

# Sierra Signals

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

<http://sf-arc.org>

November 2005

P.O. Box 1005, Newcastle, CA 95658

## New Satellites Launched

(Reported by Greg, KO6TH)

The latest set of amateur satellites were launched Thursday, October 27th from Plesetsk, the northern Russia spaceport made famous in the late 1950's as an ICBM facility aimed at the United States. The satellites are a set of three 4-inch cubes that are loaded into a carrier for the ride into space, sort of like a cosmic Pez dispenser. The overall satellite is named "SSETI Express".

SSETI Express was described by some as a satellite built by the Internet. Students across the planet worked on pieces of the craft, communicating and debugging their work with the aid of the global network. Many of the designers have never met in person.



### OFFICERS

#### **PRESIDENT**

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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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The launch at 08:52 CEST went well, and the spacecraft reached its intended orbit about 400 miles up. 64 minutes after launch, the three pico-satellites were released to travel on their own. Signals from the main craft (SSETI) and two of the three cubes (XI-V and UWE-1) have been received. At 12:50, SSETI was pronounced healthy; signal reports and telemetry was coming in from amateur stations around the globe.

(continued on page 2)

## 2005 Calendar of Events

(Operating Events in Italics)

[Dates are local unless otherwise indicated]

Nov 5-7	<i>ARRL Sweepstakes (CW)</i>
<b>Nov 11</b>	<b>Regular Mtg &amp; Elections</b>
Nov 12-13	<i>WAE DX (RTTY)</i>
Nov 19-21	<i>ARRL Sweepstakes (SSB)</i>
<b>Nov 26</b>	<b>Club Breakfast</b>
Nov 26-27	<i>CQ WW DX (CW)</i>
<b>Dec 9</b>	<b>Annual Club Christmas Potluck</b>
<b>Dec 31</b>	<b>Club Breakfast</b>
<b>Jan 13</b>	<b>Regular Meeting</b>
<b>Jan 28</b>	<b>Club Breakfast</b>

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

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## Forty Years Ago At The SFARC

(Reported by Gary, KQ6RT)

November 17, 2005

Four members were present. Jack showed an old movie that ARRL sent. Afterwards, we ate the refreshments Joe brought and we adjourned. It was a cold, rainy night. Members present were Jack, Joe, Carl & myself.

Respectfully submitted,

Richard H Lund, WA6HYO

73,

Gary, KQ6RT

## New Satellites

(Continued from front page)

But something happened. At 22:20 the spacecraft went into Safe mode, apparently due to an undervoltage in the power system caused by battery charging problems. The flight team is working on recovery, sending commands to the spacecraft in hopes that it can be brought back to life. The downlink is on 435.250, 9600 baud digital. To the ear, it will sound like an open FM squelch, but softer; more of a hiss than the usual roar. On their 11am pass this Saturday morning, I too heard nothing from the craft.

The other picosats appear to be doing well. XI-V and UWE-1 are sending telemetry back to Earth as designed. XI-V uses a CW signal on 435.465, and is reported as weak but receivable, which is not surprising as it's in excess of 400 miles away and transmitting with only 80 milliwatts. UWE-1 is on 435.505 with an AX.25 (9600 baud packet) signal, but the flight team is asking for help getting reliable telemetry. Bad weather in Europe, the short duration of packet bursts, and imprecise doppler correction has made it impossible for them to know what their bird is doing. The third picosat, Ncube-2 has also been reported as heard on 435.305, but not confirmed. Confusing this hunt for the satellites is that the primary satellite being launched was a large Earth-observation craft known as Mozhayets-5, which failed to separate from the booster rocket and is stuck in roughly the same orbit as the amateur birds. There is also a signal on 435.325 that seems to track with the rest of the flock. It is suspected as being RS-25, which is apparently an amateur package attached to the Mozhayets craft. This post-launch confusion is not uncommon, and will

hopefully sort itself out over the coming weeks as the various craft separate from each other.

For an interesting history of the launch facility, check out <http://www.russianspaceweb.com/plesetsk.html>. Also watch the Amsat web site (<http://www.amsat.org>) for more news on the recovery efforts for SSETI and its sibling picosats.

73s,

Greg KO6TH

## From the President's Desk

(Reported by Casey, W7IB)

Well, elections are coming up at the next meeting and some new candidates have put their hats in the ring. There's still room on the ballot to make it a "horse race", so if you have some ideas that you'd like to see implemented, let one of the officers know and we'll put you on the ticket. Remember, the election of officers always takes place at the November, which falls this year on the 11<sup>th</sup>. Here are the positions and the candidates for 2006:

**President** - Casey McPartland W7IB

**Vice-President** - Ed Morell N6EOD

**Treasurer** - George Simmons KG6LSB

**Secretary** - Leslie Nye K7NYE

**Board of Directors** Dorothy Sylvia K6DMS

Joe Sylvia KF6OQY

Wayne Stilwell W6DT

There's still time, so come on!

Also keep in mind that the Annual SFARC Christmas Dinner will be held on December 9 at 6:30pm at the Newcastle United Methodist Church. Directions will be posted on the club website, [www.sf-arc.org](http://www.sf-arc.org), and in this publication. Think about what you're going to bring to share so you can tell us at the meeting.

For those of you who are interested, and by the time this edition comes out, the FCC will have shut down the Comment Period on the "Code, No code" Notice of Proposed Rule Making (NPRM); this then goes into a 14 day period of "comments on the comments" which ends on November 14<sup>th</sup>. The FCC then goes into a process of reviewing all of the comments, and then issuing a Report & Order, then publishing it in the Congressional Record. Once published the Report & Order becomes law after, what I believe is, 75 days. So, whatever is decided it should become law sometime in early 2006, and I hope you'll join me in hoping that whatever is finally decided preserves the best interests of Amateur Radio in

the USA. PLEASE NOTE: Should it happen, the dropping of the code requirement confers no new privileges for any operating class. That is to say that if you hold a No-Code Technician, or you are a Technician that has passed the code exam, you still have to pass the General written exam in order to upgrade your General class operating privileges.

Further, if the code is dropped, it makes sense for those who have passed the General exam to assume that they will have to submit a new application, along with their CSCE, and have the upgrade posted on the FCC ULS website prior to using General Class privileges. It might be safe to assume that this process will be handled by you local VE Team, but we'll keep you posted. Remember, you can still take the Morse exam in the mean time.

So, exciting times ahead!

Next month I promise one of my regular articles, but lately work always seems to have me in "crunch time" – should quiet down after Thanksgiving.

The weather is changing and winter is coming fast. It's a time for great Low Band operating conditions on 40, 80 and 160! It's also time to concentrate on our driving with the rain and snow come new challenges – don't become a statistic!

Until next month vy 73 de W7IB and Oscar the 7 ½ wpm Dachshund (W7IB/k9)

## Contesting

(Reported by Fred, K6DGW)

### Selected November Contests:

- 5-7 ARRL Sweepstakes (CW)
- 12-13 WAE DX (RTTY)
- 19-21 ARRL Sweepstakes (SSB)
- 26-27 CQ WW DX (CW)

**ARRL Sweepstakes:** It's not really possible to say "contest" and "November" in the same sentence without delving into the venerable ARRL Sweepstakes. I say "venerable" because, possibly short of Field Day, the Sweeps may be the oldest running contest. The bands will be alive and crowded, even at the solar minimum where we are, or are very close to ... numbers have been running – SFI: 70-85, A: 5-12, K: 0-1. The contest runs from 2100Z 5 Nov to 0300Z 7 Nov (remember, we'll have just gone to standard time, so for us on the left coast, PST is Zulu minus 8 hours), and there are some unique wrinkles to SS which sets it apart from many other contests:

1. As a single operator, you can operate 24 of the 30 hours. You pick when you sleep, but there is some strategy involved if you're a big gun and intent on winning. Of course, if that's you, I doubt you'll be reading this! So for the "little pistols," we continue ...

2. You may work a call sign once— any band, it doesn't matter. But, one QSO on any band and you're dupes for each other from there on out.
3. Multipliers are the 80 or so ARRL Sections
4. The exchange is not the usual "five nine california," it sort of resembles the header of a standard NTS radiogram, and consists of:

<his call> <serialnumber> <precedence>  
<yourcall> <check> <arrlsection>

<his call> The other guy's full call. If he answered your CQ, this is the only time he's going to hear you send it and it's his one chance to make sure you got it right

<serialnumber> Your QSO number, counted serially from "001".

<precedence> A single letter (Q, U, A, B, M, or S) See the SS rules at [www.arrl.org/contests/rules/2005/novss.html](http://www.arrl.org/contests/rules/2005/novss.html)

<yourcall> Hopefully, you can figure this one out (if not, you're a prime candidate for membership in the Second-class Operators Club! – [www.qsl.net/soc](http://www.qsl.net/soc)), and it may seem redundant, however keep in mind that he could have busted it from your CQ, so here he gets another chance to get it right.

<check> Two digits representing the year you were first licensed – any callsign, anywhere. My check is "53."

<arrlsection> Your ARRL Section. For all SFARC members, that would be "SV" or "Sierra Victor."

Thus, if you are W7IB and you work me on CW in SS, you'll get "W7IB 123 U K6DGW 53 SV" as my exchange. On SSB (you won't find me there much but often friends operate my station on SSB weekend), it'll generally be phonetically.

Because of the "one contact with a given callsign" regardless of band, SS is a bit different than many other contests. First off, you don't change bands just to work the same station on another band. Secondly, the only reason for changing bands at all is to pick up new stations and sections, so you need to pay attention to propagation. It's hard to work the Northwest, NV, ID, CA, and AZ on 20 in the middle of the day. However in the late afternoon, 40 usually comes alive for these distances, but it is harder to work the east coast on 40 then. 80/75 is the band of choice later in the evening. Hardly anyone ever wastes time on 160 for SS. So, if you hang around on 20 too long on Saturday, you're going to miss those close-in stations on 40, and when you do QSY there, 40 will have "gone long" and all you'll hear are midwest and east coasters you've already worked.

The start is pandemonium, of course, and smaller stations generally "Search and Pounce" (S&P) while the big guns camp on a frequency and call CQ. However, just because you're running 100W to a G5RV doesn't mean you shouldn't call CQ

too. Many people work on Saturday and they'll get on the air for a few SS QSO's in the late afternoon/early evening after they get home. They will almost always just tune around, call a few stations, and leave for dinner. Calling CQ is your one chance to work them. You might have a hard time holding a frequency very long, but don't give up.

Things will get fairly quiet late at night (OK ... really quiet! Most serious competitors hit the rack around 0000–0100 local), and then will begin to pick up some Sunday AM. You will very likely hear right-coast stations on 20 around our sunrise, however fly-over country (aka the midwest) will be very much stronger for them, so don't be disappointed if it takes awhile before they start answering you. 0900 local is a good time for smaller stations to begin spending some time CQ'ing since that's noon on the east coast and folks are getting home from church. Many will fire up for an hour or two in their early afternoon, and again, unless you are in CQ mode you probably won't get them in your log.

Given current solar conditions, it is unlikely that 10 will actually ever open, and even if it did, it is unlikely that many stations will spend much of their SS time there. 15 is a real possibility, however. 20 will be the daytime workhorse, of course. You can check the solar status at [www.foothill.net/~andrea](http://www.foothill.net/~andrea) on the right side of the opening page. If you click on the X-ray Flux indicator, you'll get a GOES plot of the flux and a lot of other stuff too. The SFI, A, and indices are updated every six hours, so be sure to do a refresh to get the latest data.

So, regardless of your code speed, and regardless of whether or not you have ever contested before, write out your exchange on a card above your rig, warm up the radio on SS Sunday about noon, pick your comfortable sending speed, and call "CQ SS DE KQ6RT." At that point in the contest, all of North America have run out of stations to work, and KQ6RT is fresh meat. Trust me, they'll match your code speed to get you in their log! For many of us, it's about as close to being rare DX as we get.

**Footnote:** The mean age of the amateur population is rising slowly each year. Admittedly, the reasons many of us OT's got into the hobby as kids many years ago --"the magic of wireless," communicating with other countries, and being able to build some or all of our own equipment – have pretty much faded from the world. Today, the kids carry "the magic of wireless" around in the pocket of their cargo shorts, and that magic includes cameras, games, and text messaging as well as (gasp!) just talking on the phone. They play Internet games and chat on the web with someone half-a-planet away and find it totally normal, and home-built ham gear is becoming a rarity.

Neither my wife nor any of my kids showed any interest in my hobby which wasn't all bad for me since I didn't have to share my station. We have three grandsons locally (20, 19, and 17), and none of them have exhibited any interest either except for Joe, the 17-yr old. He came over one day when I was in a CW contest, listened for a few minutes, and said, "Whatcha doin' Grandpa?" I told him I was in a contest, and his next question was, "How do you win?" He ended up sitting with me close to an hour, and in the space of that time had actually began to pick up a little of the repetitive things like the suffix of my call, "TU" and "5NN," even at 30WPM. He didn't care about the

radio, the antenna, or even the logging computer ... it was the competition that attracted him. There is a club of European teens for whom the competition of contesting is the only reason they're hams. I've worked a few of them, and believe me, they play to win!

## October Meeting Minutes

(Reported by Paul, KB6NYB)

Minutes of the Sierra Foothills Amateur Radio Club Meeting, Friday Oct. 14, 2005 at the Auburn, California main library.

The SFARC Board of Directors meeting was held at 1855 hrs., attending: Casey, W7IB, Donna, KD6PJM, George, KG6LSB, Kevin, K7TST, Larry, AE6CC, and Ed, N6EOD. Subjects discussed: Upcoming Christmas party, November club election and club embroidered logo survey..

President Casey called the general meeting to order at 1931 hrs. and led all members and visitors in the pledge of allegiance to the flag. He introduced the club officers and invited all members and visitors to introduce themselves. November elections were discussed regarding openings for treasurer, Secretary and board members. General meeting ended at 2009 hrs. and White Elephant sale began. 2145 hrs. White Elephant sale ended, meeting adjourned.

Respectfully submitted,

Paul Alford, Secretary

KB6NYB

## National Ham News

Thanks, ARRL Bulletins and Letter

ARRL CALLS ON FCC TO SHUT DOWN VIRGINIA BPL SYSTEM

In support of Amateur Radio complaints of interference, the ARRL this week formally asked the FCC to instruct the City of Manassas, Virginia, to shut down its broadband over power line (BPL) system. Communication Technologies

(COMTek) operates the BPL system over the municipally owned electric power grid. The League says the facility has been the target of interference complaints, none of which has resulted "in any action or even interest" on the part of the FCC's Office of Engineering and Technology (OET) staff. In the meantime, the ARRL says, interference to local Amateur Radio stations continues.

"The Manassas system currently causes harmful interference, and it is not compliant with applicable FCC Part 15 regulations, including Section 15.5," the ARRL said in a 16-page filing to the OET and the FCC's Enforcement Bureau. "Whatever



actions either Manassas Power or Communication Technologies Inc might have taken to relieve the problem have not been successful, and it persists to the present time. This is precisely the situation in which the system must be shut down, pending successful resolution of the severe interference."

Two years ago, the ARRL put Manassas officials on notice that the League would act on behalf of its members to ensure full compliance with FCC regulations once the city's BPL system, then in the trial stage, started up.

The ARRL and the complaining Manassas radio amateurs--George Tarnovsky, K4GVT, Donald Blasdell, W4HJL, and William South, N3OH--cite interference so severe that "no communications can be conducted in the amateur allocations subject to interference," said the ARRL, which accused the city of "stonewalling in the face of repeated complaints."

"The parties cannot be said to be working this out cooperatively, since the City of Manassas and its BPL operator are currently in full denial," the League said.

Correspondence and reports from Tarnovsky, Blasdell and South outlining repeated contacts with the BPL operator and a lack of effective resolution--and even public denial--of the interference, accompanied the League's filing. All three hams suggested city officials and COMTek have not acted in good faith in addressing the interference. Efforts by the BPL operator to "notch" band segments have proven ineffective. "Our continued monitoring of the Manassas BPL system has shown they continuously open the notches and/or increase signal levels, subsequently interfering with licensed services again," Tarnovsky asserted. "This can only lead to one conclusion--they are not taking the interference issue seriously."

Field tests conducted not only by Manassas radio amateurs but by the US Department of the Navy established that the city's BPL system "was an interference generator at distances of hundreds of feet from the modems on overhead power lines," the ARRL wrote.

The FCC adopted new Part 15 rules to govern BPL deployment a year ago this week. Manassas earlier this month formally inaugurated its citywide deployment of the high-speed Internet BPL system, which it touts as "the first large-scale commercial BPL deployment in North America." The city receives a portion of BPL subscriber revenues to offset its costs of installing and maintaining the system.

A copy of the League's filing to the FCC is available on the ARRL Web site <http://www.arrl.org/tis/info/HTML/plc/filings/Manassas-BPL-complaint-10-05.pdf>.

pdf>.

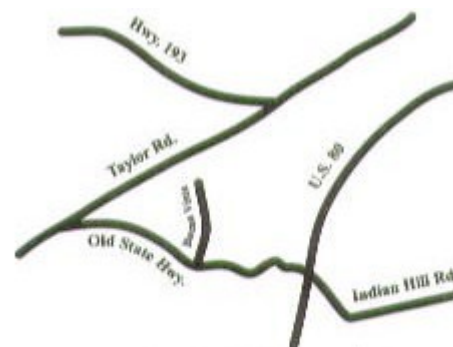
Additional information about BPL and Amateur Radio is on the ARRL Web site <http://www.arrl.org/bpl/>.

To support the League's efforts in this area, visit the ARRL's secure BPL Web site <https://www.arrl.org/forms/development/donations/bpl/>.

## Directions to Christmas Party

From Sacramento: Take Hwy 80 East toward Reno. Exit Newcastle Rd./Indian Hill exit. Turn left at the light onto Newcastle Rd. Go over the freeway, the road will bear to the left and dead end at Old State Highway. Turn right on Old State Highway (the road will take a few curves) and then turn right on Buena Vista. The church is on the left about a block from the Old State Highway.

From Auburn: Take Hwy 80 West toward Sacramento. Exit Newcastle Rd. exit. Turn right onto Newcastle Rd. The road will bear to the left and dead end at Old State Highway. Turn right on Old State Highway (the road will take a few curves) and then turn right on Buena Vista. The church is on the left about a block from the Old State Highway.



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