

October Club Meeting

Date: Friday, October 24, 2008

Time: Socializing at 7 pm, Meeting at 7:30

Place: Covington School, 205 Covington Road, Los Altos

Topic: The Elecraft K3 Transceiver

Speaker: Eric Swartz, WA6HHQ

Summary: Eric WA6HHQ will demonstrate Elecraft's new top-of-the-line transceiver for HF and 6-meter operation. Whether you count knobs or QSO's, the K3 is a sure-fire winner. You read about it in QST (April 2008), now come and see it up close and in action at FARS October meeting.

There will also be a report of the 2008 Pacificon.

There will be two great raffle prizes at this meeting. The first prize will be a Diamond X50A 2m/440 Base Vertical Antenna. Second prize is a Diamond SX40C 15/150W 144-470 MHz SWR Meter.

The club offers refreshments (great coffee, great cookies) and technical advice at the meeting: Bring your questions for Dr. Know-It-All and get great answers. Be sure to attend for an enjoyable evening.

November Amateur Radio Technology Day

The next Amateur Radio Technology Day will be November 1st at the SLAC National Accelerator Laboratory (formerly SLAC) from 8 am to 9 pm. The scheduled speaker is Kevin Weiler, K6XXX, who will speak on Rockets and Amateur Radio in the Black Rock Desert. The presentation will be given at 1:30 pm in the Panofsky Auditorium. Am-Tech Day is a lot of fun and friendship. Come out and enjoy a wonderful day at this FARS sponsored event.

Upcoming Events

Oct 24 7:00 PM, [Club meeting](#), Covington School
 Nov 1 8 AM to 9 PM, [Am-Tech Day](#), SLAC, 8AM-9PM
 Nov 6 7:30 PM, Board Mtg at the Los Altos Town Crier
 Nov 21 7:00 PM, [Club meeting](#), Covington School
 Dec 4 7:30 PM, Board Mtg at the Los Altos Town Crier
 Dec 6 8 AM to 9 PM, [Am-Tech Day](#), SLAC
 Jan 23, '09 Winter Banquet
 Mar 2009 [Electronics Flea Market](#) will start again next year
 Thursdays 8:00 PM, FARS net, 145.230(-), 100 Hz PL

See more events, [FARS Calendar](#) <<http://www.fars.k6ya.org/events/calendar>>

President's Corner



Membership Meeting. Our next meeting is Friday, October 24th at 7pm (<http://www.fars.k6ya.org/meeting>).

The October meeting is “**The Elecraft K3 Transceiver**” with Eric Swartz, WA6HHQ. Eric demonstrates Elecraft's new top-of-

the-line transceiver for HF and 6-meter operation. See it up close and in action at FARS meeting.

Board Members. Elections for Board Members of the FARS Board of Directors are scheduled for our November 21st. There will be an opportunity to nominate board members at this month's membership meeting on October 24th.

Am-Tech Day. The November Amateur Radio Technology Day is scheduled for Saturday, November 1st at the Stanford Linear Accelerator Center. Check the FARS web site (www.fars.k6ya.org/amtechday/) for the program schedule, directions, and the latest news.

Email Notices. Subscribe to the FARS Announcement list (www.fars.k6ya.org/mail/) to receive reminders of FARS activities and other news.

Flea Market. The Electronics Flea Market is on hiatus until March 2009.

- de Mikel, KN6QI

September Meeting Report

The September meeting was the annual Homebrew meeting. Five projects were presented. An APRS set of equipment, both hardware and software, was presented by Nimit Hongyim, K6XOX. Herb Vanderbeek, WY6G, presented a coupler/attenuator and amplifier for 1.2 GHz. Umesh Ghodke, K6VUG, presented a tracker w/APRS, a loop antenna with remote control tuner, and home made battery packs and various cables. Toshi Sugiya, KJ6Q, presented a magnetic loop antenna with trombone tuner. Dave Platt, AE6EO, presented some 440 MHz antennas – a monopole and a yagi. The first place prize was a tie! Umesh Ghodke, K6VUG, and Toshi Sugiya, KJ6Q, tied for first place for their projects. See more on the Homebrew later in this newsletter.



Umesh, K6VUG



Toshi Sugiya, KJ6Q



1st Place Homebrew

**Gary and Mikel
1st Place Homebrew
Raffle Winners**

The Yaesu VX-150/83 2 meter handheld with 1400 mah battery and a desktop fast charger was won by Gary Barnes, KI6HIG. A Powerex MH-C9000 Wizard One Charger/Analyzer was won by Mikel Lechner, KN6QI (FARS President). The Wish You Were Here number for Howard Califf, W6HOC, was chosen. Unfortunately, Howard was not present to claim the prize.

CLUB INFORMATION

President: Mikel Lechner, KN6QI
Vice President: Steve Stearns, K6OIK
Treasurer: David Cooper KE6PFF
Secretary: Rob Riley, KI6INR
Radio Officer: Phil Hawkins, KA6MZE
Training Officer: Kevin Weiler, K6XXX
Relay Editor: Mark Hardy, AF6DO

FARS Board: Dick Baldwin N6ATD, Robert Flemate KE6TFU, Pink Foster KG6ILA, Nimit Hongyim K6XOX, Kristen McIntyre K6WX, Barbara Neuhauser AE6RM.

Station Trustee: Stan Kuhl, K6MA
FARS Web Page: <http://www.fars.k6ya.org>
Download Relay: <http://www.fars.k6ya.org/relay>

Club members and non-members are encouraged to subscribe to the FARS Announcement list by browsing www.fars.k6ya.org/mail, clicking on Subscribe/Unsubscribe and following the instructions under "Subscribing to fars-announce".

You may submit announcements to the FARS Announcement at fars-announce@svpal.org. The list is moderated and messages will be posted as approved by the list moderator.

Contact the FARS board of directors at fars-board@svpal.org

Club meetings are held at 7 PM on the fourth Friday of each month except January (Winter Banquet); and sometimes there are changes for June (for field day) and Nov. & Dec (for holidays).

Annual club membership is \$20. Club badges are \$9. Visitors are always welcome! Directions in this newsletter. Talk-in: N6NFI (145.23-, 100 Hz) or W6ASH repeater (145.27-, 100 Hz).

FARS *Relay* is the official monthly newsletter of the Foothills Amateur Radio Society. Contributions to the newsletter from members, family, and guests are earnestly solicited!

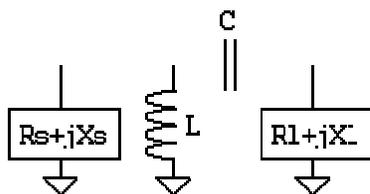
Contributions are subject to editing and/or compression. All readable forms welcome.

Here is how to reach the editor:

Mark Hardy, AF6DO
Mail: P.O. Box 2248
Santa Clara, CA 95055
Voice: 408-243-0701 (Before 9 PM, preferred)
Email: mark.af6do@gmail.com, At FARS meetings.

Impedance Matching Tool

Impedance matching is an integral part of circuit design and is useful for checking systems. The following website has a free tool that can be used to help with design (circuit diagram from the website), <http://www.circuitsage.com/matching/matcher2.html>.



October Meeting Raffle Prizes

The first prize is a Diamond X50A 2m/440 Base Vertical Antenna. The X50A is an excellent choice where ruggedness is required in a medium-gain, dual-band application. Special features: Fiberglass radome, stainless steel hardware, wide band performance, factory adjusted – no tuning required, high wind rating, DC grounded. Specifications: Band – 2m / 70cm; Gain – 4.5/7.2 dB; Max power rating: 200 W; Wind rating – 135 mph (no ice); Height – 5.6 ft; Connector – UHF; Element Phasing - 3-1/4l, 3-5/8l.



The second prize is a Diamond SX40C 15/150W, 144-470 MHz SWR Meter. The SX40C is a compact SWR-power meter featuring cross needle design for measuring SWR



and output power simultaneously. Compact size makes it very useful for testing mobiles as well as base station installation. Features: Cross needle design, rated from 144-470 MHz, power ranges of 30 and 300 Watts.

Raffle prize information from the Diamond website, www.diamondantenna.net.

Passing of Stan Kuhl

It is with great regret that FARS acknowledges the passing of Stan Kuhl, K6MA. He passed away Saturday October 18th. The funeral service will be Thursday October 23rd at 11 am at St. Cyprians Church in Sunnyvale. The church is located at Leota Ave and Washington in Sunnyvale.

Stan is long time member of FARS and is the trustee of our club call K6YA. He was a distinguished DXer on the DXCC Honor Roll with totals of 335/371.

You can read a story of how Stan helped a HAM learn CW at the following website <http://mysite.verizon.net/frugoli/id1.html>.

RF Power Density Calculator

This free online tool provides the capability to calculate RF power density. Inputs are power input to antenna, antenna gain, and distance to center of radiation to antenna. There are also links to a number of other calculators for a wide variety of uses. <http://www.calculatoredge.com/new/power%20density.htm>.

Avoiding Common Problems when Designing Op Amp and In Amp Circuits

The following website has a free downloaded of a tutorial that discusses some of the most common applications problems in designing Op Amp circuits and shows practical solutions to avoid them.

<http://www.emediausa.com/l/?27041.1229435.HGGRMOKB.0.6583>

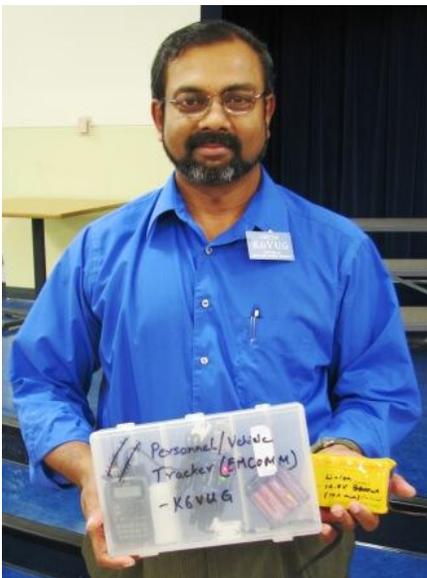
FARS 2008 Homebrew Contest



Nimit Hongyim, K6XOX, presented both hardware and software for his APRS station. Nimit won the third place prize for this entry. You can see more of Nimit's project at <http://go.to/k6xox>



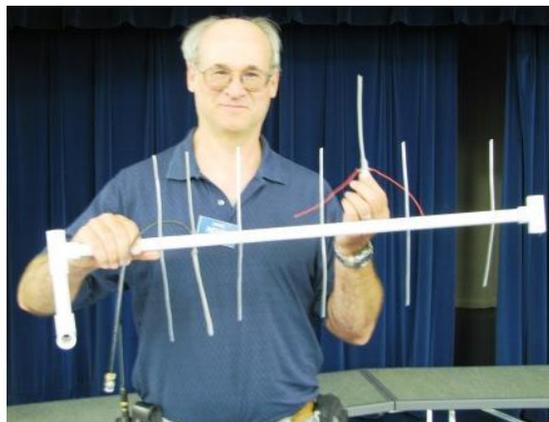
Herb Vanderbeek, WY6G, presented a coupler/attenuator with a heat sink and an amplifier (up to 140 W) for 1.2 GHz. Herb is showing the coupler in this photograph.



Umesh Ghodke, K6VUG, presented a tracker with APRS (in photo), a loop antenna with a remote control tuner, various home made cables for an IC7000 radio and a variety of battery packs. Umesh won first place (a tie) for his entry.



Toshi Sugiya, KJ6Q, presented a magnetic loop antenna with a capacitive trombone tuner, which he is showing here. The trombone tuner can quite plainly be seen. Toshi won the first place prize (a tie) for this entry.



Dave Platt, AE6EO, presented some 440 MHz antennas – a monopole and a yagi. Dave is holding one antenna in each hand in this photograph. Dave won the fourth place prize for this entry.

Winter Banquet

The Winter Banquet for 2009 is set for January 23rd at Michael's at Shoreline in Mountain View. We are planning to have \$1,000 in prizes for the raffle, a great meal, and of course a speaker (to be announced). The festivities begin at 6:00 pm with a no host bar. The dinner is scheduled at 7:00 pm with the presentation at 8:00 pm and awards and raffle after. Signup forms will be available in future editions of the Relay and at the FARS website. Mark your calendars for that date and check the FARS website for upcoming details of the banquet at <http://www.fars.k6ya.org/events/banquet>.

Amateur Radio – Technology Day
SLAC National Accelerator Laboratory, Menlo Park, CA
About the 4th Year Anniversary Celebration, October 4th, 2008***

Comments & snapshots by David A. Cooper, KE6PFF
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I'm lucky. I've been able to enjoy many years of monthly, Amateur Radio activities for hours and hours each time, at just two locations on the San Francisco Peninsula; initially (3 Months) at Sunnyvale Baylands Park & subsequently at the **SLAC National Accelerator Laboratory** (Renamed this month; Formerly the Stanford Linear Accelerator Center).

Initially known as Ham Day, Amateur Radio – Technology Day has become both a destination and a resource for many dozens of Amateurs each month, looking for and sharing what they could about Amateur Radio and Technology - Related subjects with other Hams and their friends.

With perfect weather each and every month, the hundreds of activity hours (roughly 609) have been filled with interesting/unusual/enlightening/educational/amazing & sometimes astounding (to me) events and extraordinary people, most of whom are Federal Communications Commission Licensed Amateur Radio Operators (Hams).

Thanks a lot. If you have attended any/some of/many of these monthly, supportive, free & mostly unstructured 13 hour long meetings, you probably have positive thoughts & have come away a little better because of it. I certainly have & on behalf of the sponsor of the activity (The Foothills Amateur Radio Society, of course), the Board of Directors and myself, **I want to thank all of the many people who have made this activity successful over the last 4 years***.**

As a listing of even key individuals involved over the years may be voluminous, let me cover any references to these fine people at another time. Suffice it be said that many wonderful and talented people have given freely of their precious time and energy, resulting in an enjoyable experience for all attendees. You know who you are; any large or small effort you have made as your contribution to Am – Tech Day is extremely appreciated.

The 4th Anniversary Party was a lot of fun. We had no formal speaker scheduled this month and used the Panofski Auditorium for presentations involving the Am – Tech Day Volunteer Appreciation Raffle and a group photograph. If you are interested in making a presentation at a future Am – Tech Day please contact me directly at ke6pff@arrl.net.

The sequence of activities & events during the day was the Site Morning/Setup, Lunch, The Group Photograph followed by the Am – Tech Day Volunteer Appreciation Raffle, eating the tasty cake, Dinner (an added meal by volunteers present) & the Evening/Recovery activity.

Below are a few snapshots captured at the event, along with information on the winners of the Am – Tech Day Volunteer Appreciation Raffle. **The next Amateur Radio – Technology Day is scheduled for Saturday, November 1, 2008 (The December meeting is on the 13th)** at SLAC National Accelerator Laboratory. **Keven Weiler, K6XXX** is scheduled to speak at 1:30PM on **“Rockets and Amateur**

Radio in the Black Rock Desert.” Additional information will be posted soon on the FARS Am -Tech Day web page.

*** Actually the activity has occurred 47 times in 46 months, as one meeting did not occur due to administrative reasons and we doubled up one month. We have traditionally celebrated in October; adjustments next year.

OPERATING SPECIAL EVENT STATION N6T



Toshi, KJ6Q, is seen working the world (or maybe the California QSO Party), using the Societies YAESU 990 HF Radio as **Special Event Station N6T.** This rig is often used at monthly Am – Tech Day events as our GOTA (Get On The Air) Station radio.

DISCUSSING A SUBJECT OF MUTUAL INTEREST



Frequently seen at Am – Tech Day are highly knowledgeable Amateurs Gerry K6TXD and Gerry N6NV, here in discussion about a subject of mutual interest. Both willingly donate a considerable amount of their spare time to Volunteer Amateur Radio activities on the San Francisco Peninsula.

**Am – Tech Day VOLUNTEER TEAM 47
(Morning/Setup), October 4, 2008**



Volunteer TEAM 47 (Morning/Setup) shown at around 9:00AM. L to R, front first: **Mike, Bob W6LOG, Barbara AE6RM*, Tuk W6TUK, Dave KE6PFF*, Charlie KF6CUU, Phil KA6MZE*, Toshi KJ6Q & Arv WA6UUT.** Not pictured; **Shawn AF6AR, Charlie KI6FXY & Robert KG6TFU*.** By the time this photo was taken, this team of enthusiastic & dedicated Volunteers had already been preparing the Am-Tech Day activity site for hours.

Many of the Team 47 Members arrived by the 7:15AM setup start time to load and transport equipment from on-site storage to the activity operational area. Additional tasks included setting up furniture, antennas, radios & all of the many items found in place by arriving participants to the Am – Tech Day Saturday activity. When you can, thank these very supportive individuals for taking the time & effort in making this Am – Tech Day (and others), an early morning reality and such an enjoyable all day event. Consider joining Volunteer Team 48, forming on November 1st; we have an enjoyable time and more Volunteers get the setup done quickly!

**Am – Tech Day VOLUNTEER TEAM 47
(Evening/Recovery), October 4, 2008**



Volunteer TEAM 47 (Evening/Recovery) shown at 9:00PM. L to R, front first: **Phil KA6MZE*, Jeff AK6TG, Mikel KN6QI*, Peter AF6DS, Dave KE6PFF*, Dave AA6XV,**

Robert KG6TFU* & Nimit K6XOX*. All having done this before, this seasoned, highly motivated and energetic team recovered all of the Am – Tech Day activity equipment and relocated it to storage.

Thank these very supportive individuals when you can; they took the time & effort to make the next Am – Tech Day a reality, by returning the area of the SLAC facility we used to its previous status, performing extremely well after enjoying a long day of Amateur Radio Activities. Planning has started for Volunteer Team 48; come by and help us complete the Am – Tech Day recovery effort!

**4th YEAR ANNIVERSARY, AM – TECH DAY GROUP
PHOTOGRAPH, October 4, 2008**



Some of the Am – Tech Day 4th Anniversary attendees, photographed in the SLAC Panofski Auditorium just before the start of the Am – Tech Day Volunteer Appreciation Raffle. From the left, front to back: **Dave KE6PFF*, Mike W6WZ, Vicky N7HBJ, Carol W6GEM, Gary KI6HIG, Peter AF6DS, Charlie KI6FXY, Toshi KJ6Q, Jack W1VSL, Bernard KI6TSF, Dale NX6S, Charlie KF6CUU, Kevin, K6XXX*, Don NR7X, Nimit K6XOX*, Rich W6APZ, Peter K6WEB, Rob KI6INR*, Ron WA6JUL, John K6PKT, Mikel KN6QI*, Doug KG6LWE, Dan K6DLC, Arv WA6UUT, Dave W6VYC, Lee KG6EPQ, Dona KI6DAR (back row of seats), Pink KG6ILA* with Jimmy DA6WG.**

*Denotes Member, FARS Board of Directors.

To assist in some small way in thanking the many Volunteers who have donated their time & effort to support Amateur Radio – Technology Day, the Society Board of Directors approved funding for prizes to be distributed during the Am – Tech Day 4th Anniversary meeting.

Volunteers who helped between December, 2007 and October 2008 (AM) with the morning/setup, and/or the evening/recovery team activities, as well as with other supportive missions were given a “point” for each occurrence. A matrix of dates and volunteer “points” determined the quantity of tickets that were assigned to each individual, with the ticket numbers posted to a large matrix printout by **Ron WA6JUL & Dave KE6PFF.** During the raffle, **Carol W6GEM** drew the randomly selected winning tickets in front of many eager Volunteers while **Mike W6WZ** recorded the winning names & call signs.

**4th YEAR ANNIVERSARY CAKE,
AMATEUR RADIO – TECHNOLOGY DAY, October 4, 2008**

As an interesting side note, during the Volunteer Appreciation Raffle activity, Peter K6WEB, (Nicknamed “Spidey”) utilized a unique and successful method of helium-filled balloon retrieval from the high Panofski Auditorium ceiling. It seems that several balloons “lifted” out of reach after exiting their keepers' grasp, and successful recovery (other than that associated with time) seemed to be unlikely. With a results-focused guy like “Spidey” though, the problem was soon resolved. Only those present observed the successful technique & the special method he used for balloon recovery; your secret is safe with us, “Spidey”.

Volunteer Appreciation Raffle Winners

4th Anniversary, Am – Tech Day Meeting, October 4th, 2008

Peter Sherrin, K6WEB Car to car battery charging cable & reel, with auxiliary outlet (cigarette lighter type) connectors on each end.

Michael Tabner Roll of Hand Moldable Plastic Coax-Seal®

Dale O’Harra, NX6S Amplifier with left and right speakers, from Halted Electronics

John Walther, K6PKT Directional antenna, 2427 MHz 10.5 Dbi with stand/mounting bracket assembly.

Peter Sherrin, K6WEB Roll of Hand Moldable Plastic Coax-Seal®

Arv Hamer, WA6UUT \$25.00 Merchandise Certificate, HRO in Sunnyvale.

Kevin Weiler, W6XXX* Tube of “Stuff” brand dielectric sealer.

Doug Teter, KG6LWE Battery Tender model battery charger

Phil Hawkins, KA6MZE* 4 DVD set, 150 Cartoon Classics

Ron Seefred, WA6JUL Amplifier with left and right speakers, from Halted Electronics

John Walther, K6PKT American Radio Relay League Handbook with CD

Peter Sherrin, K6WEB Roll of Hand Moldable Plastic Coax-Seal®

Charlie Arney, KF6CUU Portable Dual Band J-Pole antenna.

Ron Badger, N9UG \$25.00 Merchandise Certificate, HRO in Sunnyvale

Peter Chow, AF6DS Roll of Hand Moldable Plastic Coax-Seal®

Mikel Lechner, KN6QI* MFJ Cross Needle Power Meter

Ron Badger, N9UG RIGBlaster nomic, Rig to soundcard interface from West Mountain Radio, Norwalk, CT (Subsequently donated back to FARS by **Ron, N9UG** for use with GOTA Station or as the FARS Board of Directors specifies).

Thanks to Volunteers **Carol, W6GEM**, our dynamic winning ticket selector & **Mike, W6WZ**, recorder of the lucky winners and for his efforts for us in picking up the Anniversary Cake.

Special acknowledgment to the Ham Radio Outlet (HRO) for all of the great, ongoing support over the past four years of Am – Tech Day. Much thanks to the excellent Sunnyvale HRO Team with additional kudos to Howard Cluff, W6HOC.



Some of the many longtime Volunteers prepare for the tasty 4th Year Anniversary, Am - Tech Day Cake cutting. From left; **Dave KE6PFF***, **Kevin K6XXX***, **Mike W6WZ**, **Charlie KF6CUU**, **Pink KG6ILA***, **Arv WA6UUT** & **Doug KG6LWE**.



An obvious “cake-hound” of some skill and experience, Pink's Service Dog, Jimmy DA6WG, attempts a sly move on the 4th Anniversary Cake, but was thwarted just in time by longtime Am – Tech Day Volunteers **Kevin K6XXX***, **Pink KG6ILA*** & **Doug KG6LWE**

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FARS 2008 MEMBERSHIP RENEWAL FORM

Date: _____

PLEASE fill out the form for all new/renewal memberships.

Name(s) & Callsign(s) & Class (E-A-G-T-N-None): _____

Mailing Address: _____

Home phone: _____ Work phone: _____

Fax (H or W?) _____ Packet BBS Address: _____

E-mail: _____ ARRL Exp Date(s): _____

Preferred modes: (e.g. HF-SSB/VHF/QRP/Other): _____

I'm willing to Elmer new hams with: _____

Special topics of interest / suggestions for club meeting speakers:

Dues: \$20 per year, new members add \$9 for badge fee. **Please note:** Membership runs from January 1 to December 31.

Send your check payable to FARS, to:

David A. Cooper
PMB 41
270 Redwood Shores Parkway
Redwood City, CA 94065-1173



How to get to FARS Club meetings (Visitors always welcome)

Meetings are held at the Covington Elementary School (directions below) on the fourth Friday. Socializing at 7 PM with the regular meeting at 7:30 PM. There may be changes in the meeting dates for January, June, November, and December.

DIRECTIONS:

From Interstate 280. take the El Monte exit Northeast. Cross Foothill Expressway. (A) At the first traffic light turn right on Covington. (B) Immediately at the fork take the left street (Covington). Go about 1/10th of a mile. Turn left into the parking lot. The gym is the tall building to your right with red and white stripes.

From Foothill Expwy., take the El Monte exit and go Northeast; then follow directions as above at point (A).

From US101 or El Camino: take San Antonio Road west (to Foothill Expressway). Then follow directions above at point (A).

TALK-IN via the [N6NEI](#) (145.230-; 100Hz PL) repeater or the [W6ASH](#) 145.27- (100Hz PL) repeater.