

The READOUT

YEAR 11 NUMBER 10 OCTOBER 1989



The Oasis

DINNER DANCE

Saturday, October 7, 1989

Oasis Restaurant, 5001 McHenry Av. Modesto

Social Hour 630 pm Dinner 730 pm

You're Invited...

Stanislaus Amateur Radio Association, Inc.

P.O. Box 4601 Modesto, Ca 95352

The READOUT is the official publication of the Stanislaus Amateur Radio Association Inc. SARA P.O. Box 4001, Modesto, CA. 95352. Entered as third class mail at the U.S. Post Office Modesto, CA. 95352. Contributions to *The READOUT* are always welcome and may be submitted to the editor, Bob Pinheiro, WA6ZLO at 1221 Mist Flower Ct. Modesto, CA. 95355. Permission is granted to reprint articles appearing in *The READOUT* with appropriate credit. SARA owns and operates two F.M. repeaters. 145.39 MHz (-) located on Mt. Oso, 22 miles SW of Modesto at an elevation of 3,370 feet. Our 220 MHz repeater operates on 223.68 MHz (-) and is also located on Mt. Oso at an elevation of 3,500 feet. Both repeaters are equipped with an autopatch for the use of SARA members. SARA owns and operates a Packet Digipeater, WD6EJF-1 also located on Mt. Oso at 3,500 feet. Frequency is 145.07 MHz. SARA conducts an informational net on both repeaters each Thursday evening at 800 pm with the exception of holidays. SARA meets the third Tuesday of each month at the Stanislaus County Administration building at the corner of 12th and H streets in downtown Modesto. Meetings begin at 730 pm. SARA is incorporated in the State of California, is an affiliated club of the American Radio Relay League (ARRL) and Stanislaus County RACES. Dues are \$20.00 per annum and \$10 for students up to sophomores in college. Dues are prorated for newly joining members from the date they join. ARRL memberships and QST renewals may be made through the club with a \$2.00 commission retained by SARA.

PRESIDENT

Phil Hartz.....WD0FFX.....523-9018

VICE PRESIDENT

Joanne Shaffer.....N6SAH.....537-5205

SECRETARY

Linda Franklin.....N6REB.....537-1123

TREASURER

Steve Farles.....N6EKV.....521-7834

**NEXT SARA
MEETING**

October 17, 1989

730 PM

**County Administration
Building.**

12TH & H Streets

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Editor's Notes

"Atta Boy" Award

Scam Artist Arrested

By Bob, WA6ZLO

The "atta boy" award of the year goes to Bud, N6OCV, who renewed his membership for 1990 this past month. I think Bud also had a hand in recruiting a new member. Welcome to Ray Moore, KJ6AN, of Tracy. Ray is an Advanced class holder and a logistic engineer in Sunnysvale. Ray was first licensed in 1987. Ray not only paid his membership dues for the remainder of 1989, but he also paid for 1990. Thank you Ray! Congratulations to Oliver, WA6HHO, who upgraded to Advanced recently.

The perpetrator of a SCAM on ham radio operators last year has been arrested. Michael D. Harrison, 36, WB2PTI, Oceanside, New York, was indicted on 50 counts of mail fraud on August 28th by the United States District Court Grand Jury for the Eastern District of New York. Each count carries a five year prison term and a fine of \$250,000, which adds up to a whopping 250 years in jail and \$12.5 million fine.

The 12 page indictment charges that between August 1988 and January 1989, Harrison (also know as John McNamara and Mike Harrison) illegally devised a scheme to obtain money by means of false and fraudulent pretenses and representations using the U.S. Mail. Harrison placed full page advertisements in 73 Magazine advertizing Atlas Radio and Uniden Electronics

had joined forces and were back in business offering the new Uniden 2510 ten meter mobile transceiver at \$219.95.

The ad gave a post office box in Lynnbrook, New York and a Long Island, NY telephone number. A similar ad was placed in the Ham Trader Yellow Pages and Poplar Communications magazine. Investigation revealed that Harrison had nothing whatsoever to do with either company and accepted orders and payments with no intention of delivering the radio. Harrison cashed all the checks and put the money in his pocket and never shipped one unit.

The amount of money he got away with is reportedly substantial. Some orders were as much as \$3,000. In his ads, Harrison refused to accept credit cards because the prices he was offering were so low that he could only accept checks or money orders which he promptly cashed.

There is an old Chinese proverb, *If it sounds too good to be true, it probably is!* Harrison was arrested at his home by Federal Agents on mail and wire fraud charges and released after he posted a \$25,000 bond. (Wonder where he got the bail money?) And finally, the phonetics of the month: WD6BCC...WD6-Bionic Cow Chips. 73 Bob

Commercial Shortwave From Salt Lake City

2.5 Million Watts ERP

Approximately two million listeners anywhere from Canada to Japan can pickup the signal of shortwave powerhouse KUSW in Salt Lake City, Utah. Unlike the Voice of America, KUSW is a commercial shortwave station pumping out 2.5 million watts (ERP) with the aid of a log periodic antenna. Beam tilted at 70 degrees, the antenna automatically changes the angle of propagation according to each frequency employed during the course of a day. The directive for frequency changes is servo-fed to the transmitter which delivers 100 KW of pulse width modulation. To generate that type of RF requires 29,000 volts of plate supply voltage. To keep the final tubes from vaporizing, cool distilled water cools the tubes and the resulting steam is then cooled and converted back into water for reuse via a heat exchanger. Ionospheric conditions play an important part in the station being able to reach around the world with it's signal. The ionosphere is an electrified region of the Earth's atmosphere consisting mostly of ultraviolet radiation from the sun.

As a result of changes in the ionospheric layer (raising and lowering) which affect refraction of signals, KUSW generally changes frequencies four times or more throughout its 14 hour broadcast day. The frequency changes vary not only during the day, but also according to the season, when the earth to sun relationship shifts dramatically.

WFNO in New Jersey, was the first commercial shortwave station on the air in 1982. KUSW came on the air in late 1987.

**Meet SARA
Member**



**Dave Wallace,
KA6GJN
Turlock**

**Call Lori,
N6JTD
for last minute
Dinner-Dance
Tickets.
521-7834
Deadline Oct. 5th**

ARRL REJECTS EXPLOITATION OF AMATEUR RADIO

The ARRL has responded 'NO' to the request of a coalition of radio and TV networks, reporters and news directors to make Amateur stations more useful to broadcasters. Through the Radio-Television News Directors Association (RTNDA), the broadcasters petitioned the FCC to allow ham stations to transmit news for dissemination to the public if the information was directly related to an important news event and the information could not be transmitted by other means due to communications disruption.

Under the new Part 97 rules, Amateur stations may not be used for news gathering or program production. *Amateur stations may convey news information to broadcasters when the information involves the immediate safety of life or immediate protection of property. The information must be directly related to the news event and could not be transmitted by other means and other means of communication could not be reasonably provided before or during the event.*

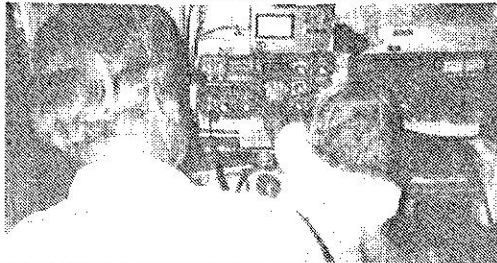
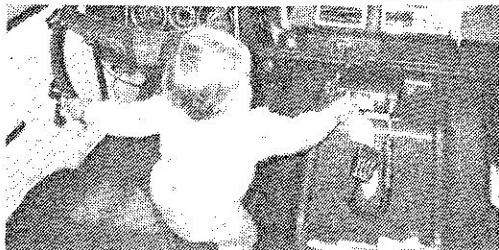
All of these tests must be met in order for news information to be conveyed from Amateurs to broadcasters. The broadcasters key request was to remove the "immediate" requirement from the rules. Without the immediacy requirement, broadcasters would be free to use Amateur stations to convey information if it was related to an "important news event, even if an emergency had passed, or even if there was no emergency at all.

Broadcasters have a wealth of electronic news gathering equipment and access to satellite frequencies they can use for emergency communications. An excellent example was the television coverage from China during the recent days of student demonstrations.

Its expected the FCC will reaffirm its position that Amateurs may provide broadcasters with news information ONLY under certain rigorous circumstances, in order to preserve Amateur Radio's unique nature. -W5YI Report

Prospective New Ham

It only took 17 months for Michelle Nicole Hotchkiss to become interested in Amateur Radio. In the photo on the left Nicole is checking out the two meter rig in her grandfather's (Glen, KA6WBY) motorhome. In the photo on the right, Nicole exhibits an immediate interest in Grandpa's low-band equipment. Ham radio runs in the family. Her dad is Randy, KA6WWT and her great grand dad was Alva, (Hotch), K6DYM. Randy, his wife Lynn and Michelle are presently in Germany where Randy is stationed with the Air Force.



FCC RELEASES TEXT OF 220 DECISION

The FCC officially released the full text of its decision to reallocate the 220-222 MHz portion of the Amateur band to the land mobile service. The text contains few surprises and little, if anything, to raise the spirits of Amateur radio operators even though the Amateur Service was made the primary user of 222-225 MHz.

The commercial land mobile radio industry insisted that the 2 MHz was badly needed to provide for explosive growth in the mobile services. The FCC agreed and maintained that the band is needed as an experimental test-bed for new narrowband radio technologies.

Packet Bandplan

The following frequencies are the packet band plan allocations accepted by NCPA (The Northern California Packet Association) as of October 1, 1989. Also, local bulletin board (BBS) information.

- 144.91 Keyboard to Keyboard (No BBS)
- 144.93 Bulletin Board Service (BBS)
- 144.95 DX Cluster Channel
- 144.97 BBS...W6FGC-2 BBS Twain Harte
- 144.99 BBS
- 145.01 Keyboard to Keyboard
- 145.03 Keyboard to Keyboard
- 145.05 Keyboard to Keyboard
- 145.07 BBS...WB6V-2 BBS Ceres
 - KE6LW BBS Yuba City
 - KG6XX-1 Carmichael
- 145.09 BBS.. K6RAU-1 BBS Merced
 - N6OA BBS Lemoore
 - WA6NWE-1 BBS N. Highlands
 - WA6YHJ-1 BBS Livermore
- 145.71 Digital Experimental
- 145.73 9600 baud TAPR compatible
(Do Not use for BBS)
- 145.75 TCP/IP
- 145.77 BBS.....WO6Y BBS Fairfield
- 145.79 BBS

The primary narrowband technology under consideration for 220-222 MHz is Amplitude Companded Single Sideband (ACSSB), a processed version of the familiar AMSSB...an analog mode.

ACSSB has been available for years but was never widely used because it is hard to 'shoehorn' it in between existing FM channels and because Motorola, the dominant manufacturer, has not marketed ACSSB radios in the U.S.

The cellular telephone industry expressly rejected ACSSB for its next generation products, favoring digital voice technology instead. Nevertheless, United Parcel Service, a major beneficiary of the reallocation, will apparently use ACSSB in its multimillion dollar planned radio system for vehicle and package location.

Allegations of corruption in the way the FCC handled the case have been made, but never proven. A subcommittee of the House Government Operations Committee convened a hearing on the issue and made several alternative recommendations. The FCC seems to have grudgingly agreed to consider one of them, a secondary Amateur allocation at 216-220 MHz.

Amateurs filed approximately 700 petitions for reconsideration, 525 from Californians. About 40 petitions came from Amateurs in Nevada and Arizona

The FCC continues to believe that operations displaced from 220-222 MHz can be moved to 222-225 MHz. In urban areas, the FCC said "more efficient use of the spectrum will have to be made."

The FCC said hams could accomplish this by better planning, reducing power to increase frequency reuse and by greater sharing of channels especially in California. Some Amateur repeater operations may need to time-share channels within the same geographic area the FCC said.

In a footnote, the FCC said "In its Petition for Reconsideration, the ARRL suggested that the Commission might have considered a secondary allocation in the 216-220 MHz band as a replacement spectrum for displaced Amateurs.

No such allocation was proposed or raised by the commenters in this proceeding. The ARRL may, if it so chooses, submit a petition making a specific proposal." In this regard the ARRL Board has directed staff to file such a petition. We expect the broadcasting establishment to fight such an allocation as those frequencies are adjacent to TV channel 13.

The FCC went on to say that.. "we believe the 902-928 MHz band provides a significant opportunity for the growth of packet radio." So, when do we move?

The FCC is a long way from setting a date

by which Amateurs will have to vacate 220-222 MHz and UPS and its ilk will get to move in. The Commission has not even released any proposed rules for the band; as UPS petition to do so is still pending.

After the FCC does release proposed rules sometime this year, we expect at least another year will pass while the FCC decides what to do to create a bandplan and industry structure for the new frequencies. Undoubtedly, this period will see a lot of mobile industry representatives knocking on the FCC doors.

Because so many issues will be involved, a Further Notice of Proposed Rulemaking could be likely..taking another year. Once rules are finalized, some party or parties will probably petition for reconsideration. Once those petitions are dealt with, it could be many months, the FCC would have to begin accepting license applications.

If cellular telephone and other new services are any example, entrepreneurs and speculators will bog down the FCC with thousands of applications for processing. A lottery procedure could be used to grant licenses, but lotteries are typically performed on an area-by-area basis over a period of time.

Of course, this scenario assumes that the ARRL court appeals will be unsuccessful. If they are successful, an even longer period may ensue to sort out the issues. Sometime during this lengthy process, the FCC will announce the date and time by which all 220-222 MHz Amateur transmissions must cease. Don't hold your breath. - Excerpted from W5YI Report.

SARA September Minutes

By Linda Franklin, N6REB

The Sept. 19, 1989 meeting was called to order at 7:30p.m. by President Phil, WD0FFX. Introductions were made by 19 members and guests. A motion was made to accept the minutes as printed in The READOUT, the motion was seconded and accepted.

The Treasurers report was given by Treasurer Steve, N6EKV's wife, Lori, N6JTD and reads as follows: Balance of the General Fund: \$341, Bal. of Fund Raiser Acct: \$44, Bal. of Educational Fund: \$595. The major expenses from the General Fund to date this year was: Liability Insurance..\$612 Repeater Equip. Insurance..\$111 New Repeater Bldg..\$877 READOUT at \$52 a month to date \$412 Post Office for postage at \$33 a month to date \$264 Antenna equip. purchased from the Ray Olive sale \$150. Total General Fund expenses to date..\$2,452.92.

Phil, WD0FFX gave a report on the repeater problem. Due to the recent storm, the repeater was damaged by lightning and LeRoy, NV6S with Steve, N6EKV brought the repeater down from the hill to assess the damage and try to repair it. The backup repeater is in use, but is not in the best of health either. The 220 located on another site was spared any trauma from what happened to the 2 meter repeater, and the on and off problems with the 220-2 meter link is probably due to the out-moded equipment.

Phil said there had been concerns expressed of Club Station equipment being purchased from the General Fund. He said only \$150 had been used to purchase Ray Olive's

antenna equipment, and that all other Club Station equipment had been purchased with the funds in the Fund raiser account. The fund raising events were expressly for the Club station fund and were used for that purpose, and he hoped all members would be encouraged to attend the club meetings so they could hear first hand the proposals made and also receive their information more accurately by putting forth their questions at that time.

He went on to say that last year at this time the General Fund was less than \$800. Also that the Club has come a long way this year, earned a lot of money, and gained a lot of contributions. To build up the funds for repairing the repeater and equipment,

Bud, N6OCV made a motion that each SARA member be asked to voluntarily assess themselves \$5.00 or any amount over that they wanted to name for the repair and upgrade of the repeater and equipment. And that it be immediately in effect to get the repeater up and running as soon as possible. The motion was seconded by Oliver, KJ6YZ and the motion was carried.

Jo, N6SAH announced the need for volunteers for the up coming bike-a-thon in October. Lori, N6JTD said that no deposits had been made for the Club Dinner Dance yet and hoped everyone would get in their reservations soon. The last day to send them in is Oct. 5, 1989. A letter of thanks from Karen Rudd with the American Cancer Society was read along with a reply of appreciation from SARA. Phil, WD0FFX

SARA Minutes

Continued from Page 8

related the note to SARA from John C. Henesey, KJ4KB, Regulatory Information Editor at ARRL, in regards to SARA's participation with the Bike-a-thon and he said "In your particular case, you are providing communications for the public on behalf of the American Cancer Society, and this is perfectly acceptable. Good Luck."

The meeting was adjourned for a break, and the evenings raffle tickets were sold. After the break the new ham class date was announced for September 30 at 9 a.m. at the Teal Middle School in Empire.

The Long Distance phone patch calls were discussed and members were reminded that this particular privilege is not free, so those taking advantage of this service were asked to remember to pay for their calls. The upcoming nominations for new officers in November was mentioned also.

The raffle was held with Steve, WA6MIZ winning an organizer for small items and Bud, N6OCV won a batch of cookies donated by Marilyn, NQ6H. The Meeting was adjourned at 9:50 p.m. Respectfully submitted by Secretary, N6REB.

**For last minute
Tickets for the SARA
Dinner-Dance
October 7, 1989
Contact Lori, N6JTD
521-7834
Last Day October 5th.**

This and That.....

Bootlegger on .39

During the mid part of September, two or three "bootleggers" showed up on the SARA two meter repeater. At first the young men and a young women, made no bones about the fact that they were unlicensed. Then when nobody would talk to them, they quickly improvised various call signs in hopes of continuing their illegal activity. As far as we know, they appear to be in the Ceres area. If you hear these scofflaws, try to get a bearing on them and let any of the club officers know of your findings.

CW Award...

Dave, KJ6DL, request all members participating in the SARA Novice and Technician Award to get your logs in by October 10, 1989 for this quarter of the contest. Send them to PO Box 691, Ripon, CA. 95366.

Autopatch charges....

A reminder, if you have made any long distance calls on the SARA Autopatch, you must pay the treasurer at the end of the month. The autopatch continues to be operated on a "trust" basis. That is we trust you to reimburse the club if you make any long distance calls.

You can either guess at the amount due or contact the treasurer at the end of the month and get the exact charges when the phone bill comes in. Right now we have several calls which have not been paid for. So, if you made any calls, please check with the treasurer.

Dx Notebook

Walvis Bay Anomaly

Dx Convention in April

By Denny Dugal, WG6P

Well, hello again Big Guns and Little Pistols. Welcome to another not so exciting edition of DX News. Not too much to report this month, as the bands and the rare Dx seem to have taken their summer vacations. HI!

Biggest news this month past was the expected operation from ZS1IS, Walvis Bay. This is expected to be a new country when all of the league dust settles later this month. Right now, Walvis Bay is a DX Anomaly. First, we have to understand where it is. It is physically located some 350 miles from the mother country of South Africa, and is completely separated from South Africa by the country of Namibia. Now, previous to this, it did not count for a separate country, and it did not count for part of South Africa, so it counted for nothing! Contacts with the only resident ham, ZS1IS, counted for absolutely nothing!!

Interesting, a country which was not a country! However, with the recent independence of Walvis Bay, hopefully it will soon count as its own country. QSL for the recent operation from there is by KC1AG. ZS8MI continues to be active from the rare location of Marion Island. He has been keeping excellent skeds on Friday mornings at about 1400Z on the long path, and comes up at 14.050 CW, operating at about 10wpm. Patience and a good signal will bag this one. He also comes up on 20SSB and 10SSB on Saturdays. Christmas could bring us all a nice

present from Santa, if the expected operation gets on the air from Bouvet Island, (3Y). Do you remember 3Y1EE and 3Y2G V from Peter I? Well, the same operators are trying to put Bouvet on the air starting Xmas Eve. They claim to need some \$200,000.00 to do it, and are soliciting donations from all DXers. If you would like to donate, contact me and I will tell you how to channel your donation.

Another rare one expected any time now is 7O, South Yemen I1RBJ, Paul, claims to have permission to operate for 72 hours sometime before the end of September. If you hear him, my advice is WFWL! Other good catches on the air now are HB0, 3B9, T32, CT3, 3B8.

If you hear stations signing with a prefix of V63, this is not some new rare bird. Its just the new calls of the islands of Micronesia, which previously signed KC6.

. Those wanting to go to the DX convention next year in Visalia, the dates are April 6, 7, and 8. It will be at the Holiday Inn as usual, so if you want to get a room, get in early! I personally guarantee that rooms will be full by the end of Sept. this year. Call 1-800-821-1127, and please specify you want rooms for the DX convention, as there is a special block of rooms at a special price. Keep your ears peeled for the bands to come alive as we proceed into the Fall and Winter. 40 and 80 are getting better every day, and 10 is opening nicely now. Best 73, good DX to you, and hope to see you in the pile ups.

You've heard about them, but do you understand how they work? Laser printers are the rage these days, but their not for everyone, especially in view of their price tag. They range from \$1,500 to as much as \$15,000 depending on the model and features.

They usually print at a maximum resolution of 300dpi (dots per inch), using finely focused dots of light or "draw" an image onto a photosensitive drum. That image is usually drawn using a solid-state laser (hence the name, laser printer), focused by a rotating prism. A few close cousins to the laser printer use LED lights or liquid crystal shutters to draw the image on the drum.

LAZER PRINTERS

Light focused on the drum changes the electrical charge wherever it hits. As soon as a page-size electrical image has been drawn, the drum is rolled through a reservoir

of toner. The toner is picked up by the charged portion of the drum which is fixed in place by a combination of heat and gentle pressure much like a copy machine.

A laser printer's performance is determined by its two major components- the print engine and print controller. Occasionally, a company employs its own engine, Ricoh is one, but 75 percent of all laser printers manufactured today use Canon engines. Kyocera and Panasonic also manufacture engines which are used on their laser printers.

KBEE-FM Makes Radio History

Modesto FM radio station KBEE, 103.3 MHz, became the first station in the United States to broadcast in completely automated digital audio on August 27, 1989. KBEE's entire music library of 2,100 selections is now on compact disc (CD's) which were digitally remastered from the original works. In addition, KBEE produces commercials, station ID's, local news and weather via DAT (Digital Audio Tape).

With digital audio there is no deterioration from repeated playing of the music because of the laser beam that passes over the compact discs which provides noise free audio of exceptional clarity and fidelity. Because KBEE was the first station in the country to make the change, equipment, computers and software had to be researched,

designed, built and programmed to create the custom made automation system for KBEE. IGM Communications of Bellingham, WA, built the audio switch and software to operate the computer programs. Pristine Software of Los Angeles provided the music software, Radio Systems Inc. modified the DAT machines for broadcast use. The music is contained on twenty two Pioneer CD players that each hold 6 CD's. The heart of the system is two 640k computers each with 40mb of memory.

Tours of the studios on Cummins Drive are available by calling 523-7756. KBEE is a 50,000 watts station owned by Price Broadcasting of Salt Lake, Utah.

Late Report From Chief Engineer

Storm Damages SARA 2 Meter Machine

Backup Machine Fails

The two meter repeater developed troubles on Monday Sept. 5, with power supply hum as well as other symptoms. Steve, N6EKV and I went up the hill that evening and got the repeater, control receivers, decoder board, and the linking transmitter and brought them down for repairs.

".... we may have taken a lightning strike or a power surge."

The problems came from a shorted transistor in the power supply of the main Spectrum repeater. The power supply was putting out 22 volts instead of the normal 12.7. At that time I thought the control receivers were out as well as anything connected to that supply.

After repairing the power supply I found the courtesy tone had lost a 555 chip. I also found that a 4049 chip in the decoder board had exploded. The chip in the decoder was a bit of a problem since the schematic we have for it is for a later model board and the chips do not match.

I made a call to Speed-Call and after much struggling we found out the board was one of

the early experimental boards and there was no schematic available. However, I was able to get the number of the exploded chip. Speed-Call also informed me that they would not repair the board if shipped to them because of the age of the unit. Fortunately the new chip repaired the problem on the touch tone decoder. An edge card connector on the board had to be replaced and the unit now works. KB6QLI and I put the unit back in service on Friday 9-22-89.

The ailing Hamtronics backup machine was removed and brought down for repairs. The severe clipping problem is going to have to be solved before it can be put back on the hill. Keep your fingers crossed that things hold up for a while. As to the cause of the problems, we may have taken a lightning strike in the area or had a voltage surge for unknown reasons. Perhaps the old transistor just died from old age.

I did replace the 12 amp transistor with one rated at 16 amps which should tend to run cooler and hopefully last longer. My thanks to N6LSA, KJ6CH, N6EKV, and KB6QLI for going up the mountain with me and helping with repairs on recent trips. 73 de Leroy, NV6S

(Editor's Note: I hope the members of the club appreciate all the time Leroy donates to the club to keep the machines going. The next time you talk to him, let him know that his efforts are greatly appreciated.)

Chief Engineer Report

Autopatch Up and Down

By Leroy Campbell, NV6S

Here is a brief report on the repeater. The auto patch was down for several days while Bill, WA6OHP, and I attempted repairs. We found nothing conclusive. It ran for several days here on the bench without fail so

it was placed back in service at which time it immediately died. I again tuned the transmitter and it has been running since.

We have recently experienced some sort of trouble with the link transmitter that links the two meter site to the 220 repeater. The link is quite noisy and drops out from time to time. I plan to make a trip to the hill this weekend to attempt to locate and repair the problem.

We also have a problem in the 220 repeater power supply which I have not been able to fix on the hill top. I have the repeater running on a power supply that I loaned the club. I cannot bring the supply down to work on

without taking the 220 repeater out of service since the power supply and the COR (carrier operated relay) are on the same board.

I plan to let it operate on the loaned supply until I have to bring the whole machine down for repairs. Also the 220 repeater is about 1.5 KHZ high in frequency and the adjustment will not bring it back to the proper frequency. I'll have to replace the crystal to get it back on frequency.

I am trying to hold the line on costs for repairs until after the first of the year

since the treasury can't stand any major expenses at this time. When money is available I would like to replace the auto patch uplink transmitter and receiver with more current equipment.

I will also order a new crystal for the 220 transmitter. That seems to be the extent of what is needed at this time. Please bear with us as we attempt to get through the rest of the year with a minimum expense to the club. 73, DE LeRoy.



ARRL Files

Petition for Rule Making

On August 31, the ARRL filed a Petition for Rule Making with the FCC for the creation of a new class of Amateur license not requiring a demonstrated proficiency in the International Morse Code.

This class of license, called Communicator, would offer certain limited operating privileges on Amateur frequencies above 220 mhz. It would require a comprehensive written examination, administered through the present VEC program.

The proposal would involve certain limitations, including a power limitation of 250 watts pep output, and would not permit the licensee to be the control operator of a repeater or auxiliary station.

-ARRL W1AW Bulletin via Packet Radio.

Next Month.....

Safari to Kenya

Next month join us on safari to Kenya, Africa on the East Coast of Africa. Our guides will be Ivan and Marge Lowe, W6SKH and KB6DYM. This feature will detail their trip to this country of deserts, swamps, green rolling hills and volcanos. You won't want to miss this special feature next month.

VE Exam in Modesto 61.5% Upgrade Rate By Chet, W6XK

Two successful Volunteer Examination (VE) sessions were held in Modesto on Thursday, September 7 and Saturday, September 9. 20 applicants were tested for all classes of license with an upgrade rate of 61.5% on Thursday and 28.5% on Saturday.

Applicants arrived from many distant locations. We tested two candidates from Sitka, Alaska and Fort Lauderdale, Florida. Locals included Mariposa, Angles Camp, Altaville, Camino, Stockton, Atwater, Turlock, and Lodi.

Congratulations to Eric Francis, KB6BXZ, on his upgrade to General. Gordon Olsson, WA6AFR, earned credit for the 20 w.p.m. code test. First-time VEs included Gregory, KA6VVV, and Al, N6SAE. The team also included Bill, WA6OHP, Leroy, NV6S, Chas, KJ6CH, Fred, K6RAU, Mike, KI6PR, and Chet, W6XK. Dottie, KI6YQ, handled the registration process.

The efforts of these volunteers are sincerely appreciated. The Tri-County VE Team would also like to thank the SARA Education Committee for the invitation to conduct examinations in Modesto.

Upcoming examination sessions include: Merced (9/30 — contact person is KI6PR), Tuolumne City (11/18 — contact person is WA6NSK), and Modesto (12/7 and 12/9 — contact person is W6XK).

73 and good luck! Chet, W6XK

Meet SARA Member

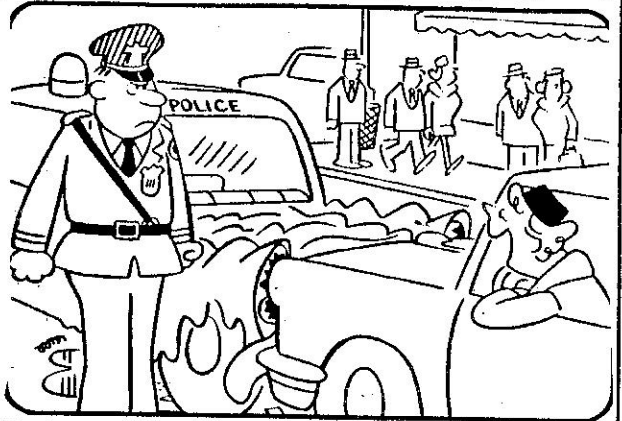


**Oakle Clark, K6SJV
Forest Grove, Oregon**

Coming in December...
A sobering story of the
perils of traveling in
Mexico at night.
Are they bandits or Cops?

Don't forget the Dinner-Dance Saturday night October 7th,
1989 at the Oasis Restaurant! For last minute tickets call
Lori Faries at 521-7834 . Deadline for tickets is October 5th.
Don't miss the fun!

Vision Teaser



Find at least six differences in details between panels.



Differences: 1. Hat is different. 2. Arm is moved. 3. Bumper is different.
4. Lady's elbow is concealed. 5. Man is missing. 6. Awning is lower.

CALENDAR

Oct	7, 1989	SARA 12th Annual Dinner-Dance	630 pm
		Oasis Restaurant , Modesto	
Oct	17, 1989	SARA Monthly Meeting	730 pm
Nov.....	18, 1989	VE Tests Tuolumne City	900 am
Nov.....	21, 1989	SARA Monthly Meeting	730 pm
Dec.....	7, 1989	VE Tests Modesto	630 pm
Dec.....	9, 1989	VE Tests Modesto	900 am
Dec.....	19, 1989	SARA Monthly Meeting	730 pm
Jan	16, 1990	SARA Monthly Meeting	730 pm
Feb.....	20, 1990	SARA Monthly Meeting	730 pm

SARA meets the third Tuesday of each month (except holidays) at the Stanislaus County Administration Building at 12th and H Streets in downtown Modesto. The meetings are held in the lower-level conference room starting at 730 pm. Visitors and interested parties are welcome.

Stanislaus Amateur Radio Association
P. O. Box 4601
Modesto, CA. 95352

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