### Palos Verdes Amateur Radio Club





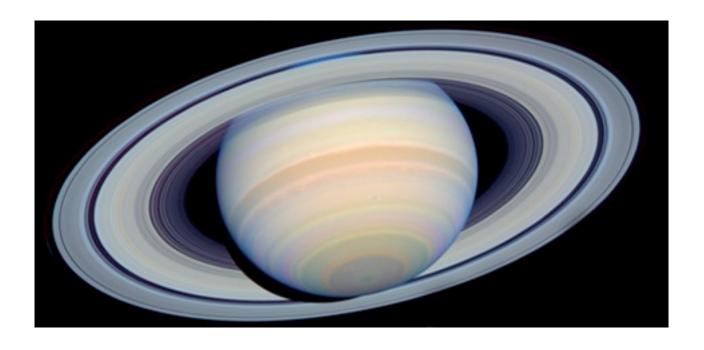




## 2007 Christmas-Holiday Dinner-Friday Dec. 14; 6:00 p.m.

With JPL Speaker David Doody Project Manager, Communications Cassini Saturn Craft

Deadline Has Been Extended to Tuesday (tomorrow) Dec. 11th - Call Bill Harper to order your tickets.





**David Doody** has been interested in interplanetary space flight since he was six. He began his flying career in a plywood play rocket that his father built in the backyard of the family's Teaneck, N.J., home. The 16-foot-high, silverpainted structure could fit half a dozen kids inside. "My friends and I could fly around the solar system in this real cool spaceship," he says. "I've been a space nut ever since."

Nowadays, Doody is operating spacecraft with friends for real. He leads the flight operations controllers for <u>Cassini</u>, a NASA spacecraft which arrived at Saturn in July 2004 and is currently sending back information. Doody's team at NASA's Jet Propulsion Laboratory in Pasadena, Calif., is in charge of the data

exchanges with the spacecraft through the <u>Deep Space Network</u>, a sort of communication hub between Earth and distant spacecraft like Cassini.

As an engineer at JPL since 1985, Doody worked on the <u>Voyager</u> mission to outer planets and the <u>Magellan</u> mission to <u>Venus</u> before joining the Cassini mission. "To be able to work on projects that are flying to the planets has been really a dream," said Doody.



After a stint in the Air Force, Doody, a commercial pilot, worked as an instructor for Japan Airlines. He then worked as a systems engineer on Santa Catalina Island while living aboard a 46-foot sailboat with his late partner Donald Whiting. They moved ashore to the Los Angeles area so that Doody could combine his passion for computers and teaching in a job with the Deep Space Network.



David Doody is the lead author of the classic, and highly readable, training text *Basics of Space Flight*. A detailed overview of the physics behind space exploration and the basics of spacecraft design, it was written to train JPL flight controllers, and now we can all read it on line at <a href="http://www2.jpl.nasa.gov/basics/">http://www2.jpl.nasa.gov/basics/</a> Among the many links in this text is one to Doody's Gravity-Assist Mechanical Simulator with diagrams and instructions for building one.

In his spare time David Doody creates free buildable scale models of JPL Space-craft which can be downloaded from <a href="http://www.jpl.nasa.gov/scalemodels/">http://www.jpl.nasa.gov/scalemodels/</a> "If you build the Cassini model, for example", said Doody, "you'll know all about the spacecraft and its parts, not just words and pictures. You'll have to put the camera exactly here -- and you know exactly where it is, and how the spacecraft has to turn to use the camera."

He also volunteers his time on PlanetTrek, <a href="http://planettrek.planetary.org/">http://planettrek.planetary.org/</a> a Planetary Society project to build a scale model of the solar system. The five-foot sun will be at JPL, the less than peasized first planet, Pluto, five miles from it, and the balance of the solar system's planets will radiate into the Pasadena community at scale distances and sizes.

And a few times a year, when a planet is right for viewing, you'll find him setting up a telescope in busy Old Town, Pasadena, offering free views of Jupiter and Saturn through the JPL Astronomy Club's massive Tinsley Cassegrain telescope, and sharing his life-long passion for our solar system.

The information above was taken from various websites. So thank you to some anonymous writers for their words, and apologies to them if I got it wrong. Editor.



### **Some Definitions**



#### Cassini

The spacecraft Cassini is a sophisticated robotic spacecraft meant to orbit Saturn and study the ringed-planet's system over a four-year period. Launched October 15, 1997 on a Titan 4 rocket from Cape Canaveral, Florida, Cassini flew twice past Venus and then once each past Earth and Jupiter to borrow gravitational energy to speed it on its way.

The spacecraft's 12 measuring devices have been gathering data on the planet, its moons, rings, and magnetic environment. The Huygens probe, dispatched from Cassini, will sample Titan's atmosphere and take photos of its hidden surface and sending it home since its arrival in 2004.

The probe is fittingly named for Christiaan Huygens, a Dutch scientist who in 1659 identified the planet's rings and discovered Titan. And the spacecraft, named for Italian-French astronomer Jean-Dominique Cassini, who, in 1675, discovered four of Saturn's moons and first noticed a break in the planet's rings.

#### **Deep Space Network**

The NASA Deep SpaceNetwork (DSN) is an international network of antennas that supports interplanetary spacecraft missions and radio and radar astronomy observations for the exploration of the solar system and the universe. The network also supports selected Earth-orbiting missions.

The DSN currently consists of three deep-space communications facilities placed approximately 120 degrees apart around the world: at Goldstone, in California's Mojave Desert; near Madrid, Spain; and near Canberra, Australia. This strategic placement premits constant observation of spacecraft as the Earth rotates, and helps to make the DSN the largest and most sensitive scientific telecommunications system in the world.



## Palos Verdes Amateur Radio Club Annual Christmas Holiday Dinner

Point Vicente Interpretive Center 31501 Palos Verdes Drive West, Rancho Palos Verdes

Friday, December 14th, 2007 Happy Hour at 6:00 PM, followed by dinner at 7:00 PM

#### Dinner Menu:

Macadamia encrusted Salmon with a pineapple vanilla butter sauce; Carving station with Sirloin of Beef plus Leek Mashed Potatoes, Vegetables, Rolls & Butter. A Dinner Salad is included with mixed greens, pecans, sliced apple and gorgonzola with a Raspberry Vinaigrette. Appetizers include an Assorted Cheese Platter with Gourmet Crackers and Artichoke Dip or Shrimp with Cocktail Sauce. Dessert follows with a Cheesecake Bar with an array of toppings. Price is \$37.50 per person.

For Reservations and Payment Information, please contact Bill Harper-WA6ESC at (310) 377-8267 or via palosverdesarc@cox.net







# The President, K5KT, Pontificates

Are you

ready for a very nice Dinner Party? Coming up on Friday, 14 December, is the one we're all waiting for. Right?? Well if you aren't, you should be. It will be a FUN, FUN time. Excellent food in a most beautiful setting overlooking Point Vicente and the Pacific Ocean (remember last year?); PLUS great raffle prizes!! We have not been advertising the excellent prizes until now; but, they are significant. How about a nice, new HT for chatting with our fellow club members on the K6PV repeater and others on the 70CM band. How about a nice, new ARRL Antenna Handbook (complete with the CD), or a Repeater Handbook, or other similar prize. Through the generosity of Jun's Electronics/Hamcity we have obtained these prizes for our Club Banquet at significant savings. And by the way, these items will be the Raffle prizes. The tickets will be provided to each person attending at no extra charge. Each couple will have about one chance in 30 with individuals about one in 60 or so. Not bad odds for just showing up! In addition, we will have a special little surprise package for each lady! PLUS, there will be two very nice Ladies prizes in a separate raffle (for Ladies only...OK... it IS redundant... so what!!)! That will provide about one in 30 odds; again not too bad, just for showing up!

Come one, come all and enjoy the fellowship and fun of our 2007 Christmas / Holiday Party at the Point Vicente Interpretive Center. You can even come a little early and peruse the very interesting Museum. And on top of all of this is a most interesting program on one of our exciting space programs. So, if you have not already reserved your spot, there is still (a little) time to do so. Come on and join us for this fun event! We wish to see you all at this annual Club event!

Well, last month was the exciting CQ (sponsored) World-Wide DX Contest (CW). I again got on my favorite band - 40 Meter CW and enjoyed the DX fun as planned. Propagation and station / country activity was better than October's SSB activity, as hoped for! I managed a good bit of time for the contest and ended up with nearly 200 contacts, 30 zones (of 40 total), and over 90 countries. Not too bad for 40 Meters in a single weekend. I could have increased my QSO totals by calling CQ and working numerous JA's (Japan); but, then that would have dramatically increased my number of incoming QSL cards as well. Maybe more next year! Anyway, it was fun and hope you managed to enjoy some of one of the best contests of the year. Sure.....This is another HF activity, and IT IS FUN!! Upgrade for your license class?? More/better HF antennas and equipment?? Just might be worth the effort(s)! If you need any information and or help with any of this, just let us (any of the BOD) know.

Are there any 'issues' that might be affecting the Club. The monthly Newsletter – QRO is really an excellent publication – Thanks Ginger. I think we have had reasonable Programs Thanks Denzel!. I think we have had FUN events –Field Day, Picnic, up-coming Christmas Holiday Banquet to name a few activities as well as the regular Club meetings, complete with Coffee and Cookies (Thanks Doris). So... what is 'the' issue? Well actually, we are looking for a new leader. Is there anyone ready and willing to

help with Club activities? I am a 'one-term' President. This is my SECOND term as President (remember 1984/5?). I'm ready to advise a new person for next year! Any volunteers? Most of the rest of the BOD (VP, Treasurer, and Directors) are comfortable with their spots and plan to run for a second term. Please think about it. This is a good time for giving (back). It can be a very

enjoyable and exciting experience. We the people of the Club will assist and provide information needed to go on for another year and more! We need YOU!.... At least ONE of YOU! Come on and take over. We're ready to do it YOUR way!

See you at the Christmas Holiday Party! Come one, come all! Vy 73 Joe



## De the VP, Denzel Dyer, KG6QWJ

No new changes in the program schedule.

The Christmas Party is a bare week away! The dinner sounds great, and our speaker, David Doody of JPL, will have a very interesting presentation on the Cassini mission, with fantastic pictures. All that will be followed by a drawing for door prizes, several of them well worth the trip.

Sometime around the January meeting, we will have an election for Club officers. Feel free to run for Vice-President!!

WA6ESC

# Treasurer's Report Bill Harper December 2007

PVARC Balance \$3,915.24 John Alexander Fund: \$ 798.00 Repeater Fund: \$ 862.66

Total Bank Balance \$5,575.90 Membership 2007 121 ARRL Members In January we will hear about RDF and transmitter hunting from a real expert, Joe Moell, K0OV.

February: Joe Haslett, on HF amateur radio while sailing balsa rafts along the coast of Ecuador.

March: Dennis Kidder, W6DQ, with his talk on "A History of Precision Time and Frequency", subtitled "So you think you know what time it is".

Nothing firm yet for April and later. After all, someone else might win the election! But there seem to be some good possibilities for several more months.



### Carbon Nanotube Radio

(sent in by Steven Barryte, KI6GUY)

A team of researchers has crafted a working radio from a single fiber of carbon nanotube material. The tiny radio, developed at the National Science Foundation's (NSF) Center of Integrated Nanomechanical Systems, performed the radio's antenna, tunable filter, amplifier, and demodulator functions to tune in a radio signal and play it back through an attached speaker.

The radio's single carbon fiber is glued to a negatively charged tungsten base that acts as a cathode. A positively charged copper anode lies directly across the base. The nanotube resonates when an encoded radio wave flows across, producing an amplified, decoded radio signal. The nanotube can be lengthened or shortened to control the radio signal's frequency, and sensitivity can be enhanced by attaching an external antenna.

Researchers foresee applications for the carbon nanotube radio from radio



This image, taken by a transmission electron microscope, shows the carbon-nanotube radio.

-controlled devices that could flow in the human bloodstream to highly efficient, miniscule, cell phone devices. They believe it would be easy to produce such nanotube radios to receive signals over the 40 to 400 megahertz band - a range within which most FM radio broadcasts fall.

For more information and to see for yourself that the above picture really isn't a radio tower on a hill, go to:

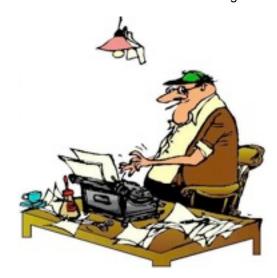
http://www.nsf.gov/news/news\_sum m.jsp?cntn\_id=110566&org=NSF&fro m=news



# ARRL Summary Report December 2007 compiled by Bryant Winchell, W2RGG

#### MOTOROLA TO ACQUIRE CONTROLLING INTER-EST IN PARENT COMPANY OF YAESU

Motorola issued a press release earlier this week stating that its subsidiary, Motorola USA, will "launch a tender offer to acquire a controlling interest in Vertex Standard Co., Ltd." Vertex Standard is the parent company of Yaesu. *The ARRL Letter Vol.* 26, No. 45



#### 500 kHz EXPERIMENT ENTERS SECOND SEASON

Fall has brought lower static and good propagation, making excellent conditions for the 500 kHz experimenters. The ARRL 500 kHz experimental license, WD2XSH, was issued in September 2006 and has 19 active stations. *The ARRL Letter Vol. 26, No. 45* 

#### OPERATIONS APPROVED FOR DXCC CREDIT

ARRL DXCC Manager Bill Moore, NC1L, announced earlier this week that all operations from Vlad Bykov's, UA4WHX, last trip have been approved for DXCC credit. *The ARRL Letter Vol. 26, No. 45* 

#### WRC-07 WRAPS UP IN GENEVA; WILL LIKELY MEET AGAIN IN 2011

The final working session of the 2007 World Radiocommunication Conference (WRC-07) in Geneva drew to a close Thursday afternoon, November 15. According to International Amateur Radio Union (IARU) Secretary David Sumner, K1ZZ, the principal achievements and disappointments, as they relate to the Amateur Services, of the conference are: Achievements

- \* Maintenance all existing amateur allocations, including the 7.200-7.300 MHz allocation in ITU Region 2 (the Americas) that had been somewhat at risk in connection with consideration of additional allocations for HF broadcasting (see below).
- \* A new worldwide secondary allocation at 135.7-137.8 kHz with a maximum radiated power limit of 1 W e.i.r.p. (given the low efficiency of practical antennas for this frequency range, this limit is not as severe as it may sound). *The ARRL Letter Vol. 26, No. 46*

#### FCC "ADMONISHES" AMBIENT OVER BPL ISSUES

The FCC, in a letter to Yehuda Cern, Chief Engineer for Ambient Corporation, concluded that Ambient's BPL operation caused "harmful interference" to Amateur Radio stations in Briarcliff Manor, New York. *The ARRL Letter Vol. 26, No. 46* 

## HAMS AND THE NATIONAL WEATHER SERVICE: WORKING TOGETHER FOR SKY-WARN RECOGNITION DAY

The Ninth Annual SKYWARN Recognition Day recognizes Amateur Radio operators for their commitment to help keep communities safe. Co-sponsored by the ARRL and the National Weather Service (NWS), the event is scheduled for Saturday, December 1. During this 24 hour special event, Amateur Radio operators, working together with their local NWS offices, will activate Amateur Radio stations and work as a team to contact other hams across the world. *The ARRL Letter Vol. 26, No. 47* 

#### FCC REVOKES AMATEUR LICENSE OF CALIFORNIA HAM

The FCC issued an Order of Revocation to Robert D. Landis, N6FRV, on Tuesday, November 20. The Commission said that "[b]ased on the evidence of his convic-

tions for child molestation, we conclude that Mr. Landis lacks the basic requisite character qualifications to be and remain a Commission licensee." Landis was convicted on two felony counts in 1991, fined \$10,000 and sentenced to 11 years in prison. *ARRL Letter Vol. 26, No. 47* 

#### **SOLAR UPDATE**

Tad "I Don't Wanna Holiday in the Sun" Cook, K7RA, this week reports: Sunspots appeared over several days in the past week. November 24-27 had daily sunspot numbers of 15, 12 and 11. Otherwise, the sun has been blank. *The ARRL Letter Vol. 26, No. 47* 

#### MISC.

500 kHz Experiment Charting New Territory: The evening of November 13 saw the first transatlantic contact on 500 kHz between amateur experimental stations. *The ARRL Letter Vol. 26, No. 47* 

## NORTHWEST US POUNDED BY STORMS, FLOODS; HAMS ACROSS REGION ACTIVATED

For the past week, the wake of fierce storms have ravaged the Pacific Northwest, killing at least seven people and leading to widespread flooding and mudslides that shut down roads and highways, including Interstate 5; other infrastructure, such as telephone lines and electricity, have been obliterated. Throughout it all, Amateur Radio operators were there to help. In Oregon, after a visit Tuesday to Vernonia, Governor Ted Kulongoski said, "I'm going to tell you who the heroes were from the very beginning of this...the ham radio operators. These people just came in and actually provided a tremendous communication link to us." Amateur Radio's role in again providing communications when other systems were destroyed or overloaded was not missed by the media. Many TV, radio and newspaper items have appeared, praising the hams and noting their service to the communities *The ARRL Letter Vol. 26*, *No. 48* 

#### MISLEADING AND INCORRECT RUMORS SURROUND IARU REGION 2 BAND PLAN

Misleading and incorrect rumors are surrounding the recently revised band plan of IARU Region 2 < <a href="http://www.iaru-r2.org/band-plan/">http://www.iaru-r2.org/band-plan/</a>>, adopted at its triennial conference in Brazil in September. The following statement was authorized by ARRL President Joel Harrison, W5ZN:

The revised Region 2 band plan for 160-10 meters takes effect January 1, 2008. The band plan is based on the band plan adopted by IARU Region 1 < <a href="http://www.iaru-r1.org/Spectrumbp.htm">http://www.iaru-r1.org/Spectrumbp.htm</a> at its conference in Davos, Switzerland in September 2005. *The ARRL Letter Vol. 26, No. 48* 

#### **SOLAR UPDATE**

Tad "The Sun Beams Down on a Brand New Day" Cook, K7RA, this week reports: More sunspots

emerged this week, with every December day so far showing spots. In addition to the sunspot numbers listed below, Thursday, December 6 had a sunspot number of 29. The daily sunspot number has not been this high since mid-July. Two spots are now visible-- 977 and 978 -- and the total coverage of the solar surface by sunspots on Thursday is four times Wednesday's coverage. *The ARRL Letter Vol. 26, No. 48* 



## Opportunities December

December 14--Christmas/Holiday Dinner--contact Treasurer Bill Harper.

Should be fun, and fascinating!!

#### January

16 - Club Meeting, Joe Moell, foxhunting, Hesse Park, 7:30 p.m.
26 Technician Class course, Part 1, 10 a.m., Hesse Park
26 General Class course, Part 1, 2:15 p.m., Hesse Park

#### **February**

9- Technician Class course part II 10 a.m.

Hesse Park

9 General Class course, Part II,

2:15 p.m., Hesse Park

20 Club Meeting, Joe Haslett - On a balsa raft

23 FCC examinations Noon Hesse Park

#### March

19 Dennis Kidder wrestles with Time and Wins

Need a Club Patch? \$5

Or How About a Club Jacket?

Joe Locascio, K5KT

310-541-5495



Need a Club Badge?

Contact Karen Freeman, KG6BNN

310-541-6971

\$13



# Thank you Dale Hanks,

for donating seven, very neat, DVDs to PVARCs library which up until now has consisted primarily of ARRL instructional tapes.

The DVDs are:

The Return of LST-325 – produced by the History Channel

Very nice looking documentary about refurbishing the LST (Landing Ship Tank) war ship used during WWII.

#### **Bringing Home the LST-325** –

This is the story of the voyage from Crete to Alabama by the 28 volunteer crewmen and one cameraman. – 2000-2001. A good companion to the "Return" DVD above.

#### The Day the Earth Shook - NOVA

About earthquakes. Very informative from the standpoint of disaster preparedness. Has great interviews with people like Cal Tech's Dr. Lucy Jones. Compares Northridge quake with Kobe, Japan quake.

#### The PV Fault - News 2 -

About 3 minutes long and an eye-opener about the dangers we face in PV from an earthquake.

#### Louis Zamparini Profile CBS

Was created in conjunction with the Olympic coverage. Covers his Olympic history and his war years as a POW.

## **Empire of the Air: The Men Who Made Radio DeForest, Armstrong, Sarnoff**

Some great old radio footage. Some great pictures of old radios. Some great history.

**Frequency** with Dennis Quaid, and Jim Caviezel Movie about a son and his dead father communicating across time with their ham radio.

Any of these can be checked out by members. Contact Ginger KG6TAU, 310-378-7894



#### Palos Verdes Amateur Radio Club P.O. Box 2316 Palos Verdes Peninsula, CA 90274

#### New Membership Application and Member Renewal Form

New: o		Renewal:		Membership		Date:		
Individual	(\$15/Year)	or Ho	ousehold a	nd/or Family	Membe	ership	_ (\$17/Year)	
(Applying) Mer	nber Informa	tion:	Member	Renewal sam	ne as La	ast Year?	YESNO	
_ast Name: First			Name:Spouse:					
Street Address	s:							
City:					Zip:			
Home Phone:	Phone: Work Phone:							
Email address:	(Unless of	therwise no	oted emails	will be sent to t	he apply	ying memb	per only)	
License Call: _	e Call: License Class:				ARRL Member?			
Member of: D	CS/RACES/AR	ES/PVAN		_ District		_ Unit ID	#	
Additional Hou	usehold and/o	r Family	Members	(if Applicable)	):			
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Please make checks payable to: Palos Verdes Amateur Radio Club

Dues are based on the January 1st to December 31st calendar year.

[Form2007\_Membership\_#1A.doc]