



Santa Clara County Amateur Radio Association

Volume 14, Number 12

December 1998

From the ARRL...

The ARRL Letter November 6, 1998

ARRL PETITIONS FOR TWO NEW LF BANDS

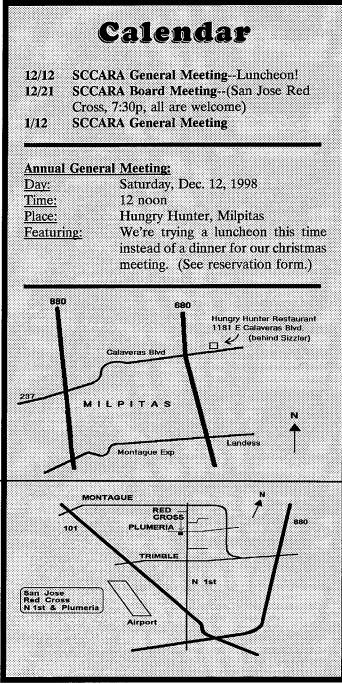
The ARRL has petitioned the FCC to create two low-frequency Amateur Radio allocations at 136 kHz and at 160 kHz. "These allocations will permit experimentation with equipment, antennas, and propagation phenomena in a small segment of the radio spectrum that has not been available to the Amateur Service for many years," the League's petition declared. The petition was filed with the FCC October 22.

Specifically, the League has proposed permitting CW, SSB, RTTY/data, and image emissions for amateurs in a 2.1-kHz "sliver band" from 135.7 to 137.8 kHz and in a 30-kHz segment from 160 to 190 kHz. The 135.7 to 137.8 kHz band adheres to the European Conference of Postal and Telecommunications Administrations (CEPT) band plan.

The ARRL has proposed allowing a transmitter output in both LF segments of 200 W PEP, but in no case greater than 2 W EIRP (effective isotropic radiated power). The League's petition points out that poor antenna efficiencies and ground-loss characteristics likely would keep EIRPs at less than 1 W. The two bands would be available to General and higher licensees.

Unlicensed experimenters--some of them hams--currently operate on LF in the US under the FCC's Part 15 rules. These limit transmitter input power to 1 W and impose substantial restrictions on the size of the antenna. The proposed allocations "will provide the only low-frequency allocation for amateur use and will accommodate more flexible experimentation than is permitted under current Part 15 regulations," the League's filing said.

Hams would be secondary to the Fixed and Maritime Mobile



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SCCARA was formed as a general interest amateur radio club in 1921 and became a non-profit corporation in 1947. SCCARA is an affiliate of the American Radio Relay League (ARRL). The club station is W6UW.

The deadline for SCCARA-GRAM articles is one week before the last Monday of the month.

OFFICERS and DIRECTORS

| President | Jack Ruckman, AC6FU | 379-4846 |
|-----------------|-------------------------|----------|
| Vice President | Barbara Britten, KD6QEI | 293-3847 |
| Secretary | | |
| Treasurer | Lloyd DeVaughns, KD6FJI | 225-6769 |
| Station Trustee | Stan Getsla, WA6VJY | 275-0735 |
| Director | Clark Murphy, KE6KXO | 262-9334 |
| Director | Don Apte, KK6MX | 629-0725 |
| Director | Don Village, K6PBQ | 263-2789 |
| Director | Lou Steirer, WA6QYS | 241-7999 |
| Director | Wally Britten, KA6YMD | 293-3847 |
| | STAFF | |
| Editor | Gary Mitchell, WB6YRU | 265-2336 |
| Facilities | Don Village, K6PBQ | 263-2789 |
| | COMMITTEES | |
| Repeater | Wally Britten, KA6YMD | 293-3847 |
| Field Day | Dan Dietz, WM6M | 458-3460 |

SCCARA REPEATERS

SCCARA owns and operates two repeaters under the call W6UU:

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| ÿ | | | | | | 2 | 2 | | 8 | | 2 | 0 | 2 | 2 | 2 | 2 | 2 | č, | 2 | 0 | 2 | 9 | 1 | ÷ | i. | 5 | | 0 | - | | 8 | | 33 | 3 | | 3 | 8 | n | ٩ | | | 2 | 5 | | | 2 | 2 | 2 | | 8 | | 2 | | | 8 | | | | | 2 | 8 | 2 | 8 | | 3 | 2 | | | 8 | 8 | | | 8 | |
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| 1 | | 12 | | | 1 | 0 | | | | | 2 | ÷. | 8 | 2 | | 8 | ÷ | ÷ | 2 | 2 | 0 | 0 | 0 | 2 | | ē | 6 | 0 | | 0 | 1 | 8 | 2 | 8 | 8 | 2 | 85 | | 5 | | | 5 | | 0 | e | 1 | | 0 | | 8 | 0 | 8 | 8 | X | | 83 | 2 | | 8 | 9 | ŝ | 2 | Ń | 0 | 8 | | | | 89 | 66 | ۰. | 22 | 83 | |

Phone patch capability is available (auto-dial and auto-patch). The two meter repeater is located in the Mt. Hamilton foothills, Alum Rock area. The 70 cm repeater is located at the Alexian Brothers Hospital, North of 280 and 101.

SCCARA NETS

On our two meter repeater: Mondays at 7:30 PM, (not the second monday--it's our meeting night). Coordinator: Don K6PBQ.

On ten meters, 28:385 MHz USB, Thursdays at 8:00 PM. Net control: Wally KA6YMD.

Visitors welcome to join in on the SCCARA nets.

IMPORTANT TELEPHONE NUMBERS

SCCARA HOTLINE: 249-6909 ARRL LICENSE (VEC) HOTLINE: 984-8353 services in the 136-kHz allocation, and secondary to the Fixed Service in the 160-190 kHz band. The League said its engineering surveys suggest that hams could operate in the two segments without causing problems to power line carrier (PLC) systems already active in that vicinity or to government assignments. Unallocated, Part 15 PLC systems are used by electric utilities to send control signals, data and voice.

Calculations included with the League's filing demonstrate how inefficient even relatively large radiators can be on LF (136 kHz is approximately 2205 meters). For example, at 200 W TPO (transmitter power output) and a 200 foot vertical radiator, efficiency is only in the range of 1%, yielding up to 2 W EIRP. A more practical setup--200 W TPO into a 100-foot vertical radiator (efficiency of 0.2%) would yield an EIRP of between 100 and 400 mW.

Several countries throughout the world already enjoy LF allocations. These include New Zealand, Great Britain, the Republic of Ireland, and several European nations.

The article "Exploring 136 kHz" by Peter Dodd, G3LDO, appears in the November 1998 issue of QST. It discusses practical equipment and an antenna system for the allocation. Dodd also is the editor of the LF Experimenter's Source Book (2nd ed) published by the RSGB and available from the ARRL for \$14. Order Item 7148. Visit ARRL Web site: http://www.arrl.org/catalog for details or call, toll-free, 888-277-5289.

A special CW LF operation from the Netherlands is scheduled for November 14 at 0900 UTC at 136.5 kHz using the call sign PA2NJN (see In Brief item, "Netherlands LF test" below). The operation will run 150 W to a wire antenna, tethered to a kite at about 920 feet in the air.

A copy of the ARRL petition is available on ARRL Web site, http://www.arrl.org/announce/lf-pet.pdf.

BIP-BIP-BIP! NEW MINI-SPUTNIK TO LAUNCH FROM MIR

Another mini-Sputnik satellite will be launched by hand this month from the Russian Mir space station. The announcement of the so-called Sputnik 41 comes almost one year to the day after the launch of Sputnik 40, which commemorated the launch of the first artificial Earth satellite by the USSR in 1957.

The newest Sputnik arrived on Mir aboard a Progress supply rocket late last month. It's due to be launched by hand during a spacewalk by the Mir crew in the November 10-11 time frame. Sputnik 41, which is variously being called RS-18, was financed by the Aeroclub de France to mark its centennial. It's part of a program of satellites made in collaboration with Russian and French students. AMSAT-France is cooperating with the education department of the Russian Aeronautic Federation to bring about this latest Sputnik encore.

Sputnik 41 is the same size as its predecessor--20 centimeters (just under 8 inches) in diameter--approximately one-third the size of the original Sputnik. It weighs 4 kg (almost 9 pounds). The latest version will carry a 150-200 mW transmitter that will transmit on or about 145.812 MHz (\pm 5 kHz and Doppler shift). The spacecraft will not carry solar cells, and it has an expected operational lifetime of up to 30 days. The last mini-Sputnik outlasted its expected one-month life by some 20 days, however.

AMSAT-France's Gerard Auvray, F6FAO, reports that, like Sputnik 40, the new spacecraft will transmit its "bip-bip" beacon plus audio-frequency telemetry that indicates the satellite's internal temperature (see table, below). But, Sputnik 41 also will broadcast pre-recorded voice greetings in three languages, French, English, and Russian. One, read by 14-year-old Constantin Sambourov, declares in Russian-accented English: "1998 was the International Year of Air and Space." Sambourov is the son of Sergei Sambourov, RV3DR, who manages Amateur Radio activity aboard Mir. A second English message read by Project Chief Victor Kourilov of the Russian Aeronautic Federation states "International Space School Sputnik Program." The French and Russian messages convey the same greetings. Auvray himself reads one of the French greetings.

The 1998 International Year of Air and Space page is at http://www.ccr.jussieu.fr/physio/Satedu/sputnik41.html.

TABLE: Telemetry of Internal Temperature

 $Hz = -38 \circ C$ $Hz = -30 \circ C$ $Hz = -20 \circ C$ $Hz = -10 \circ C$ $Hz = 0 \circ C$ $Hz = +10 \circ C$ $Hz = +20 \circ C$ $Hz = +30 \circ C$ $Hz = +40 \circ C$ $Hz = +45 \circ C$ $Hz = +50 \circ C$

NETHERLANDS LF TEST

A special CW LF operation will be on the air from the Netherlands beginning November 14 at 0900 UTC. The frequency will be 136.5 kHz, and the call sign will be PA2NJN. The operation will run 150 W to a wire antenna, tethered to a kite at about 920 feet in the air. (If there is not adequate wind, the experiment will be postponed.) Richard Middel in the Netherlands reports the last operation was done using a kite-flown wire antenna up about 225 feet. That station was heard in France, Belgium, the UK, Australia, and elsewhere. Send reports to PA2NJN c/o PI8AWT, or to richard.middel@hetnet.nl. The ARRL is seeking an LF allocation (see top story above) and other countries already have authorized LF operation around 136 kHz.--thanks to Jim Romelfanger, K9ZZ

Meeting Minutes

General Meeting, Nov. 9, 1998



Meeting Called to order by Vice President Barbara, KD6QEI, self introductions followed as is our custom.

Tonight's speaker is Doug Duben from SLAC (Stanford Linear Accelerator Center).

Business Meeting:

Next meeting will be at the Hungry Hunter in Milpitas December 12, 1998. This will be our annual Christmas meeting. This year it will be a luncheon.

Elections

The following are the results of the SCCARA Officer elections:

| President | Barbara Britten, KD6QEI |
|----------------|-------------------------|
| Vice President | Bob, N6PCQ |
| Secretary | John Leonard, WA6QRO |
| Treasurer | Lloyd DeVaughns, KD6FJI |
| Trustee | Stan Getsla, WA6VJY |
| Directors | Lloyd DeVaughns, KD6FJI |
| | Wally Britten, KA6YMD. |

Don Hayden, KO6HH, needs help in taking down an antenna.

9:10 p.m. Meeting adjourned.

Lloyd KD6FJI

Board Meeting, Nov. 16, 1998

|--|

Vice President Barbara, KD6QEI, called board meeting to order at 7:45 PM.

Attendance: K6PBQ, Don; WA6QYS, Lou; AC6FU, Jack; N6PCQ, Bob; KD6FJI, Lloyd; WB6YRU, Gary; KO6HH, Don; KA6YMD, Wally; KD6QEI, Barbara; It was recognized that no minutes had been published from the previous Board meeting.

The 1998 Christmas event (December General Meeting), a lunch, is getting nearer according to Don, K6PBQ. This year's, as shown in November SCCARA-GRAM, is December 12, 1998, with Sign-up coupon there. Don and Joan Hastings will be involved.

It was recognized that the January General Meeting speaker will be Trish, WA6UBE.

Wally, KA6YMD advised that the SCCARA repeater is awaiting the City's contractor cable installation schedule. It was recognized that 1/2" hard transmission line might be needed. Gary, WB6YRU presented that the BBS has two telephone lines, one providing Internet access, but that no RF path currently exists.

Under New Business - Jack, AC6FU reported that the sale of the trailer was complete. He also mentioned that H.R.O. was having a visit on December 19 by the Icom display trailer, and presented the possibility of the club selling food at that event. Also mentioned was the possible donation of equipment by Bill Benson. The need for another new trailer was discussed. It was determined that one of 12 ft. to 14 ft. will best meet our needs.

The possibility of having Pacificon in San Jose area was discussed. Bob, N6PCQ discussed the need to recognize that we need to learn how to increase our membership. Current member ship was reported as approximately 100.

There being no other business before the board, the meeting was adjourned at 9:23 PM.

John Leonard, WA6UAR, secretary elect

General Meeting, Oct. 12, 1998



This months meeting is a dinner meeting. After the meeting there was entertainment provided by square dancers.

Business Meeting:

The meeting was called to order by SCCARA president Jack, AC6FU, self-introductions followed as is our custom.

There was a discussion of the repeater move to the city vault.

Clark, KE6KXO, announced that the trailer had been sold.

There was an announcement about the upcoming meetings and speakers.

9:20 p.m. meeting adjourned.

Lloyd KD6FJI

Board Meeting, Oct. 19, 1998



Present: Gary, WB6YRU; Barbara, KE6QEI; Wally, KA6YMD; Don, K6PBQ; Lou, WA6QY; Lloyd, KD6FJI; Clark, KE6KXO; Robert, N6PCQ.

8:00 p.m. Meeting called to order by Vice President Barbara, KE6QEI.

Barbara thanked those that helped cook and serve the dinner at the October dinner meeting.

Wally, KA6YMD, gave an update on the move of the repeater to the city vault.

Clark, KE6KXO, reported on the sale of the trailer. The sale is complete and it has been moved from Clark's home.

There was a discussion about getting someone to run for secretary.

The November speaker will be Dr. Richter from SLAC.

Motion by Clark, KE6KXO, that host(s) be reimbursed for pre-meeting dinner for the guest speaker. Second and passed.

December meeting: Motion by Lou, WA6QYS, to authorize \$120.00 for the purchase of amateur related item and \$125.00 for non-ham prizes for the Christmas luncheon raffle prizes. Second and passed.

There was a discussion about dues: The dues will remain the same as last year.

January's speaker will be Trish, WA6UBE; her topic will be automatic link establishment.

Clark, KE6KXO: we need a year end financial statement.

Don, K6PBQ, will pay for the Field day campground at the first available moment.

K6MIT donated \$100.00 for N0ARY BBS system operations.

Lou, WA6QYS, made a motion that a thank you note be

sent to anyone who makes a donation to the club. Second and passed.

Lou, WA6QYS, reported that Dorathy Quirantes would like help in removing an antenna and tower.

Don, K6PBQ, said that Don, KO6HH, wants help putting a tarp over the antenna trailer.

Barbara KD6QEI: Mike, KC6LCJ, is looking into buying a new badge making machine.

Gary, WB6YRU, said that recent editions of the SCCARA-GRAM have very few articles by club members. He would like to see more items written by the membership.

9:25 p.m. Meeting adjourned.

Lloyd KD6FJI

Inverted V antenna for a mobile home

Henry Ponce, WD6CGI

Installing and testing an inverted "V" antenna on top of my mobile home.

This antenna is mounted on a mast 24 foot high, made of 2 inch thick aluminum tube. (Two 12 ft lengths coupled together by a threaded coupler and reinforced with three 12"x 1/2" x 1/8" metal flanges at the junction and secured with two 2" hose clamps at each end and anchored with a 1/2" screw in between to avoid slipping.) The mast is mounted on a steel rack and screwed on a 2'1" x 4" length of wood which is attached to the trunk of a 24 ft avocado tree by means of two 1 1/2" wide x 24" galvanized flanges and tied up with two metal tensors at each end. As a way of camouflage, I painted the upper two thirds of the mast avocado green and the lower third, white. The rest of the trees in my yard are painted, (tree experts advice to paint white the trunk of certain trees as to protect them from the sun). As a protection against a thunderbolt I grounded the pole by driving into the soil a four foot length of rebar and attached it to the aluminum pole with 12 AWG copper wire. At the top end of this pole is a pulley (3/4" swivel type). A 50 ft x 1/8" plastic-covered-steel halyard runs through it and it's anchored at the bottom of the pole to an eye-bolt. Hanging from the pulley is a 1:1 balun where two 33 ft antenna wires are soldered, one to each side (through the protruding ear-like rings), allowing enough wire as to be able to take two turns and then soldering the remaining end of wire (about an inch) to it. The resulting slack hopefully will prevent the dislodge of this fused end in the event of a

strong pull by the wind or when raising and adjusting the balun to its proper place. These two wires are spread out to the width and breadth of my mobile-home with an angular distance of 90 degrees, thus resembling an inverted V. At the opposite end from the Balun, the wires are attached to two "egg" plastic insulators which in turn are connected to the side of the mobile home by a 3 mm climbing rope. (In theory, this type of rope is the strongest you can find compared to another product of the same diameter, weight, and texture.) The wires are pulled up and away from the metal roof by two 6 ft 1/4x1/8 steel "L" bars (one to each wire). The bars are screwed onto the side of the mobil home with the upper one third protruding 24" into the air, raising the lowest point of the antenna wires to 38" from the metal roof.

At the completion of the antenna, the testing of its efficiency was in order and the results will follow. But first, I'd like to acknowledge and thank Frank Glass (K6RQ), my "Elmer" and friend for the invaluable help and support he gave me during this project.

The test results are as follows:

| Freq. kHz | SWR | SWR with tuner |
|--------------|-----|-------------------|
| 7000 | 1.4 | 1.1 |
| 7050 | 1.4 | 1.1 |
| 7100 | 1.6 | 1.7 |
| 7150 | 2.1 | 1.6 |
| 7200 | 2.3 | 1.1 |
| 7250 | 2.9 | 1.1 |
| 7300 | 3.2 | 1.1 |
| | | |

CQ JOTA

The 41^{st} annual Jamboree-on-the-air was held on Oct. 17 & 18. I opened up my home station on Sunday Oct. 18 for JOTA. This is the fifth year I've had them over to my home station. I get a much larger response to an invitation to my home then our club station.

I had 18 scouts and weblos with seven leaders over the afternoon. The scouts were able to talk to several JOTA stations, including K2BSA in South Dallas at Camp Wisdom. They discussed their scouting activities and their school work.

I also set up a couple of code practice oscillators for them to learn how to send their names in Morse code. A couple of the scouts had been over before and enjoyed working with Morse code.

Operating Jamboree-on-the-air is great fun. I look forward to it every year. All you need to do is locate a local scouting group (look in your phone book under Boy or Girl Scouts of America) and you will be all set for JOTA '99.

73, Don Village, K6PBQ





Took part_____

Packet Pieces

Downloaded from the packet network:

Date: 6 Sep 94 07:00 From: N5EQO@N5UXT To: HUMOR@USA Subject: Teacher's Question

Teacher: What do you call a person who keeps on talking when people are no longer interested?

Student: A teacher.

--Nancy Carson

From The Happy Club de Nick N5EQO

Newsletter Notes

On behalf of SCCARA, I'd like to thank some people who have helped with the publishing of the SCCARA-GRAM over the past year. Clark Murphy, KE6KXO has helped out nearly every month. El Wirt, K6ZYY has a busy schedule, but was able to lend a hand many months. And sometimes when El couldn't make it John Kerner, KB6RSB filled in. Thanks guys!

For those of you who aren't aware of the publishing process, each newsletter has to be folded, stapled, labels affixed, and then sorted by zip code, etc. For bulk mail, we must have a minimum of 200 pieces. The process generally takes us at least an hour. (Of course, this is after the newsletter is in its finished, camera-ready form.)

If anyone is interested in joining the team, either with the publishing or in any other capacity, please let me know.

73, Gary WB6YRU, editor

ARRL Pacific Division Update

December 1998

Comment on Part 97 Restructuring

The Comment deadline on FCC WT Docket 98-143 is Dec. 1, 1998. The implementation of this Docket will set the framework for the Amateur Radio Service in the US for the next several years. The Docket and the ARRL "constructive suggestions" to the FCC on this Docket have been widely discussed in the Sept., Oct., Nov., and Dec. QSTs as well as the recent issues of the Pacific Division Updates. Already several hundred Comments are on file at the FCC on this matter and are available on the FCC Web site. For those of you who have not sent in your Comments, it is now YOUR turn to express your views about the future of Amateur Radio licensing and related topics in the US!

For your consideration, following is a capsule summary of the ARRL plan that will be covered in the ARRL's Comments that will be filed:

• Number of License Classes and Privileges.

- 4 classes - Technician, General, Advanced, Extra.

- No one to lose any privileges.

- Novices and Tech Plus licenses become Generals immediately.

- Refarm the Novice HF bands to better uses.

- Technicians to have CW privileges on HF in General segments to help broaden their scope of Amateur Radio.

• Morse Code Examination

- 5 wpm for General; 12 wpm for Advanced and Extra.

- Solid copy or fill in the blanks examination.

• Enforcement

- FCC Compliance and Information Bureau (CIB) to have full enforcement capability.

- FCC/CIB to enforce all Amateur Radio Service rules.

• Written Examinations

- Modify topics and questions to be more relevant to class of license.

- Enlarge the total number of questions in the question pool.

- Questions to be more difficult for higher level of licenses.

- Retain the syllabus in the rules to maintain national uniformity.

Explore newer techniques for distractor generation.
Greater Volunteer Examiner Opportunities

- Advanced Class to have greater opportunities as VEs.

• RACES Station Licenses

- Special RACES licenses no longer relevant, but keep RACES.

Of course, you many have a different approach than the ARRL Board has taken.

This NPRM provides a unique opportunity to express your views on the direction that Amateur Radio should take in the US in the years ahead. I urge all of you to write and send your constructive comments to the FCC at one of the addresses noted in the following paragraph. To be effective, you should not only include your suggestions for change (or no change) in your message, but should also include the rationale behind your suggestions. If you wish, please also send a copy to me at k6wr@arrl.org or at the address on page 10 of any QST.

Several hundred Comments have already been filed with FCC on this Docket. These comments range from very simple comments such as "I like it" or "I don't like it" with little or no rationale for the points made to very extensive Comments with accompanying rationale. Suggestions have been made for as few as three license classes (one no code VHF; one with 5 wpm code for current General class HF privileges; and one with 5 wpm code for all current Extra class privileges). Others have asked the FCC to "leave it all as it is." Most Comments are from individuals, but some are from organizations. All the Comments can be found on-line at the www.fcc.gov Web site.

The FCC is encouraging electronic comments via the Web at http://www.fcc.gov/e-file/ecfs.html or by email at ecfs@fcc.gov. For instructions on how to file using the ecfs address, send an email to ecfs with the words "Get form <your email address>" in the body of the message. Of course, written comments can be sent in hardcopy by US mail to Magalie Roman Salas, Secretary, Federal Communications Commission, 1919 M St. NW, Washington DC 20554. Be sure to include reference to WT Docket 98-143.

Reference and Background Information

How and why the FCC started this "Biennial Review" of all services they regulate has been well documented previously. The recent issues of QST have documented the ARRL Plan and the FCC WT Docket 98-143 in great detail. The last several issues of the Pacific Division Update have been devoted to this very important matter. The specific references are as follows:

A copy of the complete NPRM has been posted on the ARRL Web page, http://www.arrl.org, and at the Pacific Division web page at http://www.pdarrl.org. The FCC NPRM can also be downloaded from the FCC Web site:

http://www.fcc.gov/Bureaus/Wireless/Notices/1998/fcc98183.wp http://www.fcc.gov/Bureaus/Wireless/Notices/1998/fcc98183.txt (WordPerfect 5.1 and ASCII text respectively).

October QST carried the NPRM story starting on page 56 plus an excellent editorial on this matter on page 9.

The FCC issued some corrections and clarifications to the NPRM in September. The Errata document addresses most of the questions and confusion raised by the original announcement. It's available on the ARRL Web site at http://www.arrl.org/news/restructuring/98-143/Errata.html and on the FCC Web site. The November QST deals with the Errata on page 76.

The ARRL Plan, as developed by the ARRL Board at its July 22 meeting is described in detail in "License Restructuring for the Future," on page 48 in the Sept. QST. An excellent editorial on "Restructuring" by Dave Summer, K1ZZ, ARRL Executive Vice President, is on page 9 in the same issue.

The ARRL Special Board meeting on Oct. 24, which reaffirmed the original plan, and added some modifications is described in detail in the December QST pages 49 - 51.

Since August, the Pacific Division Update posted on the Pacific Division Web site (pdarrl.org), and many ARRL. Bulletins and ARRL Letters have dealt with this matter in detail.

ARRL Petitions for LF Bands

The ARRL has petitioned the FCC to create two low-frequency Amateur Radio allocations at 136 kHz and at 160 kHz. "These allocations will permit experimentation with equipment, antennas, and propagation phenomena in a small segment of the radio spectrum that has not been available to the Amateur Service for many years," the League's petition declared. The petition was filed with the FCC October 22.

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A copy of the ARRL petition is available on ARRL Web site, http://www.arrl.org/announce/lf-pet.pdf. Thanks ARRL Letter, Nov. 6, 1998

Discovery Launches PANSAT

PANSAT, the Petite Amateur Navy Satellite, was launched over Australia October 30 from the space shuttle Discovery. The 150-pound Amateur Radio satellite carries a spread-spectrum communication package fabricated by student officers and faculty members at the Naval Postgraduate School, Monterey CA, as an educational project and a means of demonstrating spread-spectrum communication. It was launched from Discovery as part of the third International Extreme Ultraviolet Hitchhiker (IEH-3) experiment.

The NPS says the spacecraft will provide store-and-forward digital packet communication using direct-sequence spread-spectrum modulation with a center frequency of 436.5 MHz, a bit rate of 9842 bps and 9 MB of message storage. According to the NPS Web site, "Amateur Radio ground stations will be able to utilize PANSAT via a bulletin-board type user interface." PANSAT's Dan Sakoda, KD6DRA, says the team is doing initial assessments and has heard a reply signal from the spacecraft. But the ground crew has not yet been successful connecting via modems. "We've still got some bugs to shake out of our ground system," Sakoda said this week. He explained that the satellite does not have a beacon and only transmits when commanded to do so from the ground. "The fact that we saw PANSAT's response means that the satellite is working properly," he said. Sakoda does not expect PANSAT to be available to the Amateur Radio community for another couple of months.

For more information, visit the official PANSAT Web site, http://www.sp.nps.navy.mil/pansat/ or see http://131.120.25.103/pansat/danspans/dspansat.html.

Thanks ARRL Letter, Nov. 6, 1998

All QSTs Now Available on CD-ROM

Now you can see every issue of QST on CD-ROM! Microsoft Windows 3.1 or higher is required for running the software. The new 1915-1929 set is ARRL Item No 7009. Each set is \$39.95. Visit the ARRL Web page at http://www.arrl.org/catalog for details or call, toll-free, 888-277- 5289.

Coming Events

• Livermore Swap Meet - 1st Sunday of each month at Las Positas College in Livermore, 7:00 AM to noon, all year. Talk in 147.045 from the west, 145.35 from the east. Contact Noel Anklam, KC6QZK, (510) 447-3857 eves.

Brad Wyatt, K6WR Director, ARRL Pacific Division

18400 Overlook Rd. #5 Los Gatos CA 95030-5850 (408) 395-2501 (voice & fax)

Packet: K6WR @ N0ARY.#NCA.CA.USA.NOAM Internet: k6wr@arrl.org Pacific Division Web site: http://www.pdarrl.org/

December Luncheon Meeting Sign-up

Our annual December christmas meeting will be a luncheon this time; on Saturday December 12, at the Hungry Hunter in Milpitas, Calaveras Blvd just east of Hwy 680 (old yellow house location), we've been there before. Luncheon is at 12 noon. Please note that on Saturday their isn't a regular bar. You will be able to order a bottle of wine for the table.

We will have a choice of three entrees. The regular lunch is \$13 each, children's choices are indicated below. Reservations need to be in by Friday, December 4. Talk-in on our repeater W6UU, 146.385(+). I'm looking forward to seeing all of you there. Why not renew your membership (back cover) at the same time? -- Don K6PBQ

| | Foi | the : | annual | . meeting | : in | December, | sign | me | up | for | the | following | lunch(| ∋s): | |
|------|-----|-------------|----------------|------------------|------|-----------|------|----|----|-----|-----|-----------|--------|------|--|
| From | the | <u>regu</u> | <u>lar mer</u> | <u>u, \$13 e</u> | ach | : | | | | | | | | | |

| | | Prime Ribs of Beef | | Chicken Westwood |
|--------|--------------|---|-----------|---|
| | | Grilled Sword Fish | | |
| | <u> </u> | _ | | |
| From | the <u>C</u> | <u>Children's menu</u> : Deli Burger, \$7.50 | | Chicken Strips, \$7.50 |
| | | Fried Shrimp, \$8.75 | | Total for lunches: \$ |
| Please | renew | your membership (over) at the sam | e timecom | bine both payments here GRAND TOTAL: \$ |

Give this form (or copy) with payment to the Treasurer or mail to: SCCARA PO Box 6 San Jose CA 95103-0006

Need Help?

Amateurs have a long history of helping each other. An experienced amateur who helps another is traditionally called an "Elmer." If you have a question or problem, you are encouraged to ask one of SCCARA's Elmers. Below is a list of topics including who to contact for each.

If you consider yourself to be reasonably competent in at least one area of amateur radio and would be willing help others, please ask the club secretary for an Elmer survey form and fill it out.

Antennas, feed-lines, tuners: WB6EMR, AC6FU, K6PBQ, WB6YRU Lightning protection, grounding: WB6YRU Station set-up, equipment: AC6FU, K6PBQ TVI/RFI: WB6YRU Homebrew projects, construction: AC6FU, KD6FJI, WB6YRU Computers: KB6NP; IBM PC: WN6U, WB6YRU Other digital modes (AMTOR, RTTY): WN6U Code operating and installations: WB6EMR, AC6FU, K6PBQ DX (long distance/propagation): WB6EMR Emergency operating/preparedness: WA6QYS FM (VHF/UHF, repeaters): WA6VJY HF operating techniques (SSB, CW): WB6EMR, AC6FU, K6PBQ Mobile operating: WN6U NTS & traffic handling: QRP (HF low power, all modes): WN6U TEN-TEN (10 M only): AC6FU Classes/license upgrading: W6ACW, AC6FU Legal/FCC rules: WB6YRU SCCARA (club inner workings): K06HH, K6PBQ, WA6VJY, WB6YRU, WA6QYS Math applications: AC6FU Children's Discovery Museum, volunteer operator: K6PBQ

W6ACW, Ed Hajny, (408) 739-6105

WB6EMR, James D. Armstrong, Jr., evening & msg: (408) 945-1202

KD6FJI, Lloyd DeVaughns, day: (408) 299-8933, evening: (408) 225-6769 packet: home BBS KB6MER

AC6FU, Jack L. Ruckman, (408) 379-4846

KO6HH, Don Hayden, (408) 867-4643 packet: home BBS NOARY

KB6NP, Jon Dutra, day & msg (408) 428-2058 evening (408) 867-8654 packet: home BBS NOARY internet: jad@aol.com

K6PBQ, Don Village, (408) 263-2789

WA6QYS, Lou Steirer, (408) 241-7999 packet: home BBS NOARY

WN6U, Doug Eaton, (408) 377-3736 packet: home BBS NOARY internet: wn6u@compuserve.com

WA6VJY, Stan Getsla, day: (408) 738-2888 x5929, evening & msg: (408) 275-0735

WB6YRU, Gary Mitchell, msg (408) 265-2336 also (408) 269-2924 packet: home BBS NOARY internet: wb6yru@aenet.net

S.C.C.A.R.A. Membership Form for 1999 (Fill in name and address if there is no mailing label below; make corrections if the label is incorrect)

| Name: | Call: | | Class: E A G T+ T N |
|---|------------|-------------------------------|--|
| Address: | | Lic | ensed since (yr): |
| City:5 | state: | Zip: | |
| Telephone: () | | <pre>New Member</pre> Renewal | I'm also an ARRL member |
| E-mail: | Pa | cket: | |
| For family memberships (at the same address |), please | list other name(| s) and call(s): |
| Annual membership dues are payable at the fi New members joining on or after July 1, pay Annual Membership dues: Individual \$15 | half the | membership dues. | |
| I want SCCARA badges @ \$3 ea. Badge na | | y şzo il studen | ···· |
| Please send the repeater Auto-Dial/Auto-Pat WE MUST BE ABLE TO VERIFY YOUR AMATE BEFORE ANY REPEATER CODES WILL BE SE | UR LICENSE | | e): Yes TOTAL: |
| Give this completed form (or copy) with pay mail to the return address below: | | e Secretary or T | |
| PLEASE DO NOT TEAR/CUT | | | PLEASE DO NOT TEAR/CUT — |
| SANTA CLARA COUNTY AMATEUR RADIO ASSOCIATION PO BOX 6 San Jose CA 95103-0006 | | | NONPROFIT ORG. US POSTAGE PAID SAN JOSE CA PERMIT NO 3318 |
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