August 2006

THE GRID LEAK

The Official Newsletter of the Tulare County Amateur Radio Club

P.O. Box 723, Visalia, CA 93279

TULARE COUNTY, CALIFORNIA
146.880 (-) TCARC REPEATER
Park Ridge Mountain
East of Fresno, California
36 43.29' N Latitude, 118.56.38' W Longitude
7,500' above Sea Level

I.R.L.P. Node # 8120
Echolink Node # 152747 (WA6BAI-R)

Web Page: http://www.tcarc.net/
Companion site at: http://groups.yahoo.com/group/wa6bai/

Club Officers

President: Dave McElroy WA6BEF
Vice President: Bill Stenger K6QOG
Secretary: Ray Quinn KF6KMY
Treasurer: Dave Millhouse N6YMM
Past President: Steve Lee-Thomas W6SLT
Repeater Liaison: Chuck Ward WA6SAA
Activities Director: Hal Clover KC5LUB

Next Club Meeting is August 24th, 7:30 pm at the County Board of Supervisors Building, 2800 Burrell, Visalia.
It is located West of the court house.

Club Websites:

The mailing lists available for TCARC are:

- gridleak@tcarc.net - Grid Leak distribution in Portable Document Format (PDF)
- gridleak-text@tacarc.net - Grid Leak distribution in text format for those who prefer or require it.
- tcarc-announce@tcarc.net - One-way announcements open to all
- members@tcarc - Open to all active members
- repeater@tcarc.net - New repeater committee list (committee members only)
- officers@tcarc.net - For officers

If anyone wishes to start a new list related to amateur radio or the TCARC, you may do so by sending me an e-mail. -- 73 de Ray KF6KMY

Emergency Coordinators:

Emergency Coordinators for Tulare County:
RACES is Jim Reeves KC6YRU - kc6yru@tcarc.net
ARES is Hal Clover KC6LUB - hal90000@sosinet.net

TCARC Minutes of July Meeting

Meeting minutes 7-27-2006.

Meeting began at 1935Z. In attendance:
Dave WA6BEF presiding,
Pam KA2RQK,
Bill K6QOG,
Carol (no call,)
Alan W6MTR,
Gloria W6NRS,
Steve W6SLT,
Chuck WA6SAA,
Bill S, KB6HGA.

Previous minutes and treasurer's report were not presented as neither secretary nor treasurer were present. The meeting was short, due to the fact that the weather was extremely hot outside and president suggested that the meeting adjourn to Perkos for icecream afterward.

Chuck, discussed repeater operations. He would like to switch the controllers from Blueridge and Parkridge, which will provide more effective control of the Park Ridge machine without the need to travel to it. This will be done at some point, but not until the heat breaks. Motion was made by Pam, seconded by Alan. Carried.

Point of interest. Chuck states that changes are being made at the Park Ridge facility. There are, apparently, two buildings and the radio and telephone equipment utilized by the park service is all being moved to the other building. We are being left, he states, with a more than ample supply of battery backup. In fact, the repeater has, in fact been operating on battery fulltime since the repeater was moved to that facility. This to me is absolutely impressive.
Future potential training was discussed. President suggested the goal of one introductory ham class within the next twelve months, as there seems to be little if any training activity going on within this area. Gloria states that she and Dave Millhouse, N6YMM, had conducted the last training class eight years ago she believes.

Meeting adjourned to Perkos at 2015, approx.

Respectfully submitted by Dave McElroy, WA6BEF, president.

Happy Birthday & Anniversary

September Birthday:

KC6YRU Jim Reeves

September Anniversaries:

W6MTR Alan & **W6NRS** Gloria Vicenti
N6QBK Chuck & Darlene Wilcox

Woman in Space?

FROM THE ARRL WEBSITE

NEWINGTON, CT, Aug 21, 2006 -- American businesswoman Anoushe Ansari may be the eleventh-hour stand-in for Daisuke "Dice-K" Enomoto, 34, as the next civilian to fly to the International Space Station. Ansari, who would be the first female civilian space adventurer, has indicated she's ready and eager to make the trip. Whether she'd also be ready to operate the Amateur Radio on the International Space Station (ARISS) gear to make contacts with Earth is not known. Space Adventures, which had arranged for Enomoto to go into space on the next *Soyuz* taxi flight, today confirmed reports that he has been removed from the September 14 flight roster for medical reasons.

"During a recent evaluation it was determined that Mr. Enomoto has a medical condition that will exclude him from participating as a crew member of *Soyuz* TMA-9," Space Adventures said in a news release. "No other information is available at this time."

Space Adventures had no comment on whether Ansari, 39, would, indeed, fill in for Enomoto September 14. If she does, it's not known whether she'd be able to get a US Amateur Radio license in time for the flight. Dice-K reportedly was already trained and authorized by Russia to operate the ARISS equipment aboard the ISS using the RS0ISS call sign and was to have made some school group contacts.

An Iranian-American, Ansari is the co-founder -- with her husband and brother-in-law -- of Telecom Technologies -- acquired in 2000 by Sonus Networks Inc -- and the investment firm Prodea Inc. Space Adventures has partnered with Prodea to develop a line of air-launched suborbital vehicles.

The *Soyuz* TMA-9 flight will carry ISS Expedition 14's NASA astronaut Michael Lopez-Alegria, KE5GTK, and Russian cosmonaut Mikhail Tyurin, RZ3FT, to the space station. It will launch from Baikonur Cosmodrome in Kazakhstan. The return *Soyuz* flight would carry ISS Expedition 13 crew members Pavel Vinogradov, RV3BS, and Jeff Williams, KD5TVQ, back to Earth.

Ansari has been in Russia training concurrently with Enomoto, who is believed to have paid in the vicinity of $20 million for the privilege of flying up and back on the *Soyuz* and spending about a week on the ISS conducting experiments. Enomoto was to become the fourth civilian space traveler and the first from Asia.

Previous private space explorers have included Dennis Tito, KG6FZX, in 2001, South Africa's Mark Shuttleworth in 2003 and Greg Olsen, KC2ONX, in 2005. ARISS arranged for all three space travelers to make contacts with students on Earth during their respective stays in space.

Ansari was the winner of the 2000 National Entrepreneurial Excellent Award sponsored by *Working Woman* magazine. Her family made a major contribution to the X Prize -- now known as the Ansari X Prize -- which offered a $10 million prize for the first successful private reusable space vehicle. The prize was won in 2004 by a team headed by aerospace designer Burt Rutan.

From the Editors: If there is anything that you would like to add to the newsletter, you may contact us by email at stengerw@sti.net. The deadline to have articles included is the 10th of each month; submissions after the 10th will go in the next newsletter unless otherwise instructed. -- **de Carol & Bill K6QOG**

PSK for Beginners

By Jeff Brone, WB2JNA
August 6, 2006

FROM THE ARRL WEBSITE:

You may have heard about PSK31, a fairly new mode of communication that's getting quite popular with hams. With PSK, you use your home computer with your radio to send and receive digital signals with other hams. The signals come through the radio, are fed into the computer and are decoded by software as the words being sent appear on the screen. The computer then turns the words you type into a signal that is sent through your radio to the ham you're talking to. It all works amazingly well, and pretty simply at that. With that in mind, here's a basic explanation of how to get involved in PSK31.

Getting Started

If you want to get started using PSK31, I suggest that you begin by listening (and watching) some PSK signals. First, go on the Internet and download the latest version of the *Digipan* program to your computer (just follow the links and instructions). *Digipan* is free and simple, so it's a good place to start.

You'll want to run a cable from the headphone or speaker jack of your radio to the "line in" jack on the back of your computer (next to this jack will probably be a drawing of an arrow pointing to the center of a circle). Keep in mind that not all computers have a LINE input (most laptops don't). If yours does not, you'll have to use the microphone input.

Next, adjust your sound card controls (double click the little "speaker" icon at the bottom of your computer screen) so the "line in" volume is at about 75 percent and is not muted. When you double click the tiny speaker, you'll see the VOLUME controls, which control transmit audio, not the RECORD controls that you need to adjust for receiving. To get the RECORDING window, you have to click on OPTIONS in the upper left corner of the VOLUME window, then click OPTIONS, then PROPERTIES, then RECORDING, then OK.

Next, open Digipan, tune the radio to about 14.070 MHz, adjust the radio volume until the program's computer screen shows a neutral dark color and maybe some noticeable trails of signals that stand out clearly from the background. You are now looking at the "waterfall display." You also can try listening on or around 7.070 or 21.070 MHz.

You may need to tune the radio a few kHz either way to get a good signal to read. I find it best to tune the rig so the signal you're monitoring is around the "1000" marker on the waterfall display. PSK signals sound like high-pitched warbling, and they appear very thin and individual on the display. Use your mouse to double click on a trail, and the words being sent should appear on the larger receiving box on *Digipan*. You are now reading PSK signals, which should keep you busy for a while. Notice the friendly tone that the operators use and the relaxed feeling of most exchanges. This is something most PSK ops seem to enjoy a lot.

You'll want to send some signals and talk to other operators. Do a dry run practice session first. Connect the speakers (or a headset) to your computer and adjust your sound card to make sure you have moderate volume coming out of them. Then type some text in the smaller "transmitting" box and click the "T/R" button at the top of Digipan. You will hear a signal coming out of the speakers and see the text you would be transmitting scroll across the screen. If you again click the "T/R" button at the top while this is happening, the program will automatically finish sending the whole text before going back to receive (this trick will come in handy later). Play around with this for a bit and see how it feels. In fact, spend some time getting used to using the program in this "practice" mode.

PSK the "Easy Way"

Eventually, you'll feel ready to send a signal on the air. Here's a simple tip on how to send PSK the easy way. Put your computer speaker right up against your rig's microphone (make sure you're in a quiet room), and wrap them up in cloth or foam to keep out extraneous noise. Set the rig on the right sideband for the band you're using. Turn on the rig's VOX, or set up a little PTT switch (many rigs have an outboard connector for this on the back panel).

PSK Made Easy continued

You can send PSK directly from the computer speaker through the microphone. Although the rig's switch may say SSB, the mode you're transmitting is PSK, so it's quite legal. There are a couple of things to remember:

- The PSK signal drives the rig pretty easily, so turn the soundcard volume control for the speakers way down to about 15-20 percent.
- When transmitting, advance your rig's power output (slowly) starting from no power at all. I like to stop at about 20 percent of full power. You may be able to use more, but PSK is pretty much a full duty mode, so go easy on your rig.
- Watch your transceiver ALC (automatic level control) meter. If the ALC is indicating anything other than "zero," you are overdriving the radio.

This method may not provide quite as clean a signal as if the PSK went directly through the microphone plug, but I've used this method with about 20 W out with very good (clean) signal reports. One measure of a signal's purity is the IMD, which should be below -25. Another ham can check this for you, and *Digipan* will check this on a received signal in the little "IMD" box at the bottom. Check the IMD when a PSK signal is on "transmit," but while text is not being sent.

You also can feed the computer speaker's output directly into your microphone plug. Connect the ground side of the computer speaker jack to the mic plug's ground side, and the center pin of the speaker jack to the non-ground, mic input side of the mic plug. If you don't have VOX or a PTT jack on the back of the rig, you may need to fashion a PTT connection switch through the mic plug. Turn the computer's speaker volume output way, way down (to about 20 percent), transmit a PSK tone and gradually inch up the rig's power to the desired level. I don't even use any interface circuit between the rig and computer, and it seems to work well. You may need an interface, and there are several on the Internet if you'd like to build one, or you can always buy one. Many *QST* advertisers, like West Mountain Radio, MFJ, Tigertronics and RigExpert sell them, as well as other companies like MicroHAM and MixW. Remember: watch the ALC or you could be generating a horrible signal and interfering with others.

High Tech Thrills

You can also experiment with the program's functions, including the macros, allowing you to assign transmission text to certain buttons at the top of the program This makes it easier to send the standard information, such as call sign, location and rig, without retyping everything. You can clear the text in either or both of the transmit and receive windows. Check out the help file for lots of good ideas and information. There's a lot to learn to the program, and I recommend playing around in the previously described practice mode for a good while before you go on the air.

PSK can be quite a thrill, as it seems kind of high tech, yet still is good old radio at heart. Have fun!

Jeff Brone, WB2JNA, an Amateur Extra class licensee, has been involved with Amateur Radio for over 35 years. He enjoys CW, PSK31, Echolink and vintage radios. Jeff holds a PhD in theatre and works in customer service. He lives in Baltimore, Maryland. To learn more about PSK31, check out the PSK31 section on the ARRL Web site or the June 2006 issue of QST (p 82) for how to use PSK31 on a Pocket PC.

SAN JOAQUIN VALLEY SECTION

Report for the month of July 2006

SM Charles McConnell, W6DPD- ASMs K6YK and W6FRH, ACC W6DPD, SEC N6ZFN, OOC N1VM, STM K6RAU, PIC KE6IGJ, TC W6TE.

Greetings from the ARRL San Joaquin Valley Section.

An Emergency Coordinator is needed in Merced County. Contact N6ZFN (n6zfn@bak.rr.com) or W6DPD (w6dpd@arrl.org) if you can help.

Mark your calendars.. September is National Preparedness Month. The San Joaquin Valley ARS presents the Harvest HamConVention Sept 15-16 in Fresno. Check www.sjvars.com for information. Amateur Radio Awareness Day is Saturday, Sept. 16, 2006. The annual Turlock ARC Auction will be September 30, 2006. Check www.w6bxn.org for information. The 2006 California QSO Party is October 7-8. Check www.cqp.org for information. Pacificon 06 will be October 13-15, 2006 at the San Ramon Marriott. Check www.pacificon.org for information. The Scout Jamboree on the Air is October 21, 2006. The International DX Convention is April 27-29, 2007 at Visalia. Check http://www.dxconvention.org for information. EMCOMM West is May 4-6, 2007 at the Atlantis Resort and Casino in Reno NV. Check www.emcommwest.org for information. Field Day 2007 is the fourth full weekend of June.

When your affiliated club elects officers for the next year, be sure to update your club's information on the affiliated club area of the ARRL web page. If you fail to update your clubs information for 2 years, your club will be placed in the inactive file.

Need to take an Amateur exam? Check the ARRL web page, www.arrl.org for exam information. You can also search for Amateur Radio Classes in your area.

The Northern California Net (NCN), the Section Traffic Net, meets nightly on 3.630 MHZ at 7 PM Pacific Time. The slow speed training session of the net meets nightly on 3.705 MHZ at 9 PM Pacific Time. Handling traffic on CW is a good way to improve your CW skills. The Daytime Region 6 Traffic Net meets daily at 3:30 pacific time on or near 7.275 MHZ. The California Traffic Net meets daily on 3.906 MHZ and 6:30 PM local time.

The California QSO Party, CQP, is October 7-8, 2006. This is a good opportunity to put your county on the air and be sought out by stations across the United States and around the world that are participating in the party. The Northern California Contest Club has a great award program for participating stations. Check out www.cqp.org for information.

It is my sad duty to report that KE6DK, KF6VCD, WA6KCQ, and WA6CVL are Silent Keys. They will be missed.

The U.S. Department of Homeland Security for the third year is sponsoring National Preparedness Month which is a nationwide effort held each September to encourage Americans to prepare for emergencies in their homes, businesses and schools. ÊThis year's goals are to increase public awareness about the importance of family emergency preparedness and to urge individuals to make themselves and their loved ones better prepared. National Preparedness Month is a nationwide effort held each September to encourage Americans to prepare for emergencies in their homes, businesses and schools. This year's goals are to increase public awareness about the importance of family emergency preparedness and to urge individuals to make themselves and their loved ones better prepared. More than 200 organizations including ARRL are members of the coalition promoting National Preparedness Month. Amateur Radio Awareness Day is sponsored by ARRL and is September 16. This is a good opportunity for your club to set up an Amateur Station in a shopping center parking lot to demonstrate

SAN JOAQUIN VALLEY SECTION

Report for the month of July 2006

Continued

Amateur Radio to the public. This is in the middle of National Preparedness Month.

The Sequoia Amateur Radio Group is a new club in Lake Isabella. Officers are pres W6PAJ, vp KC6OCA, secy KC6RIZ and treas KA6IYS. Check www.sarg-krv.org for information. Welcome to the SJV.

SJV stations active in the ARRL International Phone DX Contest placed as follows. First was WC6H operated by NU6S, N6EE was second and N6NZ was third. OH8X operated by OH8NC won the World 14 MHZ plaque sponsored by the Central California DX Club.

Congrats to W6YDE on qualifying for DXCC, to W6YWH and WA6SZE on achieving the Top of the DXCC Honor Roll.

W6FRH qualified for numerous Worked All States Awards through QSO matches on Log Book of the World.

Traffic for July: W6DPD 2, K6RAU 16, and N6SUZ 103; Total 121. PSHR: K6RAU 59 N6SUZ 100.

TULARE COUNTY AMATEUR RADIO CLUB, INC.
MEMBERSHIP APPLICATION

NAME (Self) _____ NAME (Family Member) _____

CALLSIGN (Self) _____ CALLSIGN (Family Member) _____

ADDRESS _____

CITY _____ STATE _____ ZIP _____

EMAIL _____

LICENSE CLASS (Self) _____ LICENSE CLASS (Family Member) _____

RES PHONE _____ BUS PHONE _____

EQUIPMENT _____

BANDS _____

INTERESTS (Please Check)

- ☐ EMERGENCY SERVICE
- ☐ TRAFFIC HANDLING
- ☐ CINTESTS
- ☐ RAG CHEWING
- ☐ Dxing
- ☐ QRP
- ☐ BUILDING
- ☐ ANTENNAS
- ☐ OTHER

DESCRIBE _____

_____

SIGNATURE _____

Membership Dues: ($20.00 - Individual - $25.00 - Family)

Mail To:

Tulare County Amateur Radio Club
P.O. Box 723
Visalia, CA 93279