertical element yagis, which make up Dave's "Mighty Big Antenna" which is shown in the accompanying photo. I was very impressed!

73 to All de Stew-W4MO

-- NOVEMBER MEETING --

Our meeting will start at **6:00 PM** on Tuesday, **02 November 2009** in the Meeting Room of the Venice Public Library, 300 South Nokomis Avenue. (After entering the Library, turn left near the Information Desk and take hallway directly to the Meeting Room.) Discussion of the new Windows 7 operating system will be presented.

-- A TRAGIC EVENT --

Four well-known contesters en route to operate in the 24-25 October CQ World Wide DX Contest from the Bahamas were killed 21 October when their plane crashed shortly after take-off from the Summerville Airport in Jedburb, South Carolina. The four, all regular operators of the C6APR contest station, were identified as Peter Radding-W2GJ/C6APR, 69, the plane's pilot/owner; and passengers Ed Steeble-K3IXD/C6AXD, 68; Randy Hargenrader-K4QO/C6AQO, 55, and Dallas Carter-W3PP, 67. According to the Summerville *Journal Scene* newspaper, the twin-engine Piper PA-23 Aztec crashed 250 yards east of the runway. The cause of the crash has not yet been determined, but Radding was a very experienced pilot. According to Dorchester County Coroner Chris Nisbet, the four hams had made this trip before with Radding piloting the plane.

The C6APR team was featured in the cover story of April's *WorldRadio Online*, and Steeble wrote an article in the April, 2007 issue of *CQ* about his experiences as QSL manager for C6APR and for a special Islands on the Air expedition, W2GJ/C6A, in 2006.

(From the *CQ/WorldRadio Newsroom*, 22 October 2009, and ARRL Web site.)

TAMIAMI AMATEUR RADIO CLUB
Minutes of the Meeting
(Held at the Venice Public Library)
06 October 2009

President Stew Haag-W4MO called the meeting to order at 6:03 PM and introductions were made all around.

MINUTES – Secretary Jack Sproat-W4JS asked for a motion to accept the minutes of the 10 September 2009 meeting as published in the October 2009 issue of *The Communicator*. Jack Gaddas-KY1Z so moved, seconded by Guenther Hennig-AJ4QX, and passed.

CORRESPONDENCE – Thank You letters were mailed to Jacaranda Library and GCCFV for the use of their facilities over the past years. E-mail was received from Elsbeth Connors, widow of Honorary TARC Life Member Ed Connors-WB1GHK, expressing appreciation for article in the October newsletter. (The TARC Silent Key Memorial Plaque was on display.)

TREASURER'S REPORT – Treasurer Don Jansen-KI4VGE reported that the starting balance was \$1245.58. Receipts were \$13.00 from the July 50/50, a \$12.00 donation from Jon Hamlet-W4ZW, and \$16.00 for two name tags, totaling \$41.00. Expenses were \$14.32 for DayStar Internet service at the repeater site, and \$18.69 for stamps, printing and Memorial Plaque engraving, totaling \$33.03. The 06 October 2009 ending balance is \$1253.55. Peter Pesa-N4RD moved for approval of the report, seconded by Charlie Covell-W4DB, and passed.

COMMITTEE REPORTS

SUNSHINE – Nothing reported.

VE TESTING – Our next VE session will be at 10 AM on 10 October. While no candidates had given advance notice to attend, we could have walk-ins.

REPEATER/TECHNICAL – Stew reported that the problem with the new UPS had been resolved. However, he found the site in a state of disarray, with many cables having been disconnected or connected improperly. The repeater and other available modes, other than the packet gateway, are currently operational.

CLUB PROPERTY – No inventory changes.

PUBLICITY/MEMBERSHIP – Don-KI4VGE reported that we now have 93 members, including seven Life Members and 24 First-Year Free members. Peter-N4RD opined that First-Year Free members should not have voting status. This led to discussion relative to the experiences which prompted the proposal. Failing support, the proposal was dropped.

NET OPERATIONS – Net Manager Bob Murphy-WA1UHG was not present.

LIAISON TO EARS – Konrad Owens-WA3RRS reported that the Englewood ARS is planning to just hold a tailgate event in early March at the Englewood United Methodist Church. The cost to procure the Charlotte County Fairgrounds for a hamfest has become prohibitive.

LIAISON TO QCWA – Jack-W4JS stated that the initial luncheon/meeting of the 2009-2010 season for Suncoast Chapter 53 will be held tomorrow, 07 October, 11:30 AM at Denny's on Bee Ridge Road in Sarasota. No program is planned, with the attendees just telling of their summer activities.

OLD BUSINESS – Nothing carried over from last month.

NEW BUSINESS – Jon Hamlet-W4ZW presented an overview of recent activity between him, representing the TARC and the Pine View School ARC and the Sarasota Emergency Radio Club. This activity centered on the controversial 145.130 MHz repeater which was financed and equipped by the TARC but remains licensed to the SERC. It was also discovered that the coordination for the 145.130 repeater had expired in March. Acting within the rules of the Florida Repeater Council, Jon had immediately applied for that coordination in the name of the Pine View School ARC-W4PVC. Jon's application was made to secure the coordination from being re-assigned outside the SERC/TARC/PVSARC family. This application was successful in that SERC regained the coordination on 5 October. Jon has also requested another new coordination for another school project.

Jon and Stew-W4MO met with the SERC president and secretary on 01 October. They went into that meeting with the position that we desire access to the site for TARC and the PVSARC, and that Jon would like to be trustee for the 145.130 repeater. Verbal agreement was received that the primary use of the repeater is for emergency traffic, otherwise it could be dedicated to the PVSARC.

Jon subsequently prepared a Memorandum of Understanding (MOU) relative to a relationship between TARC, SERC and PVSARC, setting forth the role of each organization regarding such aspects as operation and maintenance, ownership/control of equipment, training, etc. The MOU was presented to the SERC at their 05 October meeting, and positively received.

See **MINUTES** on pg. 4

CURRENT/PENDING DX ACTIVITY & PROPAGATION HIGHLIGHTS

CURRENT and/or SCHEDULED DX ACTIVITY										
COUNTRY – CALL SIGN	ACTIVITY PERIOD	BEAR-ING	HF BANDS and BEST OPENING TIMES (GMT)							
			80	40	30	20	17	15	12	10
Papua New Guinea – P29CW	Now to 19 Dec	283	07-13	06-14	13-16	14-16	20-21	--	--	--
Malawi – 7Q7HB ** and Digital	Now to 30 Nov	90	22-04	21-04	19-23	15-21	14-19	15-18	15-18	NO
Afghanistan – T6YA **	Now to 30 Nov	26	20-03	21-01	13-14	13-14	NO	NO	NO	NO
Easter Is – XR0Y; 2 stns w/30-meter priority	Now to 15 Nov	208	01-12	21-14	12-04	13-00	14-22	15-21	16-20	15-21
South Korea – HL9QST	Now to 13 Nov	335	08-12	07-13	07-11	NO	NO	NO	NO	NO
South Georgia – VP8DIF	Now to 15 Nov	155	23-09	22-09	22-05	19-22	13-00	NO	NO	NO
Vanuatu – YJ0CCC	Now to 05 Nov	262	06-13	05-14	07-15	18-00	19-22	20-21	20-21	NO
Papua New Guinea – P29NI	02 to 09 Nov	283	07-13	06-14	13-16	14-16	20-21	NO	NO	NO
Mali – TZ6JA ++	02 to 23 Nov	82	21-07	19-08	13-23	13-21	15-19	15-19	1700	NO
Chesterfield Is – TX3A	02 Nov 06 Dec	264	07-13	06-14	07-16	14-23	19-22	20-21	20-21	NO
Vietnam – XV4D	04 to 17 Nov	348	11-12	10-12	13-14	14-19	NO	NO	NO	NO
St Pierre & Miquelon – FP/KV1J & W8TOM	07 to 15 Nov	39	20-13	12-23	13-20	14-18	NO	NO	NO	NO
Senegal – 6W/EI6DX **	07 to 16 Nov	87	22-08	20-08	12-23	14-21	15-18	15-18	NO	NO
West Kiribati – T30KI & T30IW	10 to 16 Nov	277	05-13	04-15	08-15	18-23	19-21	19-20	19-20	NO
Papua New Guinea – P29VCX & P29VLR	11 to 16 Nov	283	07-13	06-14	13-16	14-16	20-21	NO	NO	NO
Samoa – 5W0MR; 5W0KH	11 to 30 Nov	257	05-13	04-15	08-15	17-00	18-22	18-21	18-22	2000
Comoros – D68F; focus on low bands	13 to 23 Nov	84	22-03	21-04	20-23	16-21	15-18	16-17	16-18	NO
Ghana – 9G5TT & 9G5XX	13 to 27 Nov	87	21-07	19-08	18-08	13-21	14-19	15-18	15-18	NO
Crozet Is – FT5WO ++	15 to 23 Nov	131	--	--	--	18-21	15-18	NO	--	NO
Madagascar – 5R8IC	17 Nov - 15 Dec	90	22-02	21-03	20-23	12-21	17-21	15-18	15-18	NO
New Caledonia – FK/JA1NLX **, RTTY	19 to 23 Nov	258	07-13	06-14	07-15	14-23	16-19	20-22	20-22	NO
Tonga – A31A	19 Nov – 01 Dec	253	05-13	04-14	07-16	16-00	19-22	18-21	19-20	20-21
Christmas Is – VK9XX	21 Nov – 05 Dec	334	11-12	10-14	13-15	14-16	18-22	NO	NO	NO
Botswana – A25NW	23 Nov – 01 Dec	105	22-04	20-05	19-23	13-21	15-16	15-18	14-19	16-17
Zambia – 9J3A	25 to 30 Nov	94	22-04	20-05	19-23	13-21	14-19	15-18	15-18	NO

Updated 28 October 2009, based on 28 October 2009 *QRZ DX*, 25 October 2009 *The Weekly DX*, and <http://www.ng3k.com>

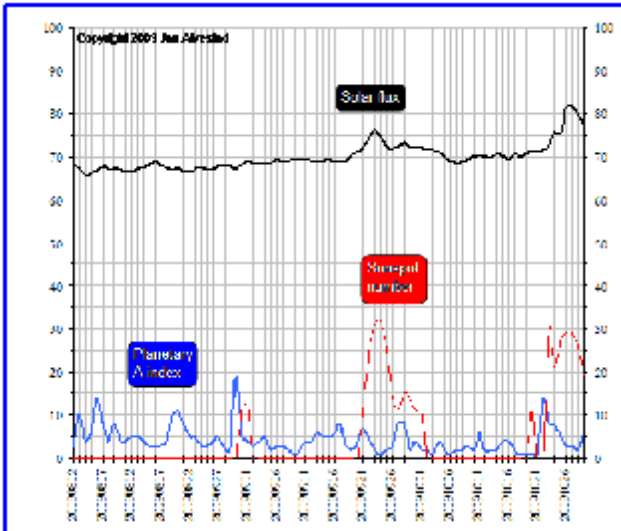
Notes: Time in bold = Band(s) with 75-100% opening; ??? = Call Sign not yet known; ++ = Mostly Phone; ** = Mostly CW; NO = No Opening forecast. Long Path bearings and opening times are underlined. All forecasts calculated using *W6ELProp V.2.60* propagation software, available to download at <http://www.gsl.net/w6elprop/>. Solar Flux and K-index varied in accordance with USAF 45-Day A/P Forecast.

-- OCTOBER SOLAR ACTIVITY --

During October, the Solar Flux ranged from 69 to 82, with a mean value of 72.3 (vs. 68.4 for October 2008 and 67.6 for October 2007). The A-index was ≥ 7 on only 5 days.

Solar activity was very low to low. Unsettled levels were on 11, 15 and 22-25 Oct. Region 1028 (SSN 11) showed 20 Oct. for one day. Region 1029 (SSN 30) showed on 23 Oct., driving the Solar Flux to 82 on the 27th.

(Courtesy of: Jan Alvestad, <http://www.solen.info/solar/>)



-- NOVEMBER FORECAST --

Solar activity is expected to be very low to low. No proton events are expected at geosynchronous orbit. Solar flux should average 72.1 during November.

Geomagnetic field activity is expected to be quiet through 06 November, increasing to unsettled 07 November. Quiet levels are expected 08-16 November, increasing to active 18-21 November. Mostly quiet conditions should prevail during the remainder of November.

(From NOAA *Weekly Highlights and Forecasts*, 27 October 2009, NOAA *27-day Space Weather Outlook Table*, 27 October 2009, and *45 Day AP Forecast*, USAF, 27 October 2009)

-- DX-EXTRAS --

Region 1029 came along just in time for the Phone Weekend of the CQ Wide World DX Contest. The 15-meter band was wall-to-wall DX right up to 21.450 MHz. The band continued to offer good DX through the remainder of the month, although the Region 1029 turned the Sun's western limb by month's end.

Keep a lookout for Chesterfield Island and Tonga, as propagation to the South Pacific is opening up with decent signals.

CONTESTS & ACTIVITIES

Contest/Special Event	Begin-End Times/Dates	Bands/Modes	QSO With	Exchange
Ukrainian DX Contest	1200Z 07 Nov 1200Z 08 Nov	160 – 10 Meters SSB and CW	Anyone, Anywhere	R/S/(T), Serial Number
ARRL November Sweepstakes	2100Z 07 Nov 0300Z 09 Nov	160 – 10 Meters CW Only	U. S. A. and Canadian Stations	See ARRL web site
Worked All Europe DX Contest	0000Z 14 Nov 2400Z 15 Nov	80 – 10 Meters RTTY Only	WAE Countries; QTCs may be requested	R/S/T, Serial Number
Japan International DX Contest	0700Z 14 Nov 1300Z 15 Nov	80 – 10 Meters SSB Only	Japanese Stations	R/S, CQ Zone (5, locally)
OK-OM DX Contest	1200Z 14 Nov 1200Z 15 Nov	160 – 10 Meters CW Only	Czech and Slovak Stations	R/S/T, Serial Number
LZ (Bulgarian) DX Contest	1200Z 21 Nov 1200Z 22 Nov	80 – 10 Meters SSB and CW	Bulgarian Stations	R/S/(T), ITU Zone (8, locally)
ARRL November Sweepstakes	2100Z 21 Nov 0300Z 23 Nov	80 – 10 Meters SSB Only	U. S. A. and Canadian Stations	See ARRL web site
CQ World Wide DX Contest	0000Z 28 Nov 2400Z 29 Nov	160 – 10 Meters CW Only	Anyone, Anywhere	R/S/T, CQ Zone (5, locally)

From ARRL "Contest Corral" and November 2009 *WorldRadio Online*

MINUTES from pg. 2

Jon then read the MOU at this time. Martha Ackroyd-KJ4IFJ, the PVSARC faculty sponsor, did not foresee any problem, but a copy will be given to Pine View School officials for their review and approval.

Peter-N4RD moved that the TARC approve the MOU as written and that Jon should proceed for its endorsement by the SERC and PVSARC. Jack Gaddas-KY1Z seconded the motion, which passed unanimously. Mike Hickey-NY4P expressed his thanks to Jon for his dedicated and positive efforts in this matter.

COMMENTS FROM THE FLOOR – Bob Avrutik-N1RA asked that some recognition be given to Jerald A De Long, Jr.- KD4YAL, who came down from Clearwater and spent about 7.5 hours working on the packet gateway installation. Konrad-WA3RRS suggested he be given a Certificate of Appreciation, and Jon-W4ZW agreed to prepare such a certificate.

Martha-KJ4IFJ announced that members of the PVSARC are planning to actively participate in the Annual Pine View Fair which will be held that from 11 AM to 4 PM this Saturday. TARC members are invited.

ADJOURNMENT – A motion to adjourn at 7:18 PM was made by Bob-N1RA, seconded by Jack-KY1Z, and passed. There were 18 members and no visitors present.

Jack Sproat-W4JS
Secretary

-- STATUS OF AMATEUR LICENSING --

As of 25 October 2009, there were 678,829 Amateur Radio licenses outstanding in the United States. These consisted of 118,743 Amateur Extra, 60,956 Advanced, 149,915 General, 332,003 Technician and 17,212 Novice licenses. By way of comparison, ten years ago, in October 1999, there were 676,187 licenses outstanding.

The Radio Amateur population in the United States peaked in April 2003, when there were 687,860 licenses outstanding. The "low point" occurred in June 2007 when there were 654,695 licenses outstanding. Between October 2008 and 2009, 17,238 new licenses were issued. If the current rate of net growth continues, the former peak could be reached in another six months or less. It will remain to be seen if this actually occurs.

Regardless of the number of radio amateurs, it is an interesting paradox that with the increased number there has been a major decline in the number of local or regional ham radio stores. Some 30 or 40 years ago, when there were considerably fewer hams than now, even mid-sized cities boasted of at least one ham radio store. Now, virtually all ham gear and supporting materials have to be purchased via phone calls to the scattered "big box" ham radio dealers.

(From the Web site of Joe Speroni-AH0A)

Smile and the World smiles with you!

-- RECALL THE "WOODPECKER"? --

If you were an active ham radio operator or shortwave listener between July 1976 and December 1989, you probably remember a rather nasty form of interference on the HF bands during that era known as the "Russian Woodpecker." Its name came about because triangulation indicated that it originated in the west end of the USSR and its signature tapping sounded like a woodpecker pecking at wood. In a July 1982 interview with the *Miami Herald*, Andy Clark-W4IYT (SK), publisher of (the now defunct) *Florida Skip*, claimed that he named the phenomenon "woodpecker" for the distinctive sound. (Go to "Russian Woodpecker" at Wikipedia.org, and listen to the woodpecker jamming the NIST's time/frequency standards station WWVH on 02 November 1982.)

Known to NATO as "The Steel Yard," due its massive size, the woodpecker's real name was Duga-3 and it served as over-the-horizon radar for the USSR's anti-ballistic missile early warning system. With an estimated transmission power of 10 MW EIRP, the Russian Woodpecker played havoc on the HF bands.

To combat the Woodpecker, some hams attempted to jam the signal by transmitting synchronized unmodulated CW signals, at the same pulse rate as the offending signal. This idea was considered, but abandoned as impractical. Simple CW pulses didn't appear to have any effect. The "Russian Woodpecker Hunting Club" offered hams a practice target showing a woodpecker in the center of a target rings, along with scoring methods dependent on munitions used, e.g., head shots with armor piercing ammo earned 20 points. Used targets were to be mailed to the Soviet embassies or to P. O. Box 88 (the QSL Bureau) in Moscow.

However, playing back recordings of the woodpecker transmissions sometimes caused the woodpecker transmissions to shift frequency leading to speculation that the receiving stations were able to differentiate between the 'signature' waveform of the woodpecker transmissions and a simple pulsed carrier.

Web sites "Everything2" and "Wikipedia" have interesting entries about the Woodpecker.

The Duga-3 antenna installation is inside the 30 km Chernobyl Zone of Alienation. This is a restricted area surrounding the site of the Chernobyl nuclear mishap. For some eerie photos from the Chernobyl Zone, including more photos of the Duga-3 antenna farm, visit the Pripyat Project Web site.



Duga-3 array outside Chernobyl. The array of pairs of cylindrical/conical cages on the right are the driven elements, fed at the facing points with a form of ladder line suspended from stand-off platforms at top right. A backplane reflector of small wires can just be seen left of center, most clearly at the bottom of the image.

(From "Remembering the Woodpecker", Stan Horzepa-WA1LOU, ARRL Web Site, 23 October 2009; Everything2 and Wikipedia Web sites.)

-- THE "GLORIOSO GANG" --



Clockwise from the left rear, here's Bernard-F5LPY, Yves-F5PRU, Philippe-F4EGS, David-F8CRS and Freddy-F5IRO, who put Glorioso Island-FT5GA on the air from 15 September to 07 October. With no more than 2 or 3 stations operating, they gave out 50,427 QSOs to 15,250 stations. The breakdown was 24,235 CW, 21,080 SSB and 5,112 RTTY QSOs. They also managed to work 132 DXCC entities on 20 meters. A job well done, considering the constraints under which they operated!

Their efforts most certainly should have knocked Glorioso out of the #4 Most Needed spot.

-- FATAL ANTENNA PROJECT --

At approximately 8:40 PM on Monday, 12 October, Melville Braham, 55, Anna Braham, 49, and their 15 year old son Anthony were killed while trying to erect a 50 foot vertical antenna at the home of the man's mother, Barbara Tenn-KJ4KFF, in Palm Bay, Florida. The deceased were not licensed amateurs.

"It happened in an instant," Palm Bay Fire Marshal Mike Couture said in a statement. "It is an unfortunate set of circumstances that led to the most tragic result."

The trio started erecting the antenna in the late afternoon. Continuing work after darkness fell, they lost control of the antenna and it crashed into nearby overhead power lines. The impact sent 13,000 volts of electricity through the metal tubing the three were holding.

The mother was pronounced dead at the scene. When paramedics arrived, the father and son were not breathing; rescue crews immediately tried to resuscitate them. They were transported to a hospital where they later died.

Neighbor Jim Vallindingham called 911 when he saw the fire in the back yard and then he ran over. "I had no idea it was electrical until we got over there and saw the three people laying on the ground. So I called 911 a second time to tell them there were casualties. You know, there were people on the ground.

(From the ARRL Web Site)

-- K4M, MIDWAY ISLAND OPERATION --

From 13 to 19 October, 19 international DXers put Most Needed Worldwide #24, Midway Island, on the air.



Decked out in their team t-shirts, the operators show off their national/state flags after shutting down.

60,759 QSOs were logged, made up of 37,033 CW, 20,789 SSB and 2937 RTTY contacts. A total of 18,452 stations were worked, and the

team managed to make DXCC on 20, 30, and 40 meters. This was accomplished with a lot of intense operating and equipment.



Flat-bed trailer loaded with the two tons of equipment shipped in advance to Midway Island.

The antennas were limited to verticals supported with heavily flagged guy lines. Reportedly, no birds collided with the systems.



The CW operators utilized the air conditioned bar.



The SSB operators, being more rugged individuals, were content to utilize a temporary tent shelter.

(Photos shown are from the K4M Web site, for which we are most appreciative.)

November 2009

Sun	Mon	Tue	Wed	Thu	Fri	Sat
1	2	3 Breakfast @ Peach's, ± 7:45 AM TARC Meet- ing @ 6 PM, Venice Li- brary	4 QCWA Lunch, 11:30 AM @ Denny's in Sarasota TARC DX Net, 8 PM, W4AC Repeater	5 TARC Emer- gency Net @ 7:30 PM, W4AC Repeater 146.805	6 Breakfast @ Peach's, ± 7:45 AM	7
8	9 DARN Emer- gency Net @ 11 AM & 7:30 PM, Starts on W4AC re- peater 146.805	10 Breakfast @ Peach's, ± 7:45 AM TARC Net @ 7:30 PM, 146.580	11 TARC DX Net, 8 PM, W4AC Repeater 146.805	12 TARC Emer- gency Net @ 7:30 PM, W4AC Repeater 146.805	13 Breakfast @ Peach's, ± 7:45 AM	14 TARC VE Session @ 10:00 AM, Venice Public Library
15	16	17 Breakfast @ Peach's, ± 7:45 AM TARC Net @ 7:30 PM, 146.580	18 TARC DX Net 8 PM, W4AC Repeater 146.805	19 TARC Emer- gency Net @ 7:30 PM, W4AC Repeater 146.805	20 Breakfast @ Peach's, ± 7:45 AM	21
22	23	24 Breakfast @ Peach's, ± 7:45 AM TARC Net @ 7:30 PM, 146.580	25 TARC DX Net, 8 PM, W4AC Repeater 146.805	26 TARC Emer- gency Net @ 7:30 PM, W4AC Repeater 146.805	27 Breakfast @ Peach's, ± 7:45 AM	28
29	30					

NOTE: If the W4AC Repeater is inoperative, nets scheduled for activity on the repeater will be held on the simplex frequency of 146.580 MHz. Thanks for your cooperation.

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

Name _____ Call Sign _____ Class ___ ARRL (Y/N)___
Local Address _____ City _____ Zip _____
Summer Address _____ City/State _____ Zip _____
Tel. No. _____ E-Mail _____ Application Date _____

Please check activity interests: Ass't Net Control __, RFI/TVI __, VE Testing __, Training __, Packet __, RTTY __,
Computers __, DXing __, Contests __, Field Day __, Publicity __, Emergency Communications __, Special Events __,
VHF/UHF __, SSTV __, ATV __, Repeater __, EchoLink __, Other (specify) _____

Single Member @ \$15.00/year __, Family Membership @ \$20.00/year __ (\$8.00 after 30 June for remainder of calendar year. \$15.00 after 31 October grants membership through remainder of year and all of the following year.)

MAIL TO: TARC, 1419 E. MANASOTA BEACH RD, ENGLEWOOD, FL 34223-6341

**TAMIAMI AMATEUR RADIO CLUB, INC.
1419 E. MANASOTA BEACH ROAD
ENGLEWOOD, FL 34223-6341**

The Communicator is a monthly publication
Of the Tamiami Amateur Radio Club, Inc.
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2009 TARC Officers

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