

Sierra Signals

Sierra Foothills Amateur Radio Club
Auburn, CA
An ARRL Special Service Club

<http://sf-arc.org>

March 2006

P.O. Box 1005, Newcastle, CA 95658

Goodbye SuitSat, Hello Cute-1.7

(Reported by Greg, KO6TH)

Well, it appears that the SuitSat mission is over. No signals have been received from the spacecraft recently, with the last confirmed reception on February 18 after nearly 2 weeks in orbit. Telemetry shows that the Suit's battery has been depleted, and is no longer able to support the radio transmitter.

The Suit was launched on schedule during a spacewalk on February 15 by Space Station Flight Engineer Valeri Tokarev. With a farewell of "goodbye Mr. Smith", Tokarev gave the Suit a gentle push towards the rear and off at a gentle angle away from the Space Station, in order to minimize any risk of it hitting the Station as the two orbited independently. The radio turned on automatically a few minutes later, and the mission began. Mr. Smith, you may recall, was one of the characters on the old science fiction television series, "Lost in Space".



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RESOURCES

REPEATERS

145.430 (-0.6 MHz/PL 162.2)

440.575 (+5.0 MHz/PL 94.8)

223.860 (-1.6 MHz/PL 100.0)

CLUB NET

Thursdays, 7:30PM, K6ARR/R

145.430

CLUB MEETINGS

Second Friday of the month,

7:30PM at the Library, 350

Nevada St, Auburn CA

CLUB BREAKFAST

Last Sat of the month at Susie's

Café, Cirby at Riverside, Roseville

- 8:00 AM

NET CONTROL OPS

Dave Jenkins, WB6RBE

Gary Cunningham, KQ6RT

Joe Sylvia, KF6OQY

Casey McPartland, W7IB

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Unfortunately, within two orbits, the Suit appeared to go silent. News articles lamented the short life of the Suit, and speculated what had happened. Freezing old temperatures were generally the theory. But, as Mark Twain had earlier said, "The reports of [its] death were greatly exaggerated!". The Suit was still alive, but the signal had gone suddenly very weak. (*continued on page 2*)

2006 Calendar of Events

(*Operating Events in Italics*)

[Dates are local unless otherwise indicated]

- | | |
|-----------|-------------------------------------|
| Mar 3-5 | <i>ARRL DX (SSB)</i> |
| Mar 10 | Regular Meeting |
| Mar 11 | <i>North American Sprint (RTTY)</i> |
| Mar 17-19 | <i>BARTG RTTY Spring Sprint</i> |
| Mar 24-26 | <i>CQ WPX (SSB)</i> |
| Mar 25 | Club Breakfast |

We encourage members to receive Sierra Signals via email to save the Club the cost of reproduction and mailing

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Forty/Thirty Years Ago At The SFARC

(Reported by Gary, KQ6RT)

Forty Years Ago at SFARC

March 16, 1966

With 9 members and 1 guest present, President Joe opened the meeting.

The minutes of the previous meeting were read and approved.

Frank reported on the Code Theory class. There are 14 members at present.

The upcoming mobile run on April 17 was discussed and it was decided to go to Reno.

Joe reported on the RACES progress and said that the 2 meter pole was up.

The movie "One Week in October" was shown. Meeting adjourned.

Respectfully submitted,

Dick Lund, WA6HYO

Thirty Years Ago at SFARC

March 4, 1976

Had an "eyeball" meeting at Sierra College (Campus Center) with 15 hams enjoying this get-together and paying their donations for enjoying the repeater.

73,

Gary, KQ6RT

Cute-1.7

(Continued from front page)

Gain antennas and preamps were needed, and the many satellite operators and EME stations across the globe trained their antennas at the wayward spacesuit to pick up fragments of its signal. Slowly, telemetry reports were collected and the SSTV picture assembled. A. J. Farmer, AJ3U, set up a Web "Blog" site to collect audio files (<http://www.aj3u.com/blog>), and Steve, K4HG, sponsored the SuitSat website (<http://www.suitsat.org>) where reception reports are recorded. Telemetry received showed that the suit remained quite comfortable, temperature-wise, so the partial failure has yet to be explained. I highly recommend taking a minute to browse A. J.'s site, showing the variety of ways that Hams were able to

receive and decode the faint signals, long after the scanner crowd had dismissed the Suit as dead.

In spite of the partial radio failure, SuitSat was a tremendous success. The simple idea of putting a radio in an old space suite, and sending it on its way, captured the imagination of school children, the press, and the public. Over 7.5 million hits were recorded on the suitsat.org website. Numerous educational opportunities were created and fulfilled by Hams across the globe, building an awareness of the amateur radio community and its satellite program.

About the same time that SuitSat was going silent, a new satellite was being launched. CUTE-1.7, the follow-on to the earlier CUTE-1 was launched from the Uchinoura Space Center in Japan just before midnight UTC on February 20th 2006. The satellite is tiny – 100mm x 100mm x 200mm; that's a box a little bigger than a common brick, but weighing only a fraction as much. The satellite's full name is "CUTE-1.7 + APD". "APD" stands for Avalanche Photo Diode, one of the mission's experiments, which is a testbed for detecting charged particles in space. The spacecraft also has a transponder on board, with a digital communication system, and a camera.

CUTE-1.7's signal has already been heard on the ground, and early telemetry is being received and processed. The transponder and camera will be turned on later, after the spacecraft's systems have been checked out. Stay tuned for more on this interesting little bird. In the mean time, the project's website is at

http://lss.mes.titech.ac.jp/ssp/cute1.7/index_e.html

73s,

Greg KO6TH

Contesting News

(Reported by Fred, K6DGW)

March 2006 Calendar of Selected Contests:

Mar 3-5 ARRL DX (SSB)

[www.arrl.org/contests/forms/]

Mar 11 North American Sprint (RTTY)

[www.ncjweb.com/sprinrules.php]

Mar 17-19 BARTG RTTY Spring Sprint

[www.bartg.demon.co.uk/Contests/06_rules.htm]

Mar 24-26 CQ WPX (SSB)

[home.who.rr.com/wpx]

Contest Comments:

We've covered the first two contests in previous issues of Sierra Signals, but the last two this month are new.

BARTG RTTY Spring DX: BARTG is the British Amateur Radio Teledata Group, and they sponsor several contests each year for digital modes. They generate a lot of activity world-

wide, and are a great place to exercise your digital set-up plus pick up some new ones on RTTY.

CQ WPX: The WPX contests are sponsored by CQ magazine, and are a super place to pick up new countries since they are very popular internationally. There's a separate contest for CW, SSB, and RTTY, and this one is the SSB. 80 through 10 excluding 30, 17, and 12 meters. The exchange is a signal report (it'll be "59") and a 3-digit QSO number. If you're really good, just go to 4-digits after your 999th QSO. Contacts between stations on different continents are worth 3 points on 10, 15, and 20, and 6 points on 40 and 80. Contacts between stations on the same continent but different countries are worth 2 or 4 points, and between stations in the same country, 1 or 2 points. As in most contests, there are multipliers, however unlike most which use some geographic entity as a multiplier (e.g. ARRL Sections, or States/Provinces/Countries) and thus have some maximum number, WPX multipliers are the prefixes of the calls you work. A prefix can be worked once, regardless of band, however a station can be worked on each band. A prefix is the characters in a call sign up to and including the first numeral, or second numeral if the call begins with a digit. Examples are W6, K6, N6, WA6, KC6, P40, 6Y1, etc. Because of this, the number of possible multipliers, while still finite, is huge. Jim, WX6V, here in Auburn specifically chose his call to be a fairly rare prefix (only 701 other possible stations right now)

SO2R: SO2R stands for "Single Operator, 2 Radios", and the mode has taken off like wildfire in the last several years. In virtually every contest, the single operator class permits only one transmitted signal at a time. SO2R lets you stay in the SO class, but make contacts on two bands, just not instantaneously at the same time. It takes two radios on separate bands, each with its own antenna. Generally speaking, it also takes a set of bandpass filters for the radios as well to keep them from interfering with each other. Each radio feeds one side of your headphones. Most of the popular logging software now supports SO2R.

The basic operating plan is to designate one radio as the "Run Radio." It's usually on the band that is likely to generate the highest QSO rate, and you call CQ on it and all of your contacts on that band are with stations that answer your CQ. The other radio is the "S&P Radio" (search and pounce), and it is on another band, usually the next most active. While the logging program is calling CQ on Radio-1, you tune around with Radio-2 looking for a station to call. When you find one, you enter his call into the program and hit a specific key (they vary between the loggers). This interrupts the CQ and calls the station. Once you have logged the QSO, the program restarts the CQ on Radio-1. Of course if someone answers your CQ, you work him.

You can often spot SO2R stations during the contest ... their CQ's will occasionally be interrupted, and if you call one, there may be a delay in answering as he finishes up the S&P contact on the other radio. Most contest QSO's are very short, and with radios now containing digital voice keyers, SO2R is popular in SSB contests as well. I've tried SO2R twice, once at N6RO's mega-station in Oakley, and once at K6IDX over in El Dorado County. There is definitely a rhythm to it, however I

continue to operate SO1R, both because SO2R takes practice and, while I have enough radios, I don't have enough antennas.

73,

Fred K6DGW

February Meeting Minutes

(Reported by Leslie, K7NYE)

Minutes of the SFARC Board and General Meeting February 10th, 2006 at the Auburn, CA main library:

The Board of Directors meeting commenced at 6:50 PM by W7IB, Casey McPartland

Board; Board Members, in attendance included both 2006 officers and directors. Reports were asked of the officers included Casey, Ed, George and Leslie, with additional comments by Directors Joe, Dottie and Wayne. Discussion was held regarding volunteering a new raffle chairman, as well as when the club would have a discussion the pros/cons of last years field day. Comments were made about the renewal of the site location license for the club repeater with the school district. George brought in a 1997 calendar of events for the club as an item of interest and also provided dates for the annual MS Walk and the Enduro event. Meeting adjourned at 7:20 PM.

SFARC General Meeting Minutes:

7:40 PM Meeting started by W71B, President Casey McPartland; Started off with Pledge of Allegiance, Introduction of SFARC Board Members; Introductions of all club members and guests; Officer and Committee reports were made. The designated representatives gave ARES & VE reports. Rob, WW6G reported that in the last VE session, 20 tests were administered and 18 were passed. Chuck, KG6FFK presented an award to George, KG6LSB for his logistics work with ARES.

New Business:

Sharon Williams, KQ6A brought in samples of club patches for the club to view during the meeting and to make arrangements for future purchase; annual club picnic date was targeted for August 19th with the 26th as a back-up date. The next club breakfast was announced for February 25th in Roseville. Sign up sheets were sent around the room for the volunteer events (MS Walk in Auburn and Rocklin and the Enduro off-road event in Georgetown.)

Presentation:

John Aurelius and Eric Homa, N6NMZ of the Placer County Search and Rescue presented information regarding the mission and scope of this locally based volunteer group. They detailed a number of divisions within the organization, including Search and Rescue, Four Wheel Drive Team, Communications Team, Ground Search Team, Mounted Team, Motorcycle team and

Tahoe Nordic Ski Team and others. Placer County Search and Rescue perform a vital public service and is an all-volunteer group funded in part by the Sheriffs dept and private donations. They get involved with other agencies and also do other search and rescue training with other agencies around the state. They are currently recruiting new volunteers, both with and without amateur radio licenses. It was mentioned that Placer County Search and Rescue is a nationally known mountain rescue team. The SAR organization is headquartered in the DeWitt Center in Auburn. The organization will pay for all training for any volunteers that are interested in joining.

For more info about the Placer County Search and Rescue look at www.placer.ca.gov/sheriff/deptinfo/units/sar.htm After the presentation, Gary, KQ6RT, held the monthly drawing. Meeting was adjourned approximately 9:45 PM

Respectfully submitted:

Leslie, K7NYE

Secretary

From Our Treasurer's Desk

(Reported by George, KG6LSB)

The annual club picnic is scheduled for August 19th at the Auburn Recreation Park site on Dry Creek road. Start making your plans now.

Also:

We need 9 more volunteers for the Auburn MS walk on Saturday 6 May and 3 more for the Motorcycle Enduro on Sunday 7 May. Right now we have enough operators signed up for the Rocklin walk. Please contact me at kg6lsb@arrl.net.

George KG6LSB

FCC Noncommittal on Morse Code Proceeding

(Reprinted from ARRL)

Just when the FCC will act on the "Morse code" proceeding, WT Docket 05-235, remains hazy. The Commission released a Notice of Proposed Rule Making and Order (NPRM&O) last July proposing to eliminate the Element 1 (5 WPM) Morse code requirement for all license classes.

The Amateur Radio community filed more than 3800 comments on the proceeding, and additional comments continue to show up, even though the formal comment deadline was last fall. The next--and most-anticipated--step for the Commission is to formally adopt any revisions to its rules and conclude the proceeding with a Report and Order (R&O) that spells out the changes and specifies their effective date.

"There really is no news," an FCC Wireless Telecommunications Bureau (WTB) staffer told ARRL this week on background. "We certainly hope to release WT Docket 05-235 sometime this year, but we're not making any predictions at this time." The WTB staffer indicated there would be no "big announcements" at the Dayton Hamvention FCC Forum either.

Beyond eliminating the Morse requirement, the FCC declined in its NPRM&O to go forward with any other suggested changes to Amateur Service licensing rules or operating privileges.

The proceeding began with 18 petitions for rule making--many just calling for the elimination of the Morse requirement but some asking for more far-reaching changes in the Amateur Service rules. The various petitions attracted a total of some 6200 comments. The FCC subsequently consolidated the petitions--including one from the ARRL asking the FCC to establish a new entry-level license class and to retain the Morse requirement for Amateur Extra class applicants--into a single proceeding designated WT 05-235.

Worth noting is that the FCC did not propose in WT 05-235 to extend HF privileges to current Technician licensees who have not passed a Morse code examination. In its NPRM&O the FCC suggested that in a no-Morse-requirement regime, such "codeless Techs" would be able to gain HF access by taking the Element 3 General class written examination.

Before it releases an R&O on the Morse code proceeding, however, the WTB wants to wrap up action in another Amateur Radio-related docket--the "Phone Band Expansion" (or "Omnibus") NPRM in WT Docket 04-140, released last April 15. A dozen petitions for rulemaking, some dating back to 2001, were consolidated in the Omnibus proceeding. In that NPRM, the Commission proposed to go along with the ARRL's Novice refarming plan aimed at reallocating the current Novice/Tech Plus subbands to expand portions of the 80, 40 and 15 meter phone bands. The FCC also agreed with an ARRL proposal to extend privileges in the current General CW-only HF subbands to present Novice and Tech Plus licensees (or Technicians with Element 1 credit).

Any FCC decision to eliminate the 5 WPM Morse code requirement for HF access would have no impact on either the current HF CW-only subbands or on the CW privileges of Amateur Radio licensees. The Morse code proceeding neither put forward nor recommended any changes in CW allocations or privileges.

Announcing EMCOMMWEST® 2006

"EMCOMMWEST® 2006" May 6-7 Reno, Nevada "The Biggest Little City in the World"

Preparation for the 2006 edition of EMCOMMWEST® is underway! This year the conference, themed around emergency communications, will be held at the Atlantis Hotel and Resort in Reno. Many new and exciting themes will be added this year, much of which will center around response to

large scale disasters, such as Hurricane Katrina, and how amateur radio is there when all else fails!

The event is once again sponsored by the American Radio Relay League based in Newington, CT (www.arrl.org), and will host many exciting features and presentations, including:

- The Reno Spring Hamswap – Free to sellers and buyers! It will begin at 6am Saturday morning in the Atlantis parking lot. Space is limited, so plan to get there early!
- Saturday night banquet. Guest Speaker will be Bill Pasternak, WA6ITF, of Amateur Radio Newslines! A delicious meal will be served by Atlantis. Sign up online at the EMCOMMWEST® Website soon – seating limited.
- VE Testing for all classes of amateur radio licenses.
- Emergency Communication Vehicle Displays (contact EMCOMMWEST® if you have one to bring and show off)!
- ARRL Forum – with panel discussion of areas of concern to amateur radio and planning for the future.
- Data and digital communication forums– the latest technology!
- Vendor booths – space is available, but limited so hurry!!

For registration for the conference, banquet and special room rates at the hotel, log on to www.emcommwest.org today!!

Don Carlson - KQ6FM

Nevada Section Emergency Coordinator /

Public Information coordinator

kq6fm@charter.net

Items for Sale

DX40 Heathkit CW Transmitter

WH6-10 VFO

New Tubes, Very Good Shape, Like New

\$125 or B/O

Hamkey Dual Key & Vibrokeyer

w/MFJ Auto Keyer, Manual, & P.S.

MFJ 482B Keyer

\$100 or B/O

Kenwood R-2000 Shortwave Receiver

Good Shape

500khz-30mhz 118mhz-174mhz Counter

\$250 or B/O

Bob WA6ULL (916) 987-9910

Kenwood TS830S HF TRANSCEIVER - \$350.00

With 2 extra sets of 6146 finals (new)

Kenwood REMOTE VFO-820 - \$100.00

Kenwood REMOTE ANTENNA TUNER AT 230 - \$100.00

Kenwood HMC-1 headset w/vox (fits some older kenwood ht's) - \$10.00

Kenwood TS 940S hf transceiver (excellent condition visually, but unfortunately DOA good for parts or you fix 'em) w/ ser. Manual - \$200.00

Heathkit HW-9 CW TRANSCEIVER (PRISTINE CONDITION) Original unmodded/With Power Supply - \$150.00 10 thru 80 meters

Heathkit QRP WATTMETER HM-9 - \$75.00

Heathkit ANTENNA TUNER HFT-9 - \$ 75.00

Heathkit SP 99 SPEAKER - \$ 25.00

(Or take all the above Heathkits with assembly manuals for \$300.00)

All of the above heathkits are in the brown series

Contact Bob KD6WTY at 916-682-9871 Sacramento

Editors note: Anyone wishing to submit items for sale may do so by emailing me with the details (in a plain text or Word document) and I will publish as space permits.

Wanted

We are looking for a new Raffle Chairperson. Gary, KQ6RT, will be retiring from that position this year. He says he will be happy to help out the new person by passing along the things he has learned over the years. If you are interested please contact Gary email KQ6RT@sbcglobal.net or phone (916)663-4143.

Special Birthday Greetings

SFARC would like to wish Ed Ahlstrom – KQ6CK a very happy 96th birthday on March 1st!

