SCCARA-GRAM

Santa Clara County
Amateur Radio Association

Volume 25, Number 9 September 2009

President's Prose

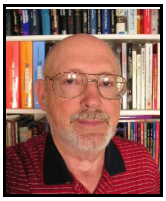
The annual picnic, held on August 15 this year, was well attended by SCCARA members and their families. Band conditions weren't great, but those who wanted to operate had an opportunity to do so. The weather was perfect, and a good time was had by all. Someone left a brown Main Street Blues jacket behind … I have it.

John Glass (NU6P) has received a favorable price quote for a new Kenwood UHF FM repeater to replace the Motorola Micor system that we're using now. As I pointed out last month, the Micor unit is around 30 years old. Since then we've replaced the power amplifier with our only spare. The Board has allocated funds for the replacement Kenwood unit.

The Board has formally withdrawn the MOU documenting the utilization, maintenance and ownership of the W6UU repeater that was submitted to the City of San Jose. It was unacceptable to the City for reasons unknown.

I've been experimenting with the 2-meter repeater phone patch and autodial capabilities. The functionality is there for both, but it's tricky to key in the required characters and responses without the controller timing out. I find that it's not too difficult when using the DTMF microphone with a base station or mobile, but almost impossible when dealing with the tiny keypad on a HT.

Gary Mitchell, WB6YRU, has completed a series of six articles for us on how to use the packet bulletin board system (SCCARA-GRAM March through August). I'm ready to give it a try as soon as I get my TNC married to my base station transceiver. For those of you that already have that capability, give it a try. Although no longer cutting-edge technology, packet is one of the preferred modes of operation for emergency communication. You may not be aware of it, but SCCARA operates and maintains a packet BBS system known as N0ARY (that's a zero). Gary does the work and SCCARA helps with the finances.



Don't forget the 2-meter FM net on Monday nights, and the 10-meter SSB net on Thursday nights.

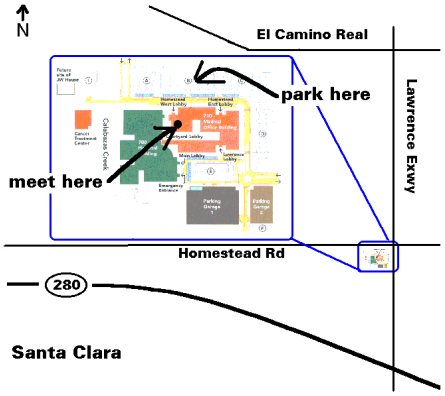
73,
Don – AE6PM

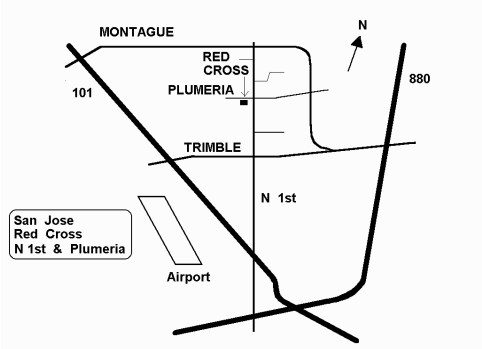
Calendar

9/12 **Electronic Flea Market at De Anza College**
9/14 **SCCARA General Meeting**
9/21 **SCCARA Board Meeting**--(San Jose Red Cross, 7:30p, all are welcome)

General Meeting

Day:	Monday, Sept. 12, 2009
Time:	7:30 PM
Place:	Kaiser Santa Clara, Rm 196, 1
Featuring:	*{to be announced}*





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The deadline for articles is the last Monday of the month.

SCCARA was formed 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.

Web page: http://www.qsl.net/sccara.

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(all officers are also directors)

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SCCARA REPEATERS

SCCARA owns and operates two repeaters under the call W6UU:
2 meter: 146.985 - PL 114.8
70 cm: 442.425 + PL 107.2
Phone auto-dial and auto-patch is available. The two meter repeater is located at Eagle Rock near Alum Rock Park in the foothills of east San Jose. The 70 cm repeater is located at the Regional Medical Center (formerly Alexian), east of downtown San Jose, north of 280 and 101.

SCCARA NETS

On our two meter repeater: Mondays at 7:30 PM, (not the second Monday--our meeting night). Coordinator: Don Village, K6PBQ. On ten meters, 28.385 MHz USB, Thursdays at 8:00 PM. Net control: Wally Britten, KA6YMD. Visitors welcome.

N0ARY PACKET BBS

SCCARA hosts the packet BBS N0ARY (Mt Umunhum). User ports: 144.93 (1200 baud), 433.37 (9600 baud), telnet sun.n0ary.org (login "bbs"). Sysop: Gary Mitchell, WB6YRU (packet info: www.n0ary.org/ncpa)

TELEPHONE NUMBERS

SCCARA contact Clark KE6KXO:	408 262-9334
ARRL/VEC Silicon Valley VE group, Morris Jones, AD6ZH:	408 507-4698

Dipole Inspection

Lou (WA6QYS), Gerry (N6SWC), Ned (AC6YY) and I unrolled the dipole antennas that we use for Field Day while we were in the park for the picnic on August 15. Our plan was to measure the lengths, check for symmetry and make repairs. The connections to the balun for the 40/80 meter dipole were determined to be suspect and the balun itself looked like it could stand to be replaced after many years of service.

I took the balun home with me to saw it open and see what was inside. It turns out that it was in good condition internally:

The coil is 9 trifilar turns of #14 enameled wire on a piece of 1" pvc pipe. The outer shell is a piece of 1-1/2" pvc with slip caps. Three eye bolts and a SO-239 connector make up the remainder of the unit. The two eyebolts on the right side of the photo show the solder buildup from previous repairs as well as some rust. We cut the dipole wires away from the balun at those locations. Refurbishment is in order.

Don - AE6PM

SCCARA Picnic

Photos by Mike KB6LCJ

Bingo players

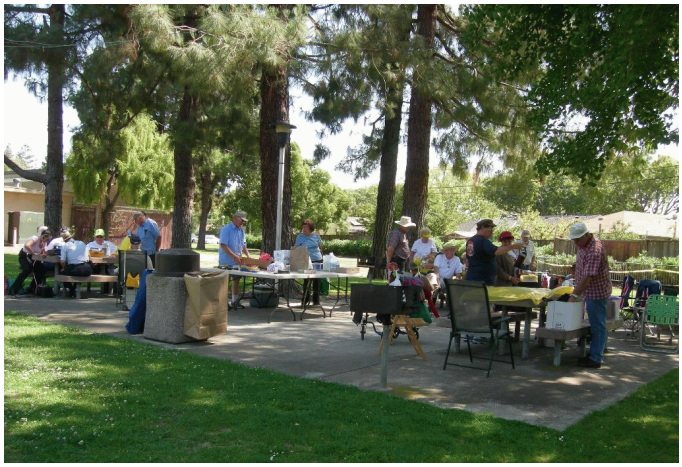
Wally KA6YMD and Lou WA6QYS operating

Wire antennas.

Who needs beams anyway?

A meeting of the minds

Several wire antennas tested and adjusted as needed



Our picnic area

Betty KI6UII (on the right) and Teresa Nemeth (does not have her ticket at this time but is working at it)

ARRL News

From *The ARRL Letter*, August 7, 2009

MFJ ACQUIRES CUSHCRAFT

On August 7, MFJ Enterprises <www.mfjenterprises.com/> announced they had purchased the Cushcraft Amateur Radio antennas product line from Missouri-based Laird Technologies <www.lairdtech.com/> effective July 31. According to MFJ, Cushcraft -- makers of HF/VHF/UHF vertical, beam and Yagi antennas for the Amateur Radio community -- will continue to be manufactured in Manchester, New Hampshire. "We are excited to have the Cushcraft Amateur Radio Antennas product line alongside our other five companies," said Martin F. Jue, President and founder of MFJ Enterprises, Inc. "This product line increases our ability to offer our customers a wide range of antenna options at different prices. Customers will be able to choose from Cushcraft Amateur Radio antennas, Hy-gain and MFJ antennas through one source." MFJ purchased Hy-gain in 2000 the company also owns Ameritron, Mirage and Vectronics. Jue said that the Cushcraft line will bring more than 50 new products to MFJ's Amateur Radio product line. "We will add more new products to this antenna line and will continue the Cushcraft Amateur Radio antennas name long into the future. Cushcraft Amateur Radio antenna product customers will appreciate the continued and expected top-quality manufacturing of this product in New Hampshire and the MFJ commitment to superb after-the-sale service and tech support in Mississippi," said Jue. The 120 page 2010 MFJ catalog will include the entire Cushcraft Amateur Radio antennas product line. MFJ has set up a special customer support line -- 662-323-5803 -- to handle Cushcraft antenna product technical support, parts requests and customer services.

From *The ARRL Letter*, August 14, 2009

ARRL PRESIDENT HARRISON PRESENTS LEAGUE'S VIEWS ON DISTRACTED DRIVING LAWS TO SAFETY ADVOCACY GROUP

To ensure that Amateur Radio is not an unintended victim of the growing public debate over what to do about distracted drivers, ARRL President Joel Harrison, W5ZN, has written a letter to the National Safety Council (NSC) <www.nsc.org/>, highlighting issues regarding the use of Amateur Radio emergency communications devices in vehicles <www.arrl.org/news/files/NSC_Letter7-30-09.pdf>. Many states have outlawed the use of cell phones while driving; some states with these laws have ambiguous wording (such as "mobile communication devices" or "mobile electronic devices") concerning the use of Amateur Radio while driving.

According to their Web site, the NSC is "on a mission" to "alert the American public that different kinds of distractions have different levels of crash risk. Talking on a cell phone and sending text messages are much higher risk activities that occur for longer durations and with more people than most other actions engaged in while driving." They also seek to "lead a change in our nation's cultural norms, so people come to view cell phone conversations and text messaging while driving as unsafe and socially unacceptable. Calling for a legislative ban on these activities is the first step in a long-term process to educate Americans to their risk and change the culture" <www.nsc.org/resources/issues/distracted_driving.aspx>.

Harrison explained to NSC President Janet Froetscher that Amateur Radio operators provide essential emergency communications when regular communications channels are disrupted by disaster: "Through formal agreements with federal agencies, such as the National Weather Service, FEMA and private relief organizations, the Amateur Radio volunteers protect lives using their own equipment without compensation. The ability of hams to communicate and help protect the lives of those in danger would be strictly hindered if the federal, state and local governments to not ensure that Amateur Radio operators can continue the use of their mobile radios while on the road."

According to ARRL Chief Executive Officer David Sumner, K1ZZ, it boils down to the difference between simplex -- when only one message can be sent in either direction at one time -- and duplex -- a communications mode, such as a telephone system, that provides simultaneous transmission and reception in both directions. Harrison, citing Sumner's 40-plus years of experience as an Amateur Radio operator, puts it this way: "Simplex, two-way radio operation is simply different than duplex, cell phone use. Two-way radio operation in moving vehicles has been going on for decades without highway safety being an issue. The fact that cell phones have come along does not change that."

Harrison attached a copy of the ARRL's Policy Statement on Mobile Amateur Radio Operation to the letter to the NSC. "Amateur Radio mobile operation is ubiquitous, and Amateur Radio emergency and public service communications, and other organized Amateur Radio communications activities and networks necessitate operation of equipment while some licensees are driving motor vehicles," the Policy Statement reads. "Two-way radio use is dissimilar from full-duplex cellular telephone communications because the operator spends little time actually transmitting; the time spent listening is more similar to, and arguably less distracting than, listening to a broadcast radio, CD or MP3 player. There are no distinctions to be made between or among Amateur Radio, public safety land mobile radio, private land mobile radio or citizen's radio in terms of driver distraction. All are distinguishable from mobile cellular telephone communications in this respect. Nevertheless, ARRL encourages licensees to conduct Amateur communications from motor vehicles in a manner that does not detract from the safe and attentive operation of a motor vehicle at all times. See the Policy Statement on the ARRL Web site: <www.arrl.org/govrelations/MobileAmateurRadioPolicyStatement.pdf> .

"The ARRL acknowledges numerous and increasing instances of state legislative proposals (and occasionally municipal ordinance proposals) to curb the use of cellular telephones while operating motor vehicles, ranging from prohibitions on hand-held telephones to prohibitions on all forms of electronic devices," the Policy Statement maintains. "These statutory proposals would supplement the more generalized motor vehicle code requirements that exist in various forms in virtually all States, which require operators of motor vehicles to pay full time and attention to the operation of the vehicle while driving. ARRL understands that driver inattention is a leading cause of automobile accidents, and it is not unreasonable to be concerned about substantial distractions to drivers of motor vehicles."

Saying that the League understands that driver inattention is a leading cause of automobile accidents, "it is not unreasonable to be concerned about substantial distractions to drivers of motor vehicles. Given the necessity of unrestricted mobile Amateur Radio communications in order for the benefits of Amateur Radio to the public to continue to be realized," the policy statement reads, "the ARRL urges state and municipal legislators considering restrictions on mobile cellular telephone operation to (I) narrowly define the class of devices included in the regulation so that the class includes only full duplex wireless telephones and related hand-held or portable equipment; or alternatively (II) specifically identify licensed Amateur Radio operation as an excluded service."

"The ARRL is aware of no evidence that [mobile] operation contributes to driver inattention," the Policy Statement asserts. "Quite the contrary: Radio amateurs are public service-minded

individuals who utilize their radio-equipped motor vehicles to assist others, and they are focused on driving in the execution of that function."

ARRL RESPONDS TO FCC'S PROPOSED ALLOCATION FOR MEDICAL DEVICES IN 70 CM BAND

ARRL General Counsel Chris Imlay, W3KD, on behalf of the ARRL, filed comments <www.arrl.org/news/files/MannFoundationDocket_09-36Comments08_11_ 09.pdf> on August 11 regarding a Notice of Proposed Rule Making (NPRM), ET Docket 09-36, issued by the FCC in March 2009 <hraunfoss.fcc.gov/edocs_public/attachmatch/FCC-09-20A1.pdf>. In the NPRM, the FCC proposed to allocate spectrum and adopt service and technical rules for the utilization of new implanted medical devices that operate on 413-457 MHz (70 cm). According to the Commission, these devices -- called implanted neuromuscular microstimulators -- would greatly expand the use of functional electric stimulation to restore sensation, mobility and function to those persons with paralyzed limbs and organs; they would be implanted in a patient and function as wireless broadband medical micro-power networks (MMNs). These devices would be used on the 70 cm band on a secondary basis as part of the Medical Data Radiocommunication Service in Part 95 of the FCC rules. The Amateur Radio Service has a secondary allocation in the 70 cm band.

Researchers with the Alfred Mann Foundation -- a leading medical research organization located in Santa Clarita, California <www.aemf.org/> -- have developed a wireless medical micro-power network to tie together tiny devices implanted in victims of paralysis, creating an artificial nervous system to restore sensation, mobility, and function to paralyzed limbs and organs. "The Mann Foundation argues that the frequency range just above 400 MHz is optimum for their application, which requires no more than 1 mW of RF spread across about 5 MHz of bandwidth," ARRL Chief Executive Officer David Sumner, K1ZZ, wrote in "It Seems to Us," published in the June 2009 issue of QST <www.arrl.org/news/features/2009/06/01/10784/>. "However, recognizing the presence of a variety of incumbent radio services in that range, specifically including the amateur service, they have proposed four channels for flexibility in avoiding localized interference. Two of the four channels are 426-432 and 438-444 MHz; the other two are above and below the 420-450 MHz band."

In its comments to the FCC regarding the NPRM, the ARRL said it believes that the choice of frequency bands for MMNs as proposed is "unfortunate and unnecessary" and that "the WMTS [Wireless Medical Telemetry Service] offers a far more suitable solution than does the 413-457 MHz band for MMNs."

Sumner, in his editorial, said that the FCC's proposed rules raise two concerns: "First and foremost, the devices would be required to accept interference only from stations authorized to operate on a primary basis. The Mann Foundation has assured us that amateur stations will not cause its system to malfunction, so we see no reason why this cannot be reflected in the rules, even though our allocation is on a secondary basis. Second, while the Mann Foundation researchers appear to have done their homework, others who try to take advantage of the new rules may not be as rigorous."

The ARRL asserts in its comments that due to redundant interference rejection design, the devices developed by the Alfred Mann Foundation "appear to have some reasonable prospect of avoiding the disastrous consequences of RF interference to implanted MMNs." The ARRL stressed, however, that the FCC should not permit the marketing of MMNs or any similar device in the 420-450 MHz band: "(1) unless and until thorough RF interference susceptibility testing is conducted on the AMF devices relative to high power Amateur Radio equipment; (2) at parameters other than those inherent in the Mann system, which incorporates notably redundant interference rejection design characteristics; and (3) without very specific patient notifications and labeling of the body-worn MCUs [Master Control Units] and other portable components which provide firm assurance that the devices will not malfunction in the presence of RF fields from authorized radio services in the same bands."

The ARRL did acknowledge that it thought the Commission to be correct when it stated in the NPRM that "[g]iven the low transmitter power and duty cycle limits that would typically be used by either the implanted MMN device or the external MCU, we expect that the risk of interference from MMNs to incumbent operations in these frequency bands would be negligibly small." The ARRL pointed out, however, that no testing has been done to verify this conclusion and "such testing should be concluded and the results analyzed before this anticipatory conclusion can be relied upon."

In its comments, the ARRL made note of the fact that there is Part 90 spectrum above 450 MHz available for low-power biomedical telemetry, but "the Alfred Mann Foundation argues that bands between 450 and 470 MHz are unsuitable due to the fact that the band is 'congested and populated with commercial, high-power transmitters that could preclude reliable operation of lower-power, wireless medical implant devices.' This, the ARRL said, "is a very worrisome contention, and not the argument that should be made by the proponent of a new service that is secondary to other incumbent licensees. ARRL contends that if the 450-470 MHz band hosts services that are incompatible with reliable operation of MMNs, then the 420-450 MHz band, and especially the segment proposed for MMNs at 438-444 MHz is equally incompatible with MMNs."

Pointing out that Amateur Radio television transmitters and repeaters and FM voice repeater input and outputs operate in this segment in particular, "the potential for interference to MMNs is on the same order, or worse, than would be the case if MMNs were to operate in the Part 90 biomedical telemetry band between 450 and 470 MHz," the ARRL told the FCC. "In the segment 426-432 MHz, amateur television stations transmit on a wide bandwidth basis. Amateur Radio stations are permitted to operate at power levels up to 1500 W PEP output, and the RF environment at 420-450 MHz, with primary government radiolocation facilities and highpower amateur facilities is no more conducive to reliable MMN operation than would be the 450-470 MHz band."

The ARRL also voiced concerns that nowhere in the NPRM does it mention what the allocation status of MMNs would be relative to the Amateur Radio Service. Though the Alfred Mann Foundation has proposed that MMNs would be secondary to incumbent licensed operations in the subject bands, the Amateur Service is presently secondary to government radiolocation in this band; this represents a cooperative sharing arrangement that is satisfactory to both government agencies and the Amateur Service, the League contends.

"While it is presumed that the proposal is for MMNs to be secondary to both government radiolocation and to the Amateur Service (as opposed to Amateur stations and MMNs being co-secondary) this is not clear from the NPRM," the ARRL maintained. "Because the interference susceptibility of MMN devices generally is not known, it would be improper to create a co-secondary allocation for MMNs anywhere in the 420-450 MHz band at this time. The Amateur Service has a practical inability to protect patients wearing RF susceptible MMNs from interference from ongoing amateur operations in the 420-450 MHz band, and therefore all MMN operation is going to have to be conditioned on the ability to withstand and operate in the presence of such

high-power signals, and thus subordinate in allocation status to the Amateur Service. Unless this interference rejection capability is demonstrated by MMN proponents in advance, the devices should not be allowed to operate anywhere in the 420-450 MHz band."

Imlay and ARRL Technical Relations Manager Brennan Price, N4QX, met with the Alfred Mann Foundation in February 2009, but Imlay said that so far, they have not responded to the ARRL's request to "cooperate in a firm statement that their devices would not malfunction in the presence of nearby RF signals from Amateur Radio stations. Failing that, these comments reflect our continuing concern about the effect on implant patients from unpredictably close Amateur Radio station operations. Other radio services affected, both above and below the 430-450 MHz band, are taking similar positions."

From *The ARRL Letter*, August 28, 2009

FCC TO UTILITIES: DON'T LOOK TO HAMS TO PAY FOR YOUR TESTING

In a case that goes back more than 10 years, the FCC has told a Pennsylvania utility that the utility is responsible for paying for "efforts to locate and correct instances of [power line] noise" <www.fcc.gov/eb/AmateurActions/files/Duque09_08_07_5108.pdf>. At least one amateur has been complaining to the FCC since 2000 regarding harmful radio interference possibly caused by power line equipment maintained by Pittsburgh's Duquesne Light Company (DLC) <www.duquesnelight.com/>.

Bob Thacker, K3GT, of Allison Park, Pennsylvania -- a suburb just northeast of Pittsburgh -- first noticed harmful interference back in 1996. He told the ARRL that DLC would come out and fix things, but that he would soon hear noise again. After a few years of this, he complained to the FCC, and in 2005, the FCC notified DLC of the complaint. A month later, DLC responded to the FCC, detailing their efforts to resolve the matter and indicated that the most recent complaint was the result of changed conditions, not the continuation of an old problem.

According to the FCC, DLC again communicated with the FCC in a letter dated June 2, 2005, explaining the efforts they had taken to repair three lightning arrestors. During the latter half of 2005 and into 2006, Thacker continued to experience interference and continued to report these instances to DLC, requesting that DLC correct the problems. In 2007, he located a specific pole as one source of noise and advised a Mr Luther of DLC of this fact; Mr Luther advised Thacker that he would submit a work order.

In March 2008, DLC contacted Thacker, indicating that it had swept the area where the suspected pole was located and discovered no noise. DLC indicated that the noise source was a neon light. Finally, DLC stated that it had spent "significant amounts of time and money" attempting to address his concerns and that DLC would require him to pay for any additional efforts to locate and correct instances of noise.

Special Counsel for Amateur Enforcement Laura Smith responded to DLC in July of this year, saying "Such a response is not acceptable." She spelled out what she called "the most important rules relating to radio and television interference from incidental radiators," specifically:

47 CFR, Section 15.5: General Conditions of Operation <edocket.access.gpo.gov/cfr_2002/octqtr/pdf/47cfr15.5.pdf>; 47 CFR, Section 15.13: Incidental Radiators <edocket.access.gpo.gov/cfr_2002/octqtr/pdf/47cfr15.13.pdf>, and 47 CFR Section 15.15: General Technical Requirements <edocket.access.gpo.gov/cfr_2002/octqtr/pdf/47cfr15.15.pdf>.

"Given the fact this case has been ongoing for quite some time without resolution and DLC has had ample time to locate the instances of interference and make the necessary repairs," Smith told the utility, "you are directed to respond to [me] within 60 days of receipt of this letter, detailing what steps you have taken to resolve the remaining instances of interference that are reported as being caused by your equipment. Should the remaining interference problems not be resolved within those 60 days, DLC will be required to provide [me] with a status update every two weeks going forward as to what progress, if any, has been made to resolve the matter."

ARRL Lab Engineer and power line noise expert Mike Gruber, W1MG, was pleased with Smith's decision, and said that amateurs should not be made to pay fees to the utilities to test for harmful interference by the same utilities. "It is not the responsibility of an Amateur Radio operator to track down and get rid of power line noise -- that's the utilities' job. I am pleased with the precedent that Laura Smith and the FCC have set here. Now maybe more utilities will take power line noise interference more seriously in the future."

SUITSAT-2 NOW CALLED ARISSAT-1

The SuitSat-2 project -- an Amateur Radio satellite housed in a Russian spacesuit -- now has a new name to go with a new shape: ARISSat-1. On Wednesday, August 19, Amateur Radio on the International Space Station (ARISS) <www.rac.ca/ariss/oindex.htm> Chairman Gaston Bertels, ON4WF, announced the new name for the satellite and project. According to ARRL ARISS Program Manager Rosalie White, K1STO, the project team is moving ahead, using the same hardware that was to fly in the Russian Orlan suit. Russia will continue to call the satellite Radioskaf-2, so ARISS is designating it ARISSat-1/Radioskaf-2.

Plans to launch a second SuitSat-spacesuit-turned-satellite were the subject of discussions and presentations at the November 2006 AMSAT Space Symposium and ARISS International Delegates' meeting. Despite a weaker-than-anticipated 2 meter signal, SuitSat-1 sparked the imagination of students and the general public and turned into a public relations bonanza for Amateur Radio <www.arrl.org/ARISS/Suitsat.pdf>. ARISS hopes to capitalize on the concept by building an even better SuitSat that will include ham radio transponders. The SuitSat.org Web site <www.suitsat.org/> attracted nearly 10 million hits during the SuitSat-1 mission. Designated by AMSAT as AO-54, SuitSat-1 remained in operation for more than two weeks, easily outlasting initial predictions that it would transmit for about a week. SuitSat-1 re-entered and burned up in Earth's atmosphere in September 2006. ARISSat-1/Radioskaf-2 is expected to be live for at least six months.

Due to storage considerations, the two surplus Orlan space suits in storage on the ISS were discarded via the Progress Cargo Vessel earlier this year. One of these suits was to be used to house the electronics for the upcoming SuitSat-2 mission; the batteries were to be mounted inside the suit, solar panels attached to the extremities with the electronics, video cameras and antenna mounted on the helmet by the ISS crew prior to deployment during an extra-vehicular activity (EVA), commonly called a spacewalk. The removal of the Orlan space suits from ISS removes the "Suit" component of the deployment and the new name reflects the change in configuration.

White told the ARRL that the ARISSat-1/Radioskaf-2 team, through Gould Smith, WA4SXM, made the final decision for the satellite to be square, with solar panels on all 6 sides. "The team is mounting a 70 cm quarter-wave whip on the bottom and a 2

meter quarter wave whip on the top," she said. "All of the hardware and software goes inside the square, and cameras go on the outside." The experiment being developed by Russia's Kursk State University is expected to be integrated into the electronics once the US-produced equipment is delivered to Russia this fall.

AMSAT <www.amsat.org/> and ARISS pointed out that the importance of this project to both organizations is not diminished. "ARISS sees this mission as an important component of education outreach, as it will provide an opportunity for students around the world to listen for recorded greetings from space, as well as learn about tracking spacecraft in orbit," White said.

The ARISSat-1/Radioskaf-2 transmitter and receiver will be based on a Software Defined Transponder (SDX) system. It will consist of two major components: The RF Module and the Digital Signal Processor (DSP) module. In the RF module, there will be an up converter that receives a signal from the DSP module as a 10.7 MHz intermediate frequency RF signal with a 50 kHz bandwidth, and up converts it to 145 MHz signal of 50 kHz bandwidth centered on 145.9375 MHz. The receiver is a down converter with a 50 kHz bandwidth centered on 437.6125 MHz. The output of the receiver is a 10.7 MHz RF signal with a bandwidth of 50 kHz. The DSP processor receives the 10.7 MHz signal from the receiver down converter and processes it and outputs a 10.7 MHz signal to the transmitter up converter. The DSP can also inject signals such as the CW ID, telemetry, audio and packet signals as determined by the software on the DSP.

AMSAT calls the deployment of the SDX "a critical milestone" for the organization. "This upcoming flight provides an opportunity to flight test the next generation of spacecraft hardware," Bertels said. "Lessons learned from this deployment will be applied to future flight opportunities as AMSAT moves towards a 'modularization approach' to spacecraft development with the expectation the future spacecraft missions will utilize a derivative of SDX and the associated hardware."

The ARISS International Team has been informed that there is still space available for shipment of the ARISSat-1/Radioskaf-2 electronics on the projected cargo flight to the ISS in January 2010, and the extra-vehicular activity scheduled for April 2010 still has a SuitSat-2 deployment on the schedule.

From *The ARRL Letter*, Sept. 4, 2009

GET SET FOR THE 2009 SIMULATED EMERGENCY TEST

It's time to get ready for the 2009 ARRL Simulated Emergency Test! ARRL Field Organization leaders are planning an event that will actively involve members of the Amateur Radio Emergency Service (ARES), the Radio Amateur Civil Emergency Service (RACES), the ARRL National Traffic System (NTS) and many other related groups that prepare for and respond to emergencies. Public service agencies and organizations in your community, ARRL Section or state will also be invited to participate. You, too, are invited to be a part of this ARRL sponsored nationwide exercise on October 3-4, 2009, or whenever it is held in your area.

Although October 3-4 is the focal point weekend, ARRL Sections, ARES teams and nets may conduct their exercises anytime -- andespecially during September through December. If you don't know who to contact, please touch base with your ARRL Section Manager and/or Section Emergency Coordinator or Section Traffic Manager for assistance. See page 16 of QST for Section Manager contact information or check the ARRL Web site <www.arrl.org/sections/>. From there, you'll find links to ARRL section pages with appropriate contact information. There can be a role for you no matter what your level of experience. After all, it is a training opportunity to try out something new under simulated emergency conditions, learn or practice useful skills in traffic handling and net operation, and observe emergency communications protocols and management.

ARRL Field Organization officials in your area and Section are planning the simulated emergency scenarios that will be used during the SET event. These scenarios are designed to help you gain valuable operating experience, or to practice what you have learned previously or to put your Amateur Radio Emergency Communications Course training into action. In any emergency -- real or simulated -- a number of public service or public safety agencies and organizations are often also involved in the response.

ARRL Section Leaders and local or district-level leaders are encouraged to work closely with these served agencies, and the SET is a great chance to demonstrate the capabilities of Amateur Radio in the community and beyond. For more information on whom the ARRL maintains a National Memoranda of Understanding with, check this page <www.arrl.org/FandES/field/mou/>. Guidelines and specific SET reporting forms for ARRL Section and Field Leaders will be posted online <www.arrl.org/FandES/field/forms>. Please report your SET activities to your Section Leaders and to HQ.

Meeting Minutes

General Meeting, Aug. 10, 2009

{no minutes were received by the deadline. - Editor}

Board Meeting, Aug. 17, 2009

Unapproved Minutes August 17, 2009 Red Cross, 2731 North 1st Street, San Jose, CA

The meeting was called to order at 7:45 pm. by Don Steinbach.

Attendance:
Board Members: Don Steinbach, AE6PM, President Ned Tufekcic, AC6YY, Treasurer David Dippon, AE6YE, Secretary Don Village, K6PBQ, Trustee Lou Steirer, WA6QYS, Director Wally Britten, KA6YMD, Director Gary Mitchell, WB6YRU, Director

Guests: Clark Murphy, KE6KXO Gwen Steirer, KF6OTD

Excused Absences: Fred Townsend, AE6QL, Vice President John Parks, W6JPP, Director John Glass, NU6P, Director

Announcements: Don S asked the board members to review the agenda. There were no changes. The deadline for the upcoming SCCARA-GRAM is 8/31/2009.

Old Business

440 Repeater Status: Don Steinbach announced that the PA was replaced on August 7th. The transmitter output power is about 10 watts. There was discussion about the need for further adjustment. Wally Britten mentioned some differences in audio output. Lou Steirer and Don Steinbach both mentioned that they can bring up

the 440 repeater from their home QTH.

Don Steinbach mentioned that funds were allocated previously for replacement hardware, but he was unable to find anything in the meeting minutes from previous board meetings. Lou Steirer moved that $1600.00 be allocated for replacement of 440 repeater hardware. Don Village seconded the motion. The motion passed unanimously.

ARRL Mailing List: Fred Townsend was not present to update the status of this activity.

City of San Jose MOU
Don Steinbach mentioned that the City of San Jose rejected the MOU. They did not provide a written notice of this rejection nor did they offer any corrections or reasons. Don Steinbach asked the board members for opinions. Gary Mitchell offered the opinion that we should stop trying to working with the City, and move the 2 meter repeater to another location. Lou Steirer asked for clarification. Wally Britten mentioned that high level repeaters are not desirable from a coordination perspective. Ned Tufekcic suggested the focus be on upgrading the 440 repeater, before pursuing options with the 2 meter repeater. Gary Mitchell mentioned that if both 440 and 2 meter repeaters are located at the same place they could be easily linked.

There was an accounting of the ownership of 2 meter repeater components. The current 2 meter controller is owned by SCCARA. The City owns duplexers and power supply. SCCARA owns the feed line, antenna, and rack.

Ned Tufekcic asked about the logistics of shutting down the current 2 meter repeater.

Don Steinbach wants to get the original MOU document back from the City. Gary Mitchell has the latest version of the MOU.

Don Steinbach asked who is maintaining the repeater codes. He also mentioned that the MOU does not state who is responsible for the repeater configuration, and changes to the configuration.

Lou Steirer asked if the MOU should be rescinded (notice sent to the City).

Don Steinbach asked if the repeater codes are restricted to SCCARA members. Gary Mitchell stated that access is not restricted to SCCARA members.

There was discussion about other groups using the SCCARA repeater, and requesting that those groups notify SCCARA in advance.

Don Steinbach is going to contact David Paul to retrieve the MOU from the City.

Don Steinbach suggested that no further funds be allocated to current 2 meter repeater, including replacement antennas. The consensus of the board members agreed with this suggestion.

New Business

Last Meetings Minutes
David Dippon gave Ned Tufekcic a membership check from Ben Vickers. Lou Steirer moved to accept last months board meeting minutes as amended. Don Village seconded the motion. The motion passed unanimously.

David Dippon announced that since board meeting minutes are published in the SCCARA-GRAM, review copies will not be printed for future board meetings.

Treasurer's Report
Ned Tufekcic reported the following balances as of 7/31/2009:

Checking	$6606.66
Savings	$3844.99
Cash approximately	$264.00

Financial Reserves: Don Steinbach submitted a list of proposed financial reserves. The Board agreed on the following amounts:

Insurance	$ 320.00
ASVARO	$1625.00
SCCARA-GRAM	$ 700.00
PO Box Rental	$ 50.00
BBS Electricity	$ 60.00
Field Day	$ 700.00
Equipment Maintenance and Repair	$ 250.00
Contingency for video projector purchase	$ 800.00
Total	$3705.00 does not include projector.

Gary Mitchell asked if the total expenses have been increasing. He asked if it would be a good idea to put some of the SCCARA funds into CDs. There was a discussion about buying a video projector. Fred Townsend has been loaning us his for meetings.

Auto-Dial and Phone Patch
Don Steinbach distributed a list of the phone patch codes, and provided a demo. Don Steinbach asked David Dippon to send him the latest repeater codes. There was discussion about the auto dial slots on the repeater and who maintains the telephone numbers.

Vice President's Report: Fred Townsend was not present.

Trustee's Report: Don Village reported that the club station will be open on August 29th for general operation. Don Village asked about the whereabouts of the power cable for the TS 140.

Activities: John Parks was not present.

Newsletter: Gary Mitchell passed around samples of the SCCARA-GRAM printed in color. He suggested a picture of the article authors. Gary Mitchell suggested that general meeting minutes be published in the SCCARA-GRAM

BBS: Gary Mitchell mentioned progress is being made on 6 meter links between BBS systems. He is building up a test setup. Don Steinbach asked if the BBS articles could be available as a single document.

Repeater: Wally Britten reported that the repeaters are running well, considering the current issues with the 440 repeaters.

Web Master
Wally Britten is updating the web site as information becomes available.

Other: Don Steinbach asked that board members bring a copy of the Bylaws to the next meeting. He suggested a couple of changes, such as simplifying the membership dues structure, and specifying when new officers start new duties.

Don Steinbach asked Ned Tufekcic for the email group address for the Board members.

The meeting was adjourned at 9.21 pm

Respectfully Submitted, David Dippon, Secretary

Packet Pieces

Downloaded from the BBS packet network:

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Date: 22 Nov 2005 12:21
From: W1GMF@W1GMF
To: HUMOR@USA
Subject: HUMOR FOR TODAY 1104

Sometimes we just need to remember what the Rules of Life really are....

1. Never give yourself a haircut after three margaritas.
2. You need only two tools, WD-40 and duct tape. If it doesn't move and it should, use WD-40. If it moves and shouldn't, use the tape.
3. The five most essential words for a healthy, vital relationship: "I apologize" and "You are right. "
4. Everyone seems normal until you get to know them.
5. When you make a mistake, make amends immediately. Crow is easier to eat while it's still warm.
6. The best advice that your mother ever gave you was, "Go! You might meet somebody!"
7. If someone says that you're too good for him or her, believe it.
8. Learn to pick your battles. Ask yourself, "Will this matter one year from now? How about one month?"
9. If you woke up breathing, congratulations! You have another chance!
10. Be really nice to your friends and family. Some day, you may need them to empty your bedpan.

Last Laugh

Basic Flying Rules: Try to stay in the middle of the air. Do not go near the edges of it. The edges of the air can be recognized by the appearance of ground, buildings, sea, trees, and interstellar space. It is much more difficult to fly there.

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 fill out an Elmer form from the club secretary.

Antennas, feed-lines, tuners: WB6EMR, W6JPP, K6PBQ, WB6YRU
Lightning protection, grounding: WB6YRU
Station set-up, equipment: K6PBQ
TVI/RFI: WB6YRU
Homebrew projects, construction: KD6FJI, WB6YRU
Computers: KB6NP; IBM PC: WB6YRU
Packet Network (BBS, forwarding): WB6YRU
Code operating and installations: WB6EMR, K6PBQ
DX (long distance/propagation): WB6EMR
Emergency operating/preparedness: WA6QYS
FM (VHF/UHF, repeaters):
HF operating techniques (SSB, CW): WB6EMR, K6PBQ
Classes/license upgrading: W6ACW
Legal/FCC rules: WB6YRU
SCCARA (club inner workings): K6PBQ, WB6YRU, WA6QYS
EchoLink: KK6MX

W6ACW, Ed Hajny, (408) 739-6105

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

KD6FJI, Lloyd DeVaughns,
(408) 225-6769 e-mail: kd6fji@arrl.net

KK6MX, Don Apte, (408) 629-0725
e-mail: kk6mx@aol.com

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

K6PBQ, Don Village, (408) 263-2789
e-mail: donvillage7@yahoo.com
WA6QYS, Lou Steirer, (408) 241-7999
packet: home BBS NOARY

WB6YRU, Gary Mitchell, msg (408) 265-2336
also (408) 269-2924
packet: home BBS NOARY
e-mail: wb6yru@ix.netcom.com

Newsletter Notes

Surprise! This one has **COLOR!** Is very cool, no? ☺

The question of printing the *SCCARA-GRAM* in color has been discussed for a while now. The problem has been the cost. However, color copying has been coming down recently, so we decided to give it a try. Still, each color page costs about five times a B&W page.

The board decided to have color only when there is something in color to print–aside from the color SCCARA logo and the color ARRL logo. The copy center charges color pages separately than B&W pages, so if we have only a couple pages with color photos, we only pay the color rate for those pages. We won't be going out of our way to stick color everywhere, like the text itself. ☺

We aren't the only ones. Newspapers use color now, many other club newsletters are color too, including amateur radio clubs.

Let the board know what you think.

One other thing, the *SCCARA-GRAM* normally gets copied from a paper master. That works fine for text, but photos don't copy so well, as you've probably noticed. So we're now copying from an electronic master (on a memory stick or CD) instead of paper. It'll add a penny to each copy, but it will produce sharper graphics and much better photos. Essentially, each copy is like a printed master.

73, Gary WB6YRU, editor

SCCARA
Santa Clara County Amateur Radio Association
PO Box 6
SAN JOSE CA 95103-0006

Affiliate of the ARRL,
American Radio Relay League

FIRST CLASS

ADDRESS SERVICE REQUESTED

SCCARA Membership Form for 2009

If none of your info has changed, fill in name and call only

Name: _____ Call: _____ Class: E A G T+ T N

Address: _____ Licensed since (yr): _____

City: _____ State: ____ Zip: _____ - _____ Licence Expiration Date (mo/yr):

Telephone: ( ) _____ ☐ New Member ☐ Renewal _____
☐ I'm also a member of the ARRL

E-mail: _____

Memberships begin January 1 and expire December 31.
If renewing: annual membership dues (base rate) are: $20 Individual, $25 Family, $10 Student (under 18)
For new members:
If joining in January: base rate
If joining in February through October: base rate x (11 - month) x 10% (e.g. for June, that would be: base rate x 50%)
If joining in November or December: free for November and December if paying the base rate for the following year

$ _____ **Dues payment** for: ☐ individual ☐ family ☐ student

For family memberships (at the same address), please include a separate form for each family member.

I want the newsletter by: ☐ U.S. Mail ☐ internet (make sure your e-mail address is legible and correct)

Give this completed form (or copy) with payment to the Secretary or Treasurer at any meeting or mail to the club address. Rev. 6/16/2008