

DECEMBER 1993

# 90's farm House

FINAL COST

\* \* \*

PAARA HOLIDAY DINNER  
WEDNESDAY DECEMBER 8TH!

\* \* \*

DEADLINE FOR  
RESERVATIONS IS  
FRIDAY DECEMBER 3RD!

386 Convention Way  
Redwood City 369-3337



## 1993 CLUB OFFICERS

PRESIDENT	LILY ANNE HILLIS	N6PGM	415-325-5484
VICE-PRESIDENT	ANDY KORSAK	VE3FZK	415-366-5228
SECRETARY	JOHN GOMPERTS	WB7TEM	408-879-0541
TREASURER	LILY ANNE HILLIS	N6PGM	415-325-5484
TRUSTEE, W6OTX	FRED CANHAM	K6YT	415-948-9238
PROPERTY/BADGES	FRED CANHAM	K6YT	415-948-9238
REFRESH/CO-PROP	JOHN BUONOCORE	KD6ZL	415-366-1658
ARES OFFICER	LILY ANNE HILLIS	N6PGM	415-325-5484
CLUB HISTORIAN			

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## PAARA/GRAFS STAFF

EDITOR	CHUCK JOHNSON	N6VFH	408-251-8536
MAILING	BILL McELHINNEY	KA6LZI	415-325-9808

## PAARA POLICIES

MEMBERSHIP IN PAARA IS \$6.00 PER CALENDAR YEAR WHICH INCLUDES A SUBSCRIPTION TO PAARA/GRAFS. MAKE PAYMENT TO THE PALO ALTO AMATEUR RADIO ASSOCIATION, P.O. BOX 911, MENLO PARK, CA 94026

CLUB NET 147.45 MHZ MONDAYS 8:30 PM

MEETINGS: 7:30 PM ON THE FIRST FRIDAY OF EACH MONTH AT THE MENLO PARK RECREATION CENTER, 700 ALMA STREET.

SEND PAARA/GRAFS CORRESPONDENCE TO:

CHUCK JOHNSON N6VFH, EDITOR  
3309 MT. LOGAN DRIVE  
SAN JOSE, CA 95127

VOLUME 36

DECEMBER 1993

## FROM THE EDITOR'S DESK

HAPPY HOLIDAYS & NEW  
YEAR TO ONE AND ALL !

DE YOUR EDITOR

SPEAKER OF THE MONTH

*SPECIAL GUEST SPEAKER*

being set up for December !  
Keep an ear on the PAARA  
net for latest details !

*REMEMBER!*

Open Home Brew Nite now  
at every meeting. Bring ur  
creations to show-'n-tell  
with the club !

Meeting Friday Dec. 3rd!  
Be There or Be Square!

-DE ANDY VE3FZK, PROGRAM CHAIRMAN

# THE PREZ SEZ ....



The Following is the revised slate of officers & board members for 1994.

**PRESIDENT - LILY ANNE HILLIS N6PGM**  
**VICE PRESIDENT - ANDY KORSAK VE3FZK**  
**SECRETARY - JOHN GOMPERTS WB7TEM**  
**TREASURER - RON CARMICHAEL KD6RFI**  
**TRUSTEE W6OTX - FRED CANHAM K6YT**  
**PROPERTY/BADGES - FRED CANHAM K6YT**  
**ARES OFFICER - LILY ANNE HILLIS N6PGM**  
**CLUB HISTORIAN - STEVE STUNTZ K6FS**

## BOARD OF DIRECTORS

CHUCK JOHNSON N6VFH -- 94-95  
DAN CURRY WB6STW -- 94  
CHRIS REMPEL N6VZD -- 94  
KOERT KOELMAN KC6WCI -- 94  
GERALD TUCKER WA6LNV -- 94  
J. GOLDBERG KD6PBH -- 94  
DAVE MEACHAM W6EMD -- 94

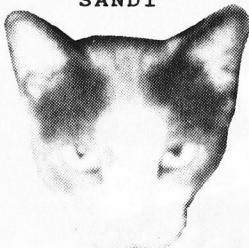
**DE LILY N6PGM**  
**NOMINATION COMMITTEE**



COALITION OF AMATEUR EXPERIMENTERS  
WISHES YOU AND YOURS A HAPPY HOLIDAY  
SEASON AND NEW YEAR!



SANDI



ORTHO



& THOSE NOT PICTURED...

## QST VIA BENJAMIN KA6SIQ

From : N6JQJ To : ARES @ALLSCV Date/time : 10-Nov 19:53

Subject: N6JQJ Steps Down as SCV SEC

SCV Section Emergency Coordinator Dave Larton N6JQJ announced today his intention to resign effective 31 December 1993. He cited personal reasons for his departure, and asked Assistant Section Emergency Coordinator Scott Hensley KB6UOO to assume the duties of SEC until a new candidate can be appointed by SCV Section Manager Steve Wilson.

Larton cited several milestones during his four year tenure as SEC, among them having the Section respond to disasters like the Lexington wildfires and the Loma Prieta earthquake. A SCV ARES position created for the earthquake, Shift Supervisor, has been included in emergency manuals nationwide as a first responder. Larton also published several manuals that have been cited by the ARRL, including the SCV Shift Supervisor's Handbook, a Net Control manual, and an Emergency Response guide. Larton also initiated the highly sucessful Emergency Response Institute, and remains on its Board of Directors.

"I've accomplished most of the goals that I began four years ago, said Larton, "and I look forward to the great work Scott Hensley will put into the Section's ARES/RACES program. I still have some projects that I want to accomplish, and I felt it was time for me to move on." Larton stressed that he will remain active as an ARES/RACES volunteer, and will be assisting the Section whenever needed. <via packet>

# Trio of inventors say their new battery number one, so to speak

## Scientists skeptical about urine battery

By SUE MANNING

Associated Press

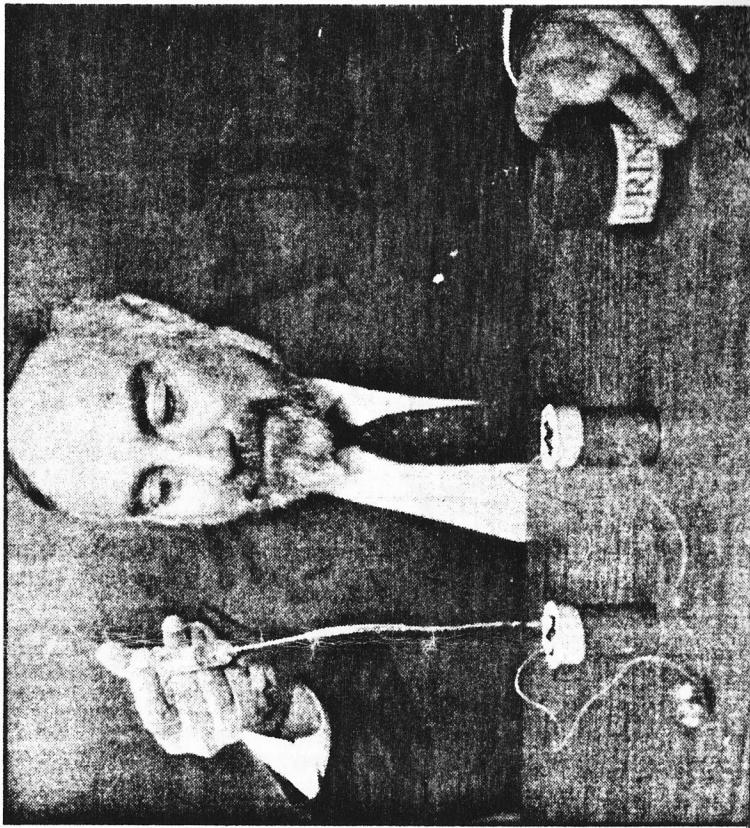
PASADENA — Urine luck.

More power to you?

Three men claim they have invented a urine battery that will produce electricity.

Scientists say they are highly skeptical of the inventors' claims, especially without knowing the makeup of the battery electrodes and what chemical reactions purportedly produce the power.

The inventors, Nelson E. Camus, Edgar Aguayo and Ismael Valle, partners in an



electronics company called Nel-  
Nithium Electronics in Hacienda  
Heights, say that information is  
a secret they are not about to  
share.

Camus, a 45-year-old elec-  
tronics engineer from Chile, dis-  
covered the compound that  
makes the battery work, Aguayo  
said. They call it Nelson's lith-  
ium or lithium.

The men are looking for inves-  
tors with \$5 million. But at least one scientist,  
Robert Osteryoung, an electro-  
chemist at North Carolina State  
University in Raleigh, N.C., said  
he would be leery about giving  
them 5 cents.

The battery promoters say  
they are used to snickers and  
chuckles. "But everybody stops  
laughing when they see our  
demonstration," Aguayo said.

The men will put the battery  
on display at the Invention Con-  
vention technology showcase,  
which runs through Monday at  
the Pasadena Convention Cen-  
ter.

The trio claims their home  
power plants, at an estimated  
\$500 each, will be cheaper and  
smaller than existing power  
sources, eliminate toxic used  
batteries at landfills and boost  
the economy.

Aguayo insists you would be  
able to run every appliance and  
power-driven device in your  
home on four or five gallons of  
urine a day.

"That's taking into considera-  
tion you have everything work-  
ing 24 hours a day. Under nor-  
mal conditions, you might be  
able to get along with one gallon  
and, believe me, a family of four  
can make one gallon a day,"  
Aguayo said.

To convert a home, the men  
plan to attach a bank of batteries  
to toilets in bathrooms. "As long  
as you put urine in the bank, you  
will have enough juice to run the  
house," Aguayo said.

Some batteries are made with  
lithium metal or related com-  
pounds, but "without more infor-  
mation, it would be impossible to  
determine if there is anything  
here or not," said Osteryoung.

Urea from urine could be used  
as a battery electrolyte, or  
material that allows electrically  
charged ions to flow from elec-  
trode to electrode, but claims  
that those batteries could power  
a home "are definitely outra-

geous," said Gary Henriksen, a  
chemist at Argonne National  
Laboratory in Illinois.

Henriksen, in charge of an  
advanced battery development  
program at the lab, which con-  
ducts research for the U.S.  
Department of Energy, called  
the idea "off-the-wall."

Aguayo claims the batteries  
eliminate recharge time. In a  
vehicle, he said, it would be pos-  
sible to recharge on the go. And  
there is no explosion danger, he  
said. "That's the beauty of urine,  
it is not explosive."

One of the problems is that not  
all urine is the same.

"We have found out the differ-  
ence in pH levels in the urine  
does make a difference in the  
energy output of a battery. Peo-  
ple under medication or who  
have a high content of alcohol  
will lower the energy output of  
the system," Aguayo said.

"There may be times when  
you have to invite family and  
friends over to help you charge  
up your system," he said.

## Nelson Camus pours fuel into his urine battery.

# 90's Farm House

PAARA HOLIDAY PARTY AND  
OFFICER INSTALLATION  
WEDNESDAY, DECEMBER 8

## CHOICE OF

- \* PRIME RIB
- \* 1/2 ROASTED CHICKEN
- \* CATCH OF THE DAY
- \* VEGETARIAN PASTA

INCLUDES: SOUP OR SALAD, POTATO OR RICE  
OR VEGETABLE, BREAD, DESSERT, COFFEE OR  
TEA OR MILK. WINE WILL BE PROVIDED BY THE  
CLUB.

NO HOST COCKTAILS 6:00 PM  
DINNER 7:15

PLEASE SEND CHECKS AND MENU CHOICES TO:

PAARA HOLIDAY DINNER  
P.O. BOX 911  
MENLO PARK, CA 94026

OR SEE ME AT THE MEETING...

DEADLINE FOR RESERVATIONS: DECEMBER 3.

\$5.00 MAXIMUM FOR GIFT X-CHANGE  
LABEL FOR YL OR OM.

DOOR PRIZES GALORE!  
SEE YOU THERE!

**386 Convention Way**  
**Redwood City** 369-3337  
DE LILY N6PGM  
PERENNIAL PARTY  
CHAIRPERSON

# Mobile Operation in EI Land

de EI4VRH/W6APZ

Several months prior to our trip to Ireland (EI), I wrote the ARRL to request any information they might have on amateur radio licensing in Ireland. They sent me the address of the Department of Transportation and Communication, a form to apply for an Irish license, and the address of the Irish Radio Transmitters Society (IRTS - similar to the ARRL, but in EI Land). There is no fee for a reciprocal license for a visit of less than a month. I filled out the forms, sent in a photocopy of our licenses and passports, and about 6 weeks later we received our Irish licenses with instructions to use the EI4VRH call with either portable or mobile after it. No mention of using our W6 calls. The XYL was given EI5VEH. When I filled out the forms, I indicated that we would be using an HT to drive a 25-Watt 2-meter amplifier.

At the same time that I sent for the licenses, I wrote to the IRTS requesting information on 2 meter and 70 cm repeaters. I enclosed 4 IRCs (international reply coupons). About two weeks after receiving the licenses a thick envelope arrived from IRTS with photocopies of pages of their 1991 IRTS Handbook, showing the locations of the two-meter repeaters and 70-cm (440-MHz) repeaters, along with a copy of their latest newsletter and a nice letter welcoming us to Ireland and answering my questions. They reported that there were 1700 licensed hams in Ireland. I programmed my HT for the 8 repeater frequencies and most of the 2 meter FM simplex channels listed in Ireland, including the 2 meter mobile calling frequency. I had visions of touring Ireland talking to hams everywhere we went, moving smoothly from repeater to repeater as we toured the country. It did not work out that way, however.

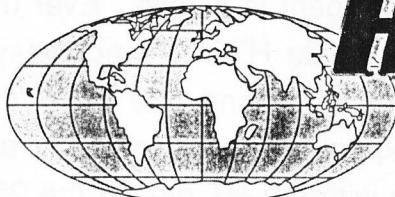
It was raining when we arrived in Dublin. The rain/drizzle  
(CONTINUED ON FACING PAGE)

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continued most of the four days we spent in Dublin. Ever try carrying an umbrella while talking on an HT? It's not easy. Leaving Dublin on the East coast of Ireland, we drove to Galway on the West coast. I expected the drive to be an excellent time for mobile operation with the HT driving the 25-Watt amplifier into the home-made magnetic-mount quarter-wave antenna. That would have been easy here, but in Ireland as in England and Japan, they drive on the left side of the road. The cars have the steering wheel on the right and the shift on the left. With that combination, it took all my concentration just to drive, shift gears, and stay on the correct side of the road!

Most of the Irish repeaters require a 1750-Hz tone burst. If you have a good musical ear, you can literally whistle up a repeater. Once the repeater is on, it stays on as long as someone transmits through it. Tone burst is not necessary until the repeater turns off again. Even without a musical ear, I was successful in whistling up repeaters several times. When the repeater does not respond and one is without tone burst, however, one does not know if one's whistle was off frequency or the signal just wasn't reaching the repeater. That was the bad news. The good news is that some Irish repeaters do not require tone burst.

While many of the main roads are wide enough and smooth enough to permit travel at 65 mph, these same roads narrow down to the equivalent of 1.5 lanes for a two-way street through some of the older towns. Most roads have frequent sharp bends with uneven pavement, requiring more concentration and precluding ham radio operation - unless one comes equipped with 3 hands: one to shift, one to steer, and one for the microphone/PTT button. MORE TO COME, FROM RICH W6APZ/EI4VRH STAY TUNED! -ED



# HAM RADIO OUTLET

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Prices, specifications, descriptions, subject  
to change without notice.

## ALINCO

### DJ-580T

2M/440 Dual Band  
40 Mem Channels  
DSQ, Dual Display  
CTCSS Enc/Dec Built-in  
Cross Band Full Duplex



## ALINCO

### DR-600T

2M/440 FM Transceiver



45W/35W + Airband RX

Detachable/Removable Head  
Keyboard freq. entry from microphone!

**CALL FOR SPECIAL PRICE**

## YAESU

### FT-990

100W HF Gen Cov Transceiver  
DDS, QSK • 500Hz CW Filter included

**CALL FOR LOW PRICE**

## KENWOOD

### TS-50S

HF Transceiver



World's smallest HF transceiver  
100W out, SSB, CW, AM, FM, 12V  
Gen. Cov. RX, 6.4 lbs., 7.16 x 2.4 x 9.32"  
105 db dynamic range, 100 Mems.  
Optional external ant. tuners available

**CALL FOR SPECIAL LOW PRICE!**

## HANDHELDS

### TH-28A

2M/2.5W DTSS  
240 Mem. w/optional  
mem. unit  
UHF RX



### TH-225A

2 MTRS/5W  
**TH-315A**  
220MHz/2.5 W

**CALL  
FOR  
GREAT  
PRICES**

## ICOM

### HANDHELDS

#### IC-2GAT

2 Meter HT • 7 Watt

#### IC-D1A

2M/440/1.2 Tri-Band

#### IC-W2A/IC-X2A

IC-W21AT, 2M/440

#### IC-2iA, 2 meter

#### IC-P2AT, 2 Meter

#### IC-P3AT, 220 MHz

#### IC-P4AT, 440 MHz

#### IC-24AT, Duo Band

#### IC-2SRA, 2M + Wide Rx



### IC-737

HF Transceiver



12V 100W w/auto Ant. Tuner  
Built-in Gen. Cov. RX, 101 Mem.  
DDS, QSK, Passband tuning

**Priced So Low, We Can't Print It!  
Call For Your Low Discounted Price!**