

Upcoming Events Next Board Meeting: May 6 Next General Meeting: May 12

Field Day: June 27 & 28 <u>Pacificon</u>: October 16 - 18 Dayton Hamvention May 15

TARC Meeting

April 14, 2015

Turlock, War Memorial

7:00 p.m.

Ron Roos, KJ6KNL, Our honorable President, called the meeting to order

Pledge of Allegiance, All members and guests introduced themselves. Dylan Low, KK6SYD, was a first time guest. All were welcomed.

Dick Decker, Vice President, K6SUU, gave an interesting presentation on Hams In Space. This was the topic members showed the most interest in. Fox 1 will launch on August 27th, 2015. To contact Space Stations in the past the *Uplink was on VHF* and the *Downlink on UHF*. This is now reversed, the **Uplink will be UHF** and the **Downlink will be VHF**. For a full copy of the Powerpoint Presentation, Dick announced that those interested could send an email to him and he would send it to those requesting it. Included in the Powerpoint will be the links for further information. Dick explained that Space stations were easier to use than Satellites. A variety of antennas were shown and discussed. They included; The Yagi, Two Elk Antennas (mounted on PVC) and one that really measured up; The Tape Measure Antenna.

Dick informed all that he has a radio that members could use to hit the Space Station. Please contact him if you are interested. The process is pretty simple and it is rewarding when you get your card back in the mail! Dick's email is; <u>dickdecker@hotmail.com</u> Ron Roos, asked members if they had read the minutes from our March 10th Meeting. He inquired if the Secretary, Melinda DeCouto, KK6NWP, had anything to announce or add. Nothing was added. Grady Williams, K6IXA, made a motion to approve the minutes as is. Dinnie Echols, N6TLW, seconded the motion. All approved.

Mike Smith, KG6VFL, gave a detailed and informative Treasurer's Report. For the Auction; \$150 (Paddle Fee) was given to Crossroads Church for the use of their facilities. There were 30 bidders, the Yeasu 950 Radio went for the highest bid. The Auction has been held for 40 consecutive years now. Mike researched and calculated that in the last 20 years there were \$178,000 in sales. This is a great way to help out widows with their estates.

We currently have 61 dues paid members.

Chris Coffin, K6CP, went over the books and stated that everything was in proper order. He mentioned that the books were very well organized. Thank you to Chris for doing this and to Mike for doing an excellent job.

Stan Williams, KJ6BKZ, informed those in attendance that they could email him if they were interested in membership. Stan announced that he was now doing the ARC Over. All were encouraged to email pictures or any other important information to him that they would like to see posted. Stan's email is; kj6bkz@yahoo.com

All thanked Stan for taking the ARC Over and clapped

Dinnie Echols inquired about what had been decided on for backup on the hill.

President, Ron Roos, announced that there were still some issues coming up that we would discuss.

Spencer Boyd, KJ6ART, and Grady Williams gave the report on the Repeater. The Repeater is now mostly repaired. The Auto Patch doesn't work. The Echo Link should now be able to work.

Ron asked Mike Smith to comment on what was happening with the purchase of the batteries

Mike explained that we were considering a !500 AMP Single String. This would be a wise use of the club monies. He is communicating with Merced County and they have stated that they are willing to donate funds to help out. The club would do well to use these available funds. Mike has written out a Grant Request for Two Strings. In addition, Grady and Mike will meet tomorrow.

Dinnie suggested purchasing a generator.

Darren Nunes, K6RDJ, agreed. Mike asked about the safety of the generator? If it were to just sit out in the open, it could invite unwanted visitors. Grady suggested putting a cyclone fence around it. A 350 gallon tank is what they are looking at. There is no charge to deliver fuel. A suggestion to use the existing storage came up. It could be modified a bit, then secured.

Darren Nunes spoke about Field Day. He would like to assign bands. Let him know of your intentions by next week. For Field Day, you will need to furnish your own power. 8:12 p.m Ron Roos made a motion to adjourn the meeting. Stan Williams seconded the motion. Meeting Adjourned.

FOR SALE or WANT

This will be a new area for those that have radio related items for sale or something they are looking for. Please email me with said items at: kj6bkz@yahoo.com

Digital Communications to the International Space Station

"WHAM-BAM" and another Turlock Amateur Radio Club member joins the Space Cadet Corps by digipeating through the International Space Station. This time it was N6QJP, Jeff. He machine gunned the space station with digital packets every thirty seconds for three days! (You never know a man until you put a weapon in his hands!) Each day he got an answer from the space station that he was received and his APRS location was relayed to the ground APRS system. Jeff now gets to send off to the ARRL for a QSL card.(and all the international terrorists know exactly where his house is located!)

There are four separate ham stations aboard the International Space Station (ISS), but three of them take an astronaut to operate. With the astronauts' time being heavily scheduled, it is very difficult, even rare, to hear them on voice, ATV or the repeater. Therefore, since the digital packet system is run by a computer and is able to run by itself, the astronauts can continue on other scheduled activities. The digital packet system is running and ready to digipeat packets it hears automatically 95% of the time it passes overhead. They do shut the packet system down during spacewalks and cargo container reception.

This all started when I discovered my Alinco DR 135 radio was covered by dust except where the dog had licked it a few times. I decided it needed something to do and figured out how to program the internal packet board to send out digital packets on a beacon containing APRS information. After a few times on the ground based APRS system the dog and I became bored and decided to try and digipeat through the space station. Damned if the dog didn't get help from Spencer and figured out how to do it!

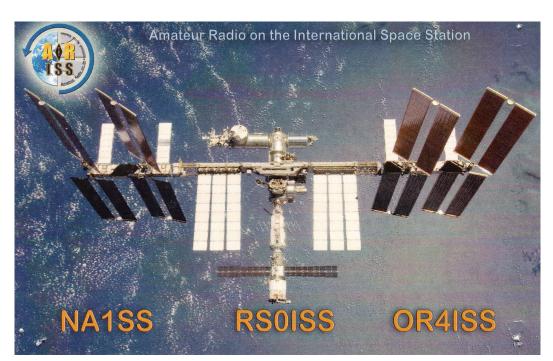
So if you want to join the TARC Space Cadet Corps all you need to do is write your name on the list of those waiting for a turn with the radio. The goal of becoming a space cadet is to learn about the ISS, how to track it, how to verify it heard you, and lastly, how to get a QSL of the ISS from ARRL. In addition AMSAT will send you a "Satellite Communicators Award" if you send them proof of the digipeat and \$2.00. Most of us are too cheap to send the two dollars!

All you need is a 12 vdc power supply of 8 to 10 amps and an outside 2 meter antenna-a J pole works fine. On the internet you can check

<u>WWW.ISSFANCLUB.COM</u> to track the space station and verify the digipeater is operational and then verify on <u>WWW.ARISS.NET</u> that the ISS heard you and repeated your APRS packet. I program your call and your GPS coordinates into the radio so even Grady could do it!

THE SPACE CADETS CORPS NEEDS YOU-BUT I AM NOT SURE WHY!

Dick



The International Space Station (ISS) is sponsored by Canada, Japan, Russia, the USA and many nations in Europe. ISS crews hail from these and other nations. Major hardware elements are:

- Zarya , Zvezda, Pirs, research modules Poisk and MRM-1 Rassvet built by Russia
- Science lab Destiny, Unity, Quest, Harmony and Tranquility modules provided by the US
- Canadian Mobile Servicing System, a 55-foot mobile robotic arm used for assembly and maintenance
- Columbus module, a science laboratory provided by ESA
- Kibo module, a science laboratory provided by Japan.

ISS crews and visitors often use their Amateur Radio station, first set up in Zarya and then Zvezda, to talk with school students to aid in their education, plus chat with fellow radio amateurs around the world. The ARISS Team continually works to extend ISS Amateur Radio station capability with new operation modes and, more recently, equipment placement in the Columbus module.

From	Day	Month	Year	UTC	MHz
<mark>⊡NA1S</mark> S KLRS0ISS ⊒ OR 4TSS	/8	FEB	2012	0024	145.8

K6SUU

Thank you Melinda for the club meeting minutes. And to dick for his ISS article.

So there ya have it. My first foray into trying to put together the ARC-OVER. This is all new to me and I have much to learn. Remember, this is your news letter and it would be great if you the members would get involved and send me suggestions, articles, pictures or whatever you'd like to see in the ARC-OVER.

Send to kj6bkz@yahoo.com

I would really like to feature a member once in awhile maybe with a little bio and or pictures of their shack. I'll talk more about this in future club meetings.

If you receive this in your email and would rather not, please let me know. Your privacy is very important and I will not share your email address with anyone.

73 Stan Williams kj6bkz@yahoo.com