

SCRA INCOME AND EXPENSE STATEMENT as of 4/14/97

BEGINNING BALANCE	
CHECKING	\$2,265.85
SAVINGS	\$942.81
CASH ON HAND	\$84.16
TOTAL	\$3,292.82

INCOME	
ARRL Income	\$62.00
Badge Income	\$12.00
Initiation	\$18.00
Dues	\$883.00
Monthly Raffle	\$34.00
Refreshment Income	\$26.25
Transfer from Petty Cash	\$10.00
Savings Account Interest Received	\$5.55
TOTAL INCOME	\$1,040.80

EXPENSES	
ARRL MEMBERSHIP	(\$56.00)
Badges, New Member	(\$9.67)
Badges, Replacement	(\$4.84)
OVERHEAD	
Officer's Expenses	(\$10.73)
Refreshment Expenses	(\$15.00)
REPEATER	
Maintenance	(\$100.00)
Phone	(\$41.53)
Short Skip Expenses	(\$87.08)
Transfer to Cash on Hand	(\$6.25)
TOTAL EXPENSES	(\$331.10)

BALANCE	
CHECKING	\$2,980.00
SAVINGS	\$948.36
CASH ON HAND	\$80.41
TOTAL CASH	\$4,008.77

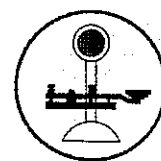
Next Meeting: May 7

BRECKENRIDGE, JOHN WB6FRZ
574 WILD OAK DR
WINDSOR, CA 95492

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ADDRESS CORRECTION REQUESTED

Sonoma County Radio Amateurs, Inc.
PO Box 116
Santa Rosa, CA 95402-0116



Club Station
W6LFI

Short Skip

Sonoma County Radio Amateurs, Inc.
PO Box 116, Santa Rosa, CA 95402-0116

146.730MHz ● 224.48MHz ● 441.375MHz

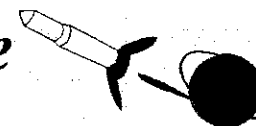


Repeater Station
WB6PVS

Volume 22 #5

May 1997

Rocket Science



by Al Bloom N1AL

We now have two bona fide rocket scientists in SCRA. John Breckenridge WB6FRZ and Alan Bloom N1AL have been involved in designing and building the Sun Sensor system on the upcoming Phase 3D (P3D) satellite to be launched by AMSAT. John designed and machined the sensor housing and Al did the electronics.

Back before Christmas, Herb Sullivan K6QXB, an electronics instructor at the Santa Rosa Junior College, attended the AMSAT annual meeting in Arizona where it was announced that P3D would need some way of determining the position of the sun. Herb must have never been in the Army, because he raised his hand and volunteered. At our first project meeting on Dec 9, we learned that the schedule called for "flight-ready" hardware to be fully assembled, tested, calibrated and shipped to AMSAT by Feb 1, 1997. Less than two months!

By the end of the project, 19 local radio amateurs and 4 non-hams had contributed in one way or another. A lot of work was accomplished in a very short time. Thanks to Hewlett Packard for PC board fabrication and providing many of the parts and tools for making both the electronics assembly, sensor housing and calibration fixtures. The Santa Rosa Junior College provided money for some expensive specialty components as well as testing facilities. Most of the people on the project were either HP employees or students or employees of the SRJC.

The Phase 3D Satellite

The last four issues of QST have contained articles on P3D, describing the orbit and the 10 different frequency bands you can use to talk through the bird. However, there were a couple topics they didn't cover.

Most satellites spin while they are in orbit. The gyroscopic effect helps to stabilize the bird's orientation. Spinning also helps with thermal regulation; otherwise the side facing the sun would get too hot and the side facing space (at around -270 degrees C) would get too cold.

However, P3D will be three-axis stabilized. That allows the antennas to point at the earth while the solar cells always point toward the sun. That also makes thermal management is a big issue, especially on a satellite this big. By using heat pipes to channel the heat where needed and paying close attention to reflectivity and emissivity, AMSAT engineers can obtain a fairly constant temperature throughout the bird. Pointing the satellite in the proper direction is the job of three internal "reaction wheels" (giant gyroscopes) oriented on the X, Y and Z axes. The on-board computer in the Internal Housekeeping Unit (IHU) can spin the reaction wheels faster or slower to cause the satellite to precess to the proper orientation.

Why a Sun Sensor?

The Sun Sensor tells the IHU where the sun is, to help orient the spacecraft. This is not only for normal operation in the three-axis-stabilized mode, but also to orient the craft for rocket firings, so excellent accuracy is required.

The Sun Sensor uses a special-purpose photocell from Hamamatsu Photonics Co. called a "Position-Sensitive Detector" (PSD). Our sensor housing acts as a pinhole camera, so the sun forms a small spot of light on the surface of the PSD. The PSD has four electrical contacts, two that determine the spot's position along the X axis and two for the Y axis. Our electronics assembly converts the currents from the four contacts into a pair of voltages that represent the sun's position in the X and Y directions. These signals are sent to an analog-to-digital converter (ADC) in the IHU for processing.

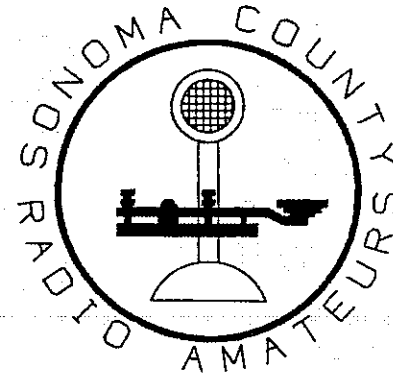
(continued on page 5)

OFFICERS FOR 1997

PRESIDENT:	Steve Carniglia	KV6A	546-7370
VICE PRESIDENT:	Rick Reiner	K6ZWB	575-4455
SECRETARY:	Steven Feil	KD6CJR	579-8346
TREASURER:	Joel Nadler	KJ6LF	545-1782
MEMBERS- AT-LARGE:	Bill Hillendahl	KH6GJV	538-0331
	Claude Jones	AB6OL	527-8593
REPEATER CHAIR:	Kelly Cureton	KD6CJQ	837-9434
ACTIVITIES CHAIR:	Dave Willey	KD6KWM	577-0191

SHORT SKIP STAFF

EDITOR:	Claude Jones	AB6OL	527-8593
(submissions) →	3612 Banyan Street, Santa Rosa, CA 95403-1557		
→	E-mail	ab6ol@cds1.net	
	Fax	938-4772	
ASSOCIATE EDITOR:	Shirley Jones	KD6PKA	
CIRCULATION:	Ken Harrison	N6MHG	
AUDIO TAPING:	John Breckenridge	WB6FRZ	
	Laurel Meyer	KC6FKX	
	Bob Phillips	N6RMW	
SWAP SHOP EDITOR:	Ken Harrison	N6MHG	539-2701



Club Meetings

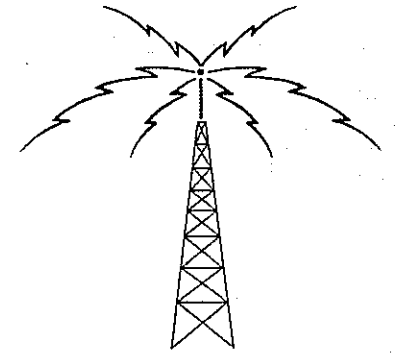
7:30 pm on the 1st Wednesday each month at the Hewlett-Packard plant in Santa Rosa. (See map below) All are welcome.

TUESDAY NIGHT NET

Check into the Tuesday night SCRA net on the 146.73 repeater at 7PM. You will hear the latest Amateur Radio Newline broadcasts, announcements of SCRA activities and a Swap Shop.

Activities Committee:

Public Service	Marie Mappus	KI6QY	664-1978
Assistant Pub. Serv.	John Breckenridge	WB6FRZ	838-6398
Public Relations	Steve Carniglia	KV6A	579-9608
QSL Mgr	Fred Leoni	N6YEU	431-8202
TV/RFI	Al Bloom	N1AL	538-7115
Antennas	Lee Dibble	KE6EAQ	544-1675
Awards	Steve Lund	K6UM	823-4544
RACES RO	Eran Glago	KD6KVO	996-1153
Field Day	Steve Carniglia	AT6A	579-9608
Swap Meet	Rick Reiner	K6ZBW	575-4455
Education	Greg Gordon	AC6VJ	523-7077
VEC Exams	Bill Kinder	KO6ZG	894-9591
Badge Chair	Fred Leoni	N6YEU	431-8202
Refreshments	Ted De Croff	KB6PTA	
Raffle at meetings	Ken Harrison	N6MHG	
Membership lottery	James Cureton	KD6GSF	
Packet BBS	Jim Andrews	KC6PJW	795-2163
Fox Hunt	Dave Willey	KD6KWM	577-0191



Repeater Control Op's

Kelly KD6CJQ	837-9434
Hoppy WD6CKP	542-6750
Steve KV6A	579-9608
Jim N6PTM	823-7947
Merl N6VUC	584-3898
Ken N6MHG	539-2701

SCRA HOTLINE 707-579-9608
WWW <http://cgs1.net/scra>

Next Meeting: *May 7*
Program: High Voltage Safety by PG&E

We invite you to attend our next monthly meeting (see below). Membership in SCRA is open to anyone interested in Amateur Radio. If you would like to join, there is a membership application in this issue.

SHORT SKIP ADVERTISING RATES

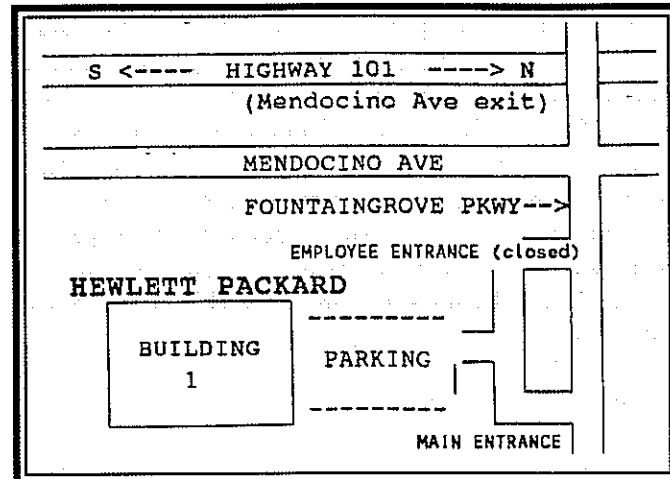
Business Cards: \$10

\$11 First 1/4 Column

\$3 Additional 1/4 Columns
(\$32 Full Page, 1 side)

Pre-printed inserts: \$32/sheet

Guaranteed circulation: 200/month



Application for membership in SCRA

Name _____ Callsign _____ License Class _____

Address _____ Phone _____ Date _____

City _____ ZIP _____ E-mail _____ () New () Renewal

SCRA Dues: The renewal date for SCRA dues is March 1st. Dues are \$18/year for individual and \$27/year for families. The new member initiation (badge) fee is \$6/person. Dues for new members only are prorated at \$1.50/month for individuals and \$2.25/month for families, starting at renewal time.

ARRL dues: \$31/year, \$25 over 65 with proof of age. (Under 21 rates require application form).

Make checks payable to **SCRA**

I WOULD LIKE MORE INFORMATION ABOUT:

- () Public Service Events
- () RACES or ARES Emergency Services
- () Taking a Novice or Technician class
- () Teaching a Novice or Technician class
- () Taking an upgrade class
- () Teaching an upgrade class
- () Helping with SCRA Flea Market
- () Acting as club Net Control Station
- () Helping with VEC license exams
- () Field day, other operating events
- () Helping with *Short Skip* Newsletter
- () Other _____

SCRA Dues:

Individual \$18, Family \$27 + _____
Initiation fee \$6.00 + _____
Prorate discount _____ - _____
(# months) (rate)

ARRL Dues:

\$31 or \$25 if over 65 + _____
Additional donation to SCRA: + _____
Total dues: _____

Name Badge Information (new members)

Fill in exactly as you want it to appear on your badge.

Callsign _____ First Name _____

City _____

AUTOSLOT REQUEST: Licensed SCRA members are entitled to a repeater autoslot. Fill in the information below to apply. For further information contact Kelly KD6CJQ at 837-9434.

Phone Number: _____ Is this your home phone? () Yes () No

Hank's Swap Shop

Currently hosted by Ken Harrison, N6MHG
539-2701 or ken@cds1.net

Sellers: Please let me know when your items have sold!

FOR SALE

Realistic HTX-404 UHF HT. Less than 1 year old. \$125.
Contact Kelly, KD6CJQ @ 707-837-9434 or email:
kelly@cds1.net

MFJ 784 DSP Filter. 10-80m + 2m \$100. MFJ 921 2m/220
antenna tuner. \$150 (new!). Smart Tuner SG-230. \$400
(new!). Contact Jim, KD6WIS @ 707-928-6944

Kenwood TS-530S HF Transceiver 160-10M WARC w/mic,
spare finals. \$500. MFJ-949E antenna tuner. Gap Vertical HF
antenna - Challenger DX - Special package deal price: \$600.
Contact Mike, KF6ALB @ 415-359-3793

Yaesu FT-101E w/ VFO, YC-601 digital display and scope.
\$525. Hallicrafter Receiver. Model S38B. \$100. Realistic
DX300 Shortwave Receiver. \$80. Contact Joe, KO6PS @
707-546-6839

Yaesu FT-2400, 50 Watt 2m Mobile. \$225. Homebrew 2m
Base Antenna & Cushcraft R5 HF vertical base antenna.
\$200. Contact Marie, KI6QY @ 707-664-1978

WANTED

Vibroplex Deluxe Blue Racer bug. Must have the narrow
chrome base. Contact Sam, WN6W @ 707-575-0400 or
email: sbrewer@prodigy.net

Space Vehicles

by Bill Waters AC6MA

For brief description of the various types of space vehicles
mentioned in the April "Satellites" article, consider the
following:

✧ Reconnaissance satellites are usually low-altitude or
synchronous-altitude orbiters; their purpose is to take
pictures, or to monitor radio transmissions originating from
earth stations, or to watch for rocket launches (using infra-red
sensors, usually), or to conduct radar mapping of the earth's
surface.

✧ Research satellites measure all kinds of things, mostly of
interest to scientists.

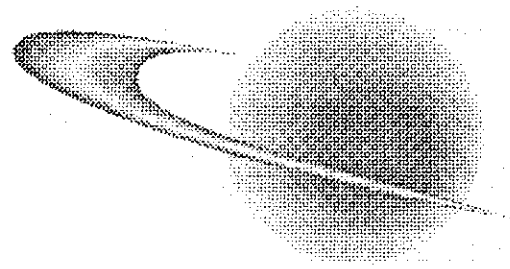
✧ Communications satellites relay signals between points on
the earth's surface, including telephone conversations,
television, raw data, newspaper articles and ads, military
traffic, etc. The more elaborate "commsats", as they are
called, contain numerous very sophisticated transponders --
essentially broadband repeaters. Some have the incredible
useful bandwidth of over 2 GHz (2,000 MHz)!

✧ For more than the past 25 years there have existed a
number of low-altitude satellites (both US and Russian, for
the most part) used primarily for ship navigation on the high
seas, or for emergency location of both maritime and land-
based travelers. Recently the Global Positioning System has
become fully operational on a worldwide basis (Short Skip,
April 1995) and is rapidly replacing many previous radio
navigation aids; GPS uses a constellation of 24 or 25
satellites in orbit about 12,000 miles above the earth.

✧ Much of the world has become very dependent on the
various monitoring functions routinely performed by weather
satellites; these keep an eye on such things as cloud cover,
movement of storms, surface conditions of the sea (using
radar), and atmospheric temperatures (using some incredibly
clever sensing devices!)

✧ What could be more fascinating or beautiful than the
images gathered by the Hubbell Space Telescope? Or the
pictures of an actual volcanic eruption on Jupiter's small
moon Io? Or pictures of the far side of the moon? Or of the
surface of Mars? Or of surface markings on Pluto. Or the
seething, boiling complexity of the clouds and bands around
Jupiter? Or the ---- need I say more about astronomical
satellites?

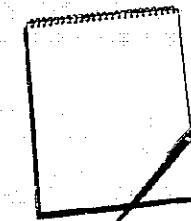
✧ Life support vehicles started when, in 1958, the Russians
put the poochy dog Laika into space, using a sputnik satellite.
This satellite type includes such vehicles as Gemini, Apollo,
Skylab, the Russian Mir, and the Space Shuttle. The jury is
still out on the subject of whether or not man is useful enough
in space to justify the enormous cost and complexity required
to keep him there -- it depends largely on your own personal
conclusions --, but there is no question about the tremendous
human interest and excitement involved.



SCRA MINUTES

April 2, 1997

Submitted by Secretary
Steven Feil KD6CJR



The April 1997 meeting was called to order by President
Steve Carniglia KV6A at 7:35 PM at HP Fountain Grove.
Other officers present were: Vice President Rick Reiner
K6ZWB, Secretary Steven Feil KD6CJR, Treasurer Joel
Nadler KJ6LF, Members-at-Large Claude Jones AB6OL and
Bill Hillendahl KH6GJV, Activities Chairman, Dave Willey
KD6KWM and Public Service Chairman Marie Mappus
KI6QY.

Visitors/New Members: There were 2 visitors present.

New Calls/Upgrades: DDQ to +, DHA to +, DHB to +,
KI6VY to AK6I.

The minutes for the March meeting were approved with the
following correction, Darlene did not need help for the ERI
convention: GJV/PTA

The Treasurers report by Joel Nadler KJ6LF is as published
in Short Skip.

Activities Committee Report, by Dave KD6KWM:
Discussing about final preparations for Death Valley, Rick
reviewed progress of the construction class, Greg AC6VJ
handed out a survey form for future classes, foxhunting class
on April 16, Bill KO6ZG announced a VE session April 12.
Field day is June 28-29.

Repeater Committee Report, by Kelly KD6CJQ: English Hill
will be up this weekend. It is the backup for our main repeater
on Sonoma Mtn. Please be patient about return phone calls!!
Rick ZWB informed us about the VOMARC swap on April
26 and our on Sept. 20.

Public Service Committee Report by Marie KI6QY: John
FRZ will be Marie's assistant for the '97 season. All May
slots are filled, THANKS!! June Mini Vineman and the
Terrible two.

RACES report by Merl N6VUC: April 14 Steering comm., 25
Coddington Earthquake display, Darlene KD6GCK
presented fliers about the ERI convention.

Ken MHG reminded us about the R/C show on May 17-18,
would like to have a Am Radio booth if he can get the help.

Steve CJR reminded everyone about the upcoming KZST
book sales. We get to keep \$10 for each book sold. If we sell

enough we get bonus money too.

Ted PTA asked for help with his Kenwood 241A.

The program for the evening was presented by Rick ZWB. It
was our annual Home Brew contest. Projects as displayed to
members include:

John FRZ: Sun sensor for Phase 3D satellite. **Steve KV6A:**
Car console including Ham, Cellular and GPS. **Steve CJR:**
Active attenuator for transmitter hunting. **Greg AC6VJ:**
Satellite transverter station. **Rick ZWB:** Completed amplifier
from last year. **Bill JLP:** 2 to 6 meter transverter. **Adam
POC:** speech amp, modulator and temperature sensor. **Chris
MNR:** 800 to 5000 MHz log periodic on PC board material.
Ken MHG: SCRA Home Page. **Dave KWM:** ZL Special ant.
design, Voltmeter, T-Hunt transmitter, APRS digipeater
station. **Hollis UDH:** Packet station.

Prizes were awarded for small and large project. **Steven
KD6CJR** won the small project class and **Greg AC6VJ** won
the large project class.

The raffle was conducted by Ken MHG. Prizes were provided
by ARDCO and HSC. The family of Claude W6YCT (skey)
provided a Micronta VOM. Please patronize these fine
establishments to show our thanks for this support.

James pulled Robert N6GDC for the membership lottery.

The meeting was adjourned at about 9:45 PM.

Board Meeting Minutes

April 9, 1997



The April 1997 Minutes of the Sonoma County Radio
Amateurs board meeting held at the Bank of the West on
Marlow Rd. Members of the board present were: President,
Steve KV6A; Vice President, Rick K6ZWB; Secretary,
Steven KD6CJR; Treasurer, Joel KJ6LF; Members-at-large,
Claude AB6OL and Bill KH6GJV; Repeater Chairman, Kelly
KD6CJQ; Activities Chairman, Dave KD6KWM and Public
Service Chairman Marie KI6QY. There were also 4 other
SCRA members present. The meeting was called to order at
5:35 PM by President Steve KV6A.

Steve KV6A: Field day is June 28-29. 1 tent will be
purchased per the budget. Litton Springs will not be available
as a site. PLEASE bring to the attention of Steve ANY ideas
so he can pursue them.

(Continued on Page 5)

12 Store Buying Power!



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(800) 854-6046
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I-880 at 23rd Ave. ramp

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(800) 854-6046
Tom, KM6K, Mgr.
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Ken, K1ZKM, Mgr.
KDM@HAMRADIO.COM
Lawrence Expwy.
So. from Hwy. 101

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Bob, WN3K, Mgr.
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Earl, KE7DA, Mgr.
Tigard-99W exit
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(800) 444-9476
Joe, KD0GA, Mgr.

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(800) 444-7927
John, KB4NUC, Mgr.
Doraville, 1 mi. no. of I-285

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Rick, AA8OB, Mgr.
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- 5W Optional
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- 120 Memories
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- Wide Band receive
- Battery Saver
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- Dual RX
- Collins SSB filter built-in
- 100W Power supply built-in

Call Now For Low Intro. Pricing!

HSC ELECTRONIC SUPPLY

* NEW LOCATION! *

5861 Redwood Drive, Rohnert Park

RAMSEY KITS

- VHF power amplifiers
- All-mode HF receivers
- QRP CW Transmitters
- Etc...

OAK HILLS QRP KITS

- Transceivers: 80, 40, 30 & 20M
- Wattmeters
- SCAF Filters

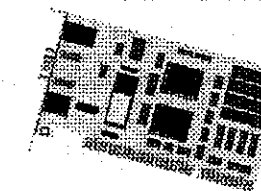
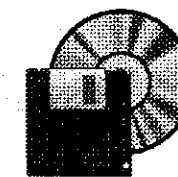
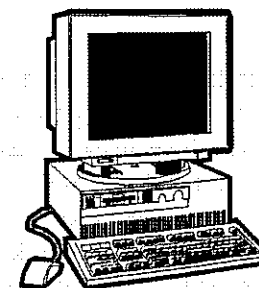
ARRL BOOKS

- ARRL Handbook
- License Manuals
- Antenna Books
- Etc...

- MFJ accessories
- Code keys
- Van Gorden Antennas
- Surplus Electronics
- Tools, parts, etc...

YOUR IBM CLONE HEADQUARTERS

FROM PC-AT's TO STATE-OF-THE-ART PENTIUM SYSTEMS,
YOU'LL FIND IT AT HSC

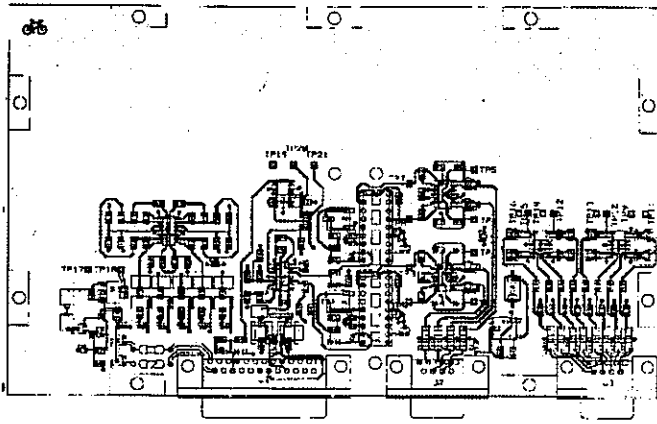


- Complete systems
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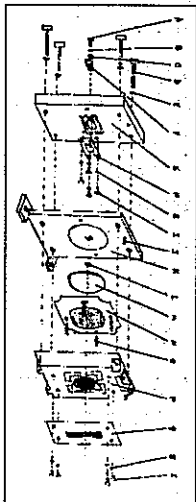


Rocket Science

(continued from page 1)

What's Next?

Since we started this project, the launch date has been set back twice, due to problems at the European Space Agency. The latest date is September 8, on the second attempted launching of the brand-new Ariane 5 launch vehicle. (Don't ask what happened on the first attempt!) This is something of a test flight: P3D is the only active satellite, with the rest



of the payload filled with ballast and test instrumentation. As compensation, AMSAT only had to pay a launch fee of \$1,000,000 compared to the normal price of \$40,000,000.

So why not become a rocket scientist yourself and gear up to work through the satellite? Most of the equipment can be purchased ready-made or you can go the homebrew route. With 10 bands to choose from, there's something for everyone. Borrow a friend's QSTs if you're not an ARRL member and read the articles to find out what you need. See you on 10 GHz!

Board Meeting Minutes

(continued from Page 3)

Rick K6ZWB: Asked if we could start a new feature for Short Skip: Member Profiles.

Steve KD6CJR: Presented a letter from ARRL soliciting funds for the Frequency Defense Fund. All members are encouraged to support the fund on an individual basis.

Joel KJ6LF: Call sign trustees for the club and repeater need to be a club member in good standing.

Claude AB6OL: Short Skip deadline is now the Friday following the Board meeting.

Bill KH6GJV: April 16 T-hunt class, 18-20 Death Valley trip, 26 VOMARC Swap in Sonoma, May 10 Human Race, 17-18 R/C show. There is still not a fixed date for the Alcatraz trip and it will most likely not be an over-nighter as planned.

Marie KI6QY: Mini Vineman is June 15, Vineman is July 26, Terrible Two is some time in June. We will not actively support the Thursday Night Market as a club this year. All members are encouraged to support the activity as individuals. It is the policy of SCRA Public Service to do Communications for the group we are supporting.


Merl N6VUC: April 25 from 5 - 8 is the Emergency Preparation Display at Coddington. Bill KH6GJV and KD6CJR offered to help man it. Will not be supporting the Cotati event due to lack of formal notice from parties involved.

KE6VGV Has the Autopatch ID policy been resolved/implemented? It was published in a recent Short Skip. The patch will be knocked down if anyone attempts to use it without ID, regardless of intent.

Respectfully submitted by Steven Feil, KD6CJR, Secretary.

New RACES Radio Officer

Eran Glago KD6KVO, has taken over the position of RACES Radio Officer from Merl Pfeiff N6VUC, effective immediately. He is appointing 3-5 Assistant RO's (ARO's). The first are : Raul KI6JC as ARO for Logistics; Kelly KD6CJQ, as ARO for Operations; and Darlene KD6GCK, as ARO for Administration and Training. As Com Unit Leader for the EOC, Bill KH6GJV will replace Kelly. Other appointments will be announced as they happen.



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STEVE BASHAM
Manager

SCRAPS

The Season Has Begun!

Our public service season has started out with a bang! By the time you receive this issue, The **Super Cities Walk** will have been a success, and perhaps the **Wine Country Century** too! All radio operator positions have been filled for the two public service events in May: Wine Country Century on May 3, and the Human Race on May 10. Thanks to those of you who have gratefully volunteered to help on these events!

The two public service events next month are the **Mini Vineman** on June 15, and the **Terrible Two** later in the month. Please consider helping with these events; we are always happy to welcome newcomers to share the fun of public service events. Contact John Breckenridge, WB6FRZ at 838-6398 to sign up for events, and Marie Mappus, KI6QY at 664-1978 for specific questions or comments about public service. We would love to hear from you.

Thursday Night Market Events Changes

SCRAPS will no longer participate as a group in Santa Rosa Thursday Night Market activities. This decision has been reached, and prompted by us, and not those in charge of the Thursday Night Market. The primary duties of our members at these events are (and have always been) to make sure people get across streets safely. Although some communications work has been done in the past, it has been clearly stated by the Thursday Night Market Executive Committee that because they have adequately provided their own radio links, our communications skills are <respectfully> not needed.

At the same time, the Executive Committee gratefully acknowledges and thanks the radio amateurs who have helped safely direct traffic in the past. Moreover, they sincerely hope that any members of our club who wish to continue to participate in that activity will volunteer on an individual basis. They still need plenty of help directing people across streets. Please contact Gina Silvera, Thursday Night Market Event Coordinator, at 524-2123 to volunteer your services.

The SCRA public service committee and Officers of SCRA stand ready to consider all requests by the Thursday Night Market Executive Committee for future communications assistance.

73,

Marie Mappus, KI6QY
John Breckenridge, WB6FRZ

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From the Prez:

Many people want to participate in club activities and voice their opinions on various subjects but find that they just don't have time.

We as members, are not utilizing a resource that has been set for years just for this situation. It is called the Member at Large. We have two of them, Bill KH6GJV and Claude AB6OL. This is the membership's voice to the board and the club. If you want to express your feelings about something, tell a member at large. That's their job. They will take it to the board. Many times we hear ideas or comments "thru the grapevine". That's not the way to be heard. If you have something that you want to say but you don't have time to come to a board meeting, use the members at large. They will express your opinion or comment at the board meeting.

LETS USE OUR RESOURCES AND GET INVOLVED.

73, Steve

SOLAR FLUX DOWN, NUMBERS UP

Sun watcher Tad Cook, KT7H, Seattle, Washington, reports: Average solar flux was down a little with sunspot numbers up a bit over the past week. The most significant event was the delayed reaction to the big solar mass ejection, which drove the Planetary A index to 38 and K index up to 7 on April 11. Over the next few days watch for a retreat in the solar flux from the high 70s down to the low 70s until the end of the first week in May, when it will start creeping up to the 80s again. Solar flux is expected to be above 80 by May 10.

Look for geomagnetic disturbances to appear again around April 24 and 25. All of this forecast is based upon activity seen during the last solar rotation, and, of course, new activity could appear at any time.

The ARRL Letter