

# THE COMMUNICATOR

# **Newsletter of the TAMIAMI AMATEUR RADIO CLUB**

Incorporated 30 November 1984 – Venice, Florida
Mailing Address: 1419 E. Manasota Beach Rd., Englewood, FL 34223-6341
Web Site -- http://tamiamiarc.tripod.com
W4AC Repeaters – 146.805 MHz(-), 444.100 MHz(+) both w/100 Hz PL



#### -- **DECEMBER 2006** -

#### -- PRESIDENT'S MESSAGE --

Well, here it is almost December and the temperature is in the 80's. I always have a bit of trouble getting into the Christmas Spirit when I'm looking at palms. Regardless, we'll probably be doing some decorating this weekend.

Speaking of the weekend, the TARC will have a table at the Tampa Bay Hamfest on December 2. We will be selling off certain items that have been donated to the club, for the benefit of our treasury. Any member who wants to sell personal items from the club table may do so, however, we are asking that they give 10% of the sale price to the club. With the virtuoso salesmanship style of Peter Pesa-N4RD, all items should move very well. I do hope that all who attend this Hamfest will enjoy it.

Reservations for our Christmas Dinner have been going very well, and it looks like we'll have at least 40 people in attendance at the Englewood Elks Lodge on December 7. If you would like to join with us, but haven't made your reservation, contact Don Gray-WD7A as soon as possible.

Happy Holidays to all of you!! VY 73 de Konrad-WA3RRS

### -- TARC WEEKLY NETS --

The TARC Simplex Net meets every Tuesday at 7:30 PM on 146.580 MHz; the TARC Net is held every Thursday, except on meeting dates, at 7:30 PM on our 146.805 W4AC Repeater (- 600 Hz offset and 100 Hz PL tone required. These nets provide a good opportunity to blow the dust from your rigs and check up on the activities of your fellow members. So try to set some time aside each week for our nets.

In addition, the Snowbird Net meets daily on 14.278 MHz @ 10 AM, and on 7.230 MHz @ 7 PM. All are welcome to participate.

#### -- UPCOMING DARN ACTIVITY --

NOTICE: The Diocese Amateur Radio Network (DARN) will NOT conduct communications exercises in December. However, the management and members of the DARN want to wish one and all the very best for a Merry Christmas. Keep in mind the true reason for this holiday.

# -- DECEMBER MEETING --

Our next TARC meeting will be at 7:00 PM on 14 December 2006 in the Community Room of The Gulf Coast Community Foundation of Venice, 601 South Tamiami Trail (Business US 41), across from the Venice Regional Health Center. This will be our Annual Meeting, with election of officers for 2007. The newly released video of the February 2006 3Y0X Peter I Island DXpedition will be shown. Come out and show support of your club.

#### -- "OMNIBUS" DOCKET TAKING EFFECT --

The changes to the amateur radio rules set forth in the "Omnibus" WT Docket 04-140 will take effect at 12:01 AM EST on 15 December 2006. The highlights, with regard to operating privileges include:

- For Amateur Extra licensees, the 75-meter Phone band will start at 3.600 MHz, Advanced licensees will start at 3.700 MHz, and General licensees will start at 3.800 MHz. While CW is allowed in the entire band, the high end of the RTTY/Digital band will be 3.600 MHz.
- ➤ On 80 meters, Novice and Tech+ licensees can use CW from 3.525-3.600 MHz.
- ➤ On 40 meters, Amateur Extra and Advanced licensees will be able to operate Phone beginning at 7.125 MHz, while Generals will start at 7.175 MHz. The top end of the RTTY/Digital band will be 7.125 MHz. Novice and Tech+ licensees can use CW from 7.025-7.125 MHz.
- > There are no changes to the 20-meter band.
- ➤ On 15 meters, the General class Phone band will start at 21.275 MHz. Novice and Tech+ licensees can use CW from 21.025-21.200 MHz.
- On 10 meters, Novice and Tech+ licensees can operate CW/RTTY/Digital from 28.000-28.300 MHz.

A full color frequency chart showing these changes is at <a href="http://www.arrl.org/announce/regulatory/wt04-140/Hambands3\_color.pdf">http://www.arrl.org/announce/regulatory/wt04-140/Hambands3\_color.pdf</a> .

(From ARRL Bulletin 27, 22 November 2006)

"Nothing is more despicable than respect based on fear." – Albert Camus (1913-1960)

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# TAMIAMI AMATEUR RADIO CLUB Minutes of the Meeting 09 November 2006

President Konrad Owens-WA3RRS called the meeting to order at 7:26 PM and led the pledge of allegiance. Special recognition was given to new TARC member Dave Sheffer-KD8CGA. Introductions were then made all around.

MINUTES –Secretary Jack Sproat-W4JS asked for a motion that the minutes of the 12 October 2006 meeting be accepted as published in the November 2006 issue of *The Communicator*, and seconded by Bob Curts-KA9ZAZ. Diana Gregory-KI4GRF asked that the minutes be amended to state, under Public Relations, that, "Diana will not conduct such training if there are more than 10 students involved." Acceptance of the amended minutes then passed.

# **CORRESPONDENCE** – Nothing to report.

TREASURER'S REPORT – Treasurer Don Gray-WD7A reported that the 12 October starting balance was \$4247.91. Receipts were \$11.00 from the October 50/50 drawing, \$15.00 for a new member's dues, and \$240 for renewed dues from 16 members, totaling \$266.00. Expenses were \$41.00 for one month's Internet service at the W4AC Repeater site, and \$11.01 for printing and stamps, totaling \$52.01. The 09 November ending balance, disregarding income at tonight's meeting, is \$4461.90. Diana-KI4GRF moved acceptance of the report, seconded by Jeff Watson-W9NYX, and passed.

#### **COMMITTEE REPORTS**

**SUNSHINE** – No news of any illnesses.

**VE TESTING** – Jack-W4JS reported that three candidates are coming to the 11 November VE session.

**REPEATER/TECHNICAL** – Stew Haag-W4MO reported that our W4AC Repeater is operating satisfactorily. Stew commented that there are some problems with the Englewood On Line (EWOL) wireless Internet service. EWOL has promised to improve the slow connection speed that is degrading the performance of the remote radios.

**CLUB PROPERTY** – Konrad advised that a Kenwood TS-530SP donated to the TARC by Bill Caldarone-W1JYF is now available for use by club members. If there is no interest, it will be offered for sale at the Tampa Bay Hamfest.

**PUBLICITY/MEMBERSHIP** – Don-WD7A reported that we now have 83 members on the roster. Don advised that the officers are considering sending out cards to the amateurs in the Venice area, advising them of our club and its activities.

**EMERGENCY COORDINATOR** – Peter Pesa-N4RD reminded all of the Venice Diocese Amateur Radio Network (DARN) radio drills, held on our W4AC Repeater the second Monday of each month at 11 AM and 7 PM. Peter, Stew-W4MO and Bob Avrutik-N1RA have investigated the possibility of having a ham radio station at the Englewood First Baptist Church, located at Cowles and Mango streets. The site was considered unsuitable for a HF station, however, a J-pole antenna there would provide excellent access to our W4AC Repeater on River Road. Peter suggested some interaction between this church and the DARN.

**NET OPERATIONS** – Konrad reported that net participation is improving, with nine stations on the last simplex net and 13 on last week's TARC Emergency Net on our W4AC Repeater.

**PUBLIC RELATIONS** – John Watson-KI4QOG stated that he is still trying to increase interest among the students at Pine View School for creation of an amateur radio club. Diana-KI4GRF reported she has sent flyers to all of the local schools announcing a Morse code demonstration to be held on 17 November.

LIAISON TO QCWA – Jack-W4JS reported that 25 Suncoast Chapter 53 members and friends attended the 01 November luncheon meeting held at Denny's on Bee Ridge Road, Sarasota. TARC members Don Gray-WD7A and Roger Schmitt-WB4HDW joined the Chapter at that meeting. The program at the 06 December meeting will be presented by Metro Crime Prevention of Florida.

**OLD BUSINESS** – Konrad asked Bob-N1RA and Stew-W4MO if there had been any response to their offers to demonstrate alternative modes such as PSK, RTTY, SDR and Remote Radio at their stations. Bob has had one query, but Stew responded in the negative

**NEW BUSINESS** – Konrad announced several items of interest to the membership:

- ➤ Tampa Bay Hamfest, 02-03 December Don-WD7A has advance sale tickets available for \$6, a \$2 discount. A Coordination/Transportation Committee comprised of Charlie Covell-W4DB, Bob-N1RA and Peter-N4RD will oversee collection and transport of equipment being offered for sale at the Hamfest. Setup will be on Friday 01 December. Club members may offer personal items for sale, with 10% of the sale price going to the TARC.
- ➤ TARC Christmas Dinner—The dinner will be held 07 December at the Englewood Elks Club. Reservations are \$20/person, and Don –WD7A must have all reservations before 05 December.
- ➤ Nominating Committee Konrad asked for volunteers for a Nominating Committee for 2007 officers. Charlie--W4DB moved we reelect the

See MINUTES, page 5

### CURRENT/PENDING DX ACTIVITY & PROPAGATION FORECASTS

CURRENT and/or SCHEDULED DX ACTIVITY										
COUNTRY – CALL SIGN ACTIVITY BEAR- HF BANDS and BES				BEST C	OPENING TIMES (GMT)					
COUNTRY - CALL SIGN	PERIOD	ING	80	40	30	20	17	15	12	10
Chagos – VQ9JC	Now to 30 Jan	54	22-01	21-02	21-23	16-19	17-18	15-17	NO	NO
Malawi – 7Q7HB	Now to 15 Jan	90	22-04	21-04	20-00	17-21	17-20	15-19	17-19	NO
Djibouti – J20SA	Now to 16 Dec	61	22-03	21-04	21-00	17-21	18-20	15-19	15-19	NO
Burkina Faso – XT2CW	Now to 12 Dec	83	22-07	20-08	18-23	13-21	14-20	15-19	15-19	NO
Morocco – CN2WW	Now to 11 Dec	64	21-08	19-10	12-23	13-20	14-19	15-18	15-18	NO
So Shetland Is – LZ0A &VP8/LZ1UQ	01 Dec – 01 Mar	169	01-07	00-09	01-08	2300	NO	NO	NO	NO
American Samoa – KH8Q	01 – 14 Dec	256	05-13	03-15	03-16	14-00	18-22	19-21	19-21	NO
Lakshadweep Is – VU7LD	01 – 31 Dec	36	22-02	22-02	20-22	13-21	15-19	15-18	16-18	NO
So Sandwich Is – LR5OU	07 – 12 Dec	154	00-06	23-08	23-08	21-08	NO	NO	NO	NO
Tonga – A35GN	25 Dec – 03 Jan	253	05-13	04-15	07-16	17-23	18-21	19-21	20-21	NO
Burkina Faso - XT2 by 5 Operators	06 – 20 Jan	83	22-08	20-08	19-00	13-22	15-20	16-18	16-18	NO
Lakshadweep Is – VU7RG	15 – 25 Jan	36	23-02	22-02	20-23	13-21	15-18	16-19	NO	NO

Updated 29 November 2006, based on 29 November 2006 *QRZ DX*, 27 November 2006 *The Weekly DX*, and *K1XN's DX Alert 611-B*Note: Time in bold = Best Band(s) for opening; ??? = Call Sign not yet known; ++ = Phone Only; \*\* = CW Only; NO = No Opening forecast.

Long Path bearings and opening times are underlined. All forecasts are calculated using *W6ELProp V.1.03* propagation software, available at <a href="http://www/qsl.net/w6elprop/">http://www/qsl.net/w6elprop/</a> by Sheldon C. Shallon-W6EL. Solar Flux and K-index varied in accordance with NOAA 27-day forecast.

# -- NOVEMBER SOLAR ACTIVITY --

During November, the Solar Flux ranged from 77 up to 97, with a mean value of 86.3 (vs. 86.5 for November 2005 and 113.2 for November 2004). The Aindex was < 10 on 23 days.

There were several days during November when the mid-latitude geomagnetic field ranged from disturbed to minor storm levels, with localized major storm periods at high latitudes. During the third week of November there were no visible sunspots for several days. Space weather was rather well as forecast, and propagation conditions were generally favorable during the month.

#### -- DECEMBER PROPAGATION --

During December, solar activity is expected to be at very low levels. No greater than 10 MeV proton events are expected.

The greater than 2 MeV electron flux at geosynchronous orbit is expected to be at high levels during 08-12 December and 22-25 December.

The geomagnetic field is expected to be mostly quiet to unsettled levels for the majority of the period. A recurrent coronal hole high speed wind stream is expected to affect the field during 07-08 December with active to major storm periods expected. Another recurrent high speed stream is expected to affect the field during 20-22 December with active to minor storm conditions expected. The Solar Flux should range from 75 to 95 during December.

(From NOAA Weekly Highlights and Forecasts, 29 November 2006 and NOAA 27-day Space Weather Outlook Table, 29 November 2006.)

## -- LACKSHADWEEP PROPAGATION --

On 20-12 meters, both long and short paths could be open at the same time, with any long path openings lasting about one hour longer than the short path.

## --STEPPIN' UP AT K1NOK --

Bob Marchese-K1NOK is the proud owner of a new 3-element SteppIR yagi. "The SteppIR is a REAL performer. It really does replace a linear feeding a trapped beam. I enjoy the 180 degree feature....it saves wear and tear on the rotor. And I hear a lot of DX saying 'K1NOK, BIG SIGNNAL'....music to the ears....Hi"

Bob's son, Adam-KA1RDT, got the beam up, then Bob climbed up to flash the "V for victory" sign.



## **CONTESTS & ACTIVITIES**

Contest/Special Event	Begin-End Times/Dates	Bands/Modes	QSO With	Exchange
TARA RTTY Melee	0000Z 02 Dec	80 – 10 Meters	Anyone, Anywhere	R/S + State
	2400Z 02 Dec	RTTY Only		
ARRL 10-Meter Contest	0000Z 09 Dec	10 Meters Only	Anyone, Anywhere	R/S/(T) + State
	2400Z 10 Dec	Phone & CW		
Czech DX RTTY Contest	0000Z 16 Dec	80 – 10 Meters	Anyone, Anywhere	R/S/T + CQ Zone
	2400Z 16 Dec	RTTY Only		
PSK31 Death Match	0000Z 16 Dec	80 – 6 Meters	Anyone, Anywhere	Name + State
	2400Z 17 Dec	PSK31 & PSK63		
Croatian CW Contest	1400Z 16 Dec	160 – 10 Meters	Anyone, Anywhere	R/S/T + Serial
	1400Z 17 Dec	CW Only		Number
RAC Winter Contest	0000Z 30 Dec	160 – 2 Meters	Anyone, Anywhere	R/S/(T) + Serial
	2359Z 30 Dec	Phone & CW		Number
ARRL Straight Key Night	0000Z 01 Jan	80 – 10 Meters	Anyone, Anywhere, rag-	"SKN" then it's
	2359Z 01 Jan	CW Only	chewing with a straight key	up to you

From December 2006 issues of QST and WorldRadio

#### -- THE CODE TALKERS --

(Every year around 14 August, Herb Goodluck-N7HG activates Special Event Station N7C from Window Rock, Arizona to commemorate National Code Talker's Day. Herb's dad was a Navajo Code Talker with the US Marines 3<sup>rd</sup> Division Signal Unit during WW II. What follows is a brief overview of the Indian Code Talker contributions to the US military, going back to World War I.)

Few are aware of the fact that American Indians were not granted citizenship in the land that was originally theirs until 02 June 1924. Despite being apparently unclassified residents at the time, many Indians enlisted in the US military services during the First World War. In France, the 142<sup>nd</sup> Infantry Regiment of the 36<sup>th</sup> Division had a company of Indians who spoke 26 different languages or dialects only four or five of which had been put into writing. Two Indian officers were selected to supervise a communications system staffed by fourteen Choctaw Indians. They were used in the regiment's October 1918 operations in the Chufilly-Chardeny zone, transmitting in their native tongue a variety of open, voice messages relating to unit movements. Enemy forces were completely surprised, and obviously could not translate the messages. It was not until the annual Choctaw Labor Day Festival in 1986, however, that official recognition was given to the role of the Choctaw Code Talkers in WW I.

In World War II, the US Army used Indians in its signal communications operations. A group of 24 Navajos was assembled to handle telephone communications, using voice codes in their native tongue, between the Air Commander in the Solomon Islands and various airfields in the region. In Europe, the 4<sup>th</sup> Signal Company of the Army's 4<sup>th</sup> Infantry Division

was assigned 16 Comanches as voice radio operators, transmitting and receiving messages in their own unwritten language. On 12 September 1944 the 4<sup>th</sup> Signal Company was commended for outstanding service between 06 June 1944 and September 1944. On 03 November 1989 the French government honored both the Choctaw and Comanche Code Talkers.

Undoubtedly the Navajo Code Talkers are those who come to mind when "code talker" is mentioned.



These code talkers were descendents of the men and women who, less than 80 years before, had been uprooted from their ancestral homes and driven like cattle some 300 miles to Fort Sumner—literally a concentration camp—in what is known as "the long march" in 1864. The code talkers were the descendants of the Navajo men and women whose homes, crops and fruit orchards were burned by Kit Carson and his men, and who, after four miserable years, were finally allowed to return to rebuild their homes in what was then just a scorched wilderness.

It is estimated that in early 1942 less than 30 non-Navajos could understand the Navajo language. One of them was Philip Johnston, the son of a missionary,

See CODE TALKERS, page 5

### **CODE TALKERS, from page 4**

who had been raised on the reservation from the age of four years. Johnston had only Navajo friends to play with, and, in due course, he became fluent in the Navajo tongue. Johnston served in WW I and knew of the service the Choctaws had provided in coded communications. Early in 1942, Johnston met with Marine officers at Camp Elliott, north of San Diego, and demonstrated how the Navajo language could be utilized. Impressed, the call went out for volunteers and 29 Navajo men responded. Ultimately, 420 Navajo qualified as Code Talkers.

The initial 29-man team set about converting the 211 words most commonly used in military lexicon into familiar, appropriate Navajo words. For example:

Bomber	Jay-sho	(Buzzard)
Submarine	Besh-lo	(Iron fish)
Grenades	Ni-ma-si	(Potatoes)

Later, 200 additional terms were added to the vocabulary. In addition, a phonetic alphabet was created and alternate terms were selected for the 12 letters most commonly used in English. For example:

A	Wol-la-chee	(Ant)
A	Be-la-sana	(Apple)
A	Tse-nihi	(Axe)
L	Dibeh-yassie	(Lamb)
L	Ah-jad	(Leg)

Thus, the phonetics for *Guadalcanal* would be spelled Goat-Ute-Ant-Deer-Apple-Lamb-Cat-Axe-Nut-Axe-Leg to avoid repetition of phonetic letters.

The Navajo Code Talkers took part in every assault the US Marines conducted in the Pacific from 1942-1945, serving in all six Marine divisions, Marine Raider battalions and Marine parachute unites, transmitting messages by telephone and radio in their native language—a code that the Japanese never broke. At Iwo Jima, Major Howard Connor, 5<sup>th</sup> Marine Division signal officer, declared, "Were it not for the Navajos, the Marines would never have taken Iwo Jima." Connor had six Navajo Code talkers working around the clock during the first two days of the battle. Those six sent and received over 800 messages, all without error.

On 17 September 1992 the Navajo Code Talkers of WW II were honored for their service with dedication of an appropriate exhibit in the Pentagon.

(From *The Navajo Code Talkers*, 25<sup>th</sup> Anniversary Edition, Doris A Paul, Dorrance Publishing Co., 1973; Code Talkers--Use of the Native Indian Tongue for Secure Communications, from OCMH Study 57, William Gardner Bell, <a href="http://www.army.mil">http://www.army.mil</a>; Navajo Code talkers: World War II Fact Sheet, Alexander Molnar, Jr., <a href="http://www.history.navy.mil">http://www.history.navy.mil</a>)

# MINUTES, from page 2

- ➤ existing officers, which resulted in vocal approval. In consideration of this endorsement of the current officers, no Nominating Committee was named. At the December Annual Meeting, the floor will be opened for any nominations for officers, and a voice vote will take place thereafter.
- ➤ Orlando Hamfest Charter Bus About 10 members indicated they would be interested in taking this bus on 10 February. As at least 35 passengers are required, Konrad will contact the Englewood and North Port radio clubs for potential passengers. The cost would be about \$30/person.

**ADJOURNMENT** – A motion to adjourn at 8:18 PM was made by Charlie-W4DB, seconded by John-KI4QOG, and passed. There were 22 members present.

**PROGRAM** – A video of the 1996 ZL8RI Kermadec Island DXpedition was shown.

Jack Sproat-W4JS Secretary

## -- A SUNNY DAY IN LONDON-TOWN --



Roger Schmitt-WD4HDW and his wife, Donna, are shown above along the Thames River, with the Tower Bridge in the background. While in London, they visited a replica of Churchill's WW II bunker. See those photos on page 6.

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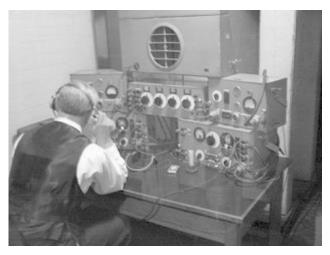
-0-

## -- REPLICA OF CHURCHILL'S BUNKER --

The following photos show the planning room, the intelligence section and a communications station. The BBC also had a commercial broadcast station set up in this bunker, from which scheduled broadcasts emanated.







"The bigger the information media, the less courage and information they allow. Bigness means weakness." – Eric Sevareid, American Newsman, 1959

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#### -- ARRL MEMBERSHIP ADJUSTMENT -

Dave Sumner-K1ZZ, ARRL CEO and Secretary took issue with the derivation of ARRL members shown in the article "U.S. Licensing Data Update" in November's issue of *The Communicator*. In a 21 November e-mail to your editor, Dave states, "(T)he figures in the annual paid subscriber statement.....do not reflect ARRL membership, which currently is around 148,000 (including about 10,000 Associate and International members). The difference between that and the USPS figures arises because of family members, as well as the fact that USPS does not allow us to count most Life Members as paid subscribers."

Your editor replied in two e-mail exchanges with Dave that the gist of the tabulation was to show that both licensing and ARRL membership are declining. We noted also that both England and Australia have witnessed some licensing growth after the Morse code requirement was dropped in those countries, and expressed the hope that the same may happen in the US once the FCC drops the Morse requirement.

### -- REGIONAL HAMFESTS --

02-03 Dec Tampa Bay Hamfest at Manatee

Civic Center, 1 Haben Blvd, Palmetto. TI: 145.190, Info: Jim-

KG4JSZ, 863.422.0176

09 Dec Silver Springs RC Hamfest, Marion

County Extension Complex, 2232 NE Jacksonville Rd., Ocala. TI: 146.610 (PL 123.0), Info: Bill-

N6WGM, 352.873.2017

(From <a href="http://bellsouthpwp.net/k/kb4vol">http://bellsouthpwp.net/k/kb4vol</a>, the Web site of Bill Britton-KB4VOL and November *QST*)

# -- ITEMS DESERVING YOUR ATTENTION -- Please take heed of the following items:

<u>TARC Christmas Dinner</u> – Mark 07 December on your calendars for this event.

Time -6:00 - 6:30 PM: Attitude Adjustment w/ Cash Bar. Meals served at 6:30 PM

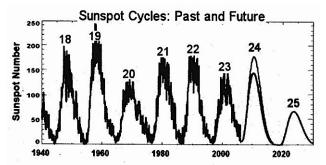
Menu – Prime Rib of Beef <u>or</u> Chicken Cordon Bleu. Appetizer/salad, beverage and dessert included.

Cost -- \$20/person, including tax and gratuity Contact Don Gray-WD7A, 496-8495 or via donald.gray26@verizon.net ASAP.

<u>2007 TARC Dues</u> – Dues payments for 2007 are now being accepted. Please complete a new Membership Application form and submit it with your dues payment. This will avoid any confusion regarding dues payment status.

## -- FUTURE SUNSPOT CYCLES --

Radio Amateurs should make ultimate use of the upcoming Sunspot Cycle 24, as Cycle 25, forecast to peak around 2022, could be one of the most inactive in centuries.



Hathaway's forecasts for Cycles 24 and 25, showing maximum of 145 sunspots for Cycle 24 vs. Mausumi Dikpati's forecast of about 185 sunspots.

Solar physicists have determined that between the core and surface of the Sun there is a Great Conveyor Belt. This Belt is a massive circulating current of fire (hot plasma) within the Sun. It has two branches, north and south, each taking about 40 years to perform one complete circuit. Researchers believe the turning of the belt controls the sunspot cycle, and that's why the slowdown is important.

"Normally, the conveyor belt moves about 1 meter per second—walking pace," says NASA solar physicist David Hathaway. "That's how it has been since the late 19<sup>th</sup> Century." In recent years, however, the belt has decelerated to 0.75 m/s in the north and 0.35 m/s in the south. "We've never seen speeds so low. It's off the bottom of the charts. This has important repercussions for future solar activity."

According to theory and observation, the speed of the belt foretells the intensity of sunspot activity—20 years in the future. A slow belt means lower solar activity; a fast belt means stronger activity. "The slowdown we see now means that Solar Cycle 25, peaking around the year 2022, could be one of the weakest in centuries," says Hathaway.

Hathaway's forecast should not be confused with another recent forecast. A team led by physicist Mausumi Dikpata of NCAR has predicted that Cycle 24, peaking in 2011 or 2012, will be intense. "Cycle 24 will be strong. Cycle 25 will be weak. Both of these predictions are based on the observed behavior of the conveyor belt," says Hathaway.

How do physicists observe a belt that plunges 200,000 km beneath the surface of the Sun? "We do it using sunspots," explains Hathaway. Sunspots are magnetic knots that bubble up from the base of the conveyor belt, eventually popping through the surface of the Sun. Astronomers have long known that sunspots have a tendency to drift—from mid-solar

latitudes toward the Sun's equator. According to current thinking, this drift is caused by the motion of the conveyor belt. By measuring the drift of sunspot groups, the conveyor speed can be indirectly measured.

Using historical sunspot records, Hathaway has succeeded in clocking the conveyor belt as far back as 1890. For more than a century, the speed of the belt has been a good predictor of future solar activity.

(From *Science at NASA*, by Dr. Tony Phillips, on <a href="http://www.physorg.com">http://www.physorg.com</a>)

#### -- COMPUTER SHOPPING TIPS --

With Christmas discounts being widely advertised, it's a tempting time to spring for a new computer. Computer-savvy experts, however, suggest delaying any such purchases until February. The Windows world is on the verge of an upheaval. Microsoft is about to replace Windows XP with the first all-new version of Windows in more than five years.

It's called Windows Vista and it's likely to be more secure and easier to use than XP. However, Vista won't be available until around 30 January 2007. So, all those brand-new Windows computers you might buy due to those Christmas discounts will be powered by an operating system now on its last gasp.

Of course, you can upgrade most newly purchased Windows XP computers to Windows Vista after January, however, there's a catch. You can now buy a new machine that offers an Express Upgrade, bearing a "Vista Capable" sticker. This will provide copies of Vista for free or at reduced prices. However, upgrading PCs to major new operating system releases can be a tricky business. Often it works fine, but in many cases there are significant problems.

Furthermore, the free or discounted upgrade program will, in most cases, entitle users of the common Home edition of XP to obtain only a stripped down version of Vista called Home Basic. This version lacks many of the best features of the Vista OS. If you want to be able to upgrade to the Home Premium version of Vista, which offers the most features, any computer now purchased must be designated as being "Premium Ready."

When the time comes to buy a new Vista machine, to fully utilize the power of this OS, it should have two gigabytes of memory, a discrete graphics card with at least 128 Mbytes of dedicated video memory, the processor should be a dual core processor running at one GigaHz, and the hard disk should have 200 Gigabytes of space.

(From "PC shopping tips—if you must buy a computer now," Walter Mossberg, *Sarasota Herald-Tribune*, 30 October 2006)

# 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		
Please check activity int	terests: Ass't Net Control_	_, RFI/TVI, VE Testing,	Training, Packet, RTTY,
Computers, DXing	, Contests, Field Day,	, Publicity, Emergency Com	munications, Special Events,
VHF/UHF, SSTV,	ATV, Repeater, Echo	oLink, Other (specify)	
	, Family Membership @ \$18.50/ uinder of year and all of the following	•	nder of calendar year. \$15.00 after 31 October

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. Editor: Jack Sproat – W4JS

Editor: Jack Sproat – W4JS Circulation: Don Gray – WD7A

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V. President: Matt Klapp – W2EQV
Secretary: Jack Sproat – W4JS
Treasurer: Don Gray – WD7A
Directors: Croft Taylor – VE3CT
Jon Hamlet – W4ZW

Bob Avrutik – N1RA Stew Haag – W4MO