

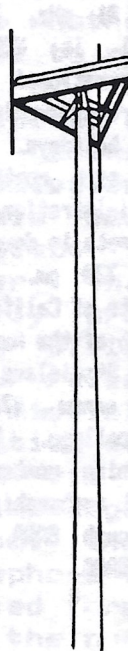


The READOUT

Vol. 9 No. 4 Apr. 1986

MONSTER TOWER FIELD TRIP MAY 24TH

Following up on the heels of the very exciting trip to the Voice of America in Delano, SARA has scheduled another interesting field trip on May 24, 1986 to the "Monster Towers" at Walnut Grove. Thanks to new SARA member Chuck Haight, arrangements have been made to tour the Walnut Grove transmitting facilities of channels 6-10-13 and 58. The transmitters and related equipment are housed at the base of the original 1,549 high candelabra tower built on the banks of the Mokelumne River a few miles south of Sacramento. At the time it was built in 1961, it was the tallest man made structure west of the Mississippi River. It's 77 feet taller than the Empire State Building with a triangular platform at the top measuring 105 feet per side. The tower weighs 3 million 500 thousand pounds and is supported by 8 1/2 miles of 1 7/8" bridge strand wire with the longest guy 1/3 of a mile long. There are 150 pilings



(Continued on Page 4)

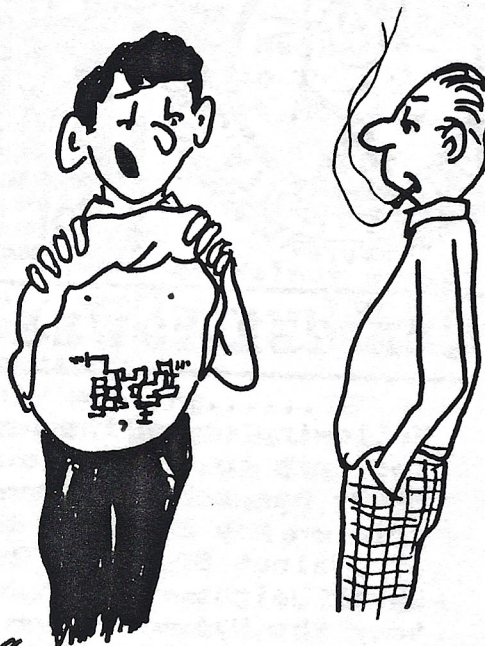
Stanislaus Amateur Radio Association, Inc.
P.O. Box 4601 Modesto, Ca 95352

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READOUT is the official publication of the STANISLAUS AMATEUR RADIO ASSOCIATION INC. "SARA" P. O. Box 4601 Modesto, CA. 95352. Entered as bulk mail at the U.S. Post office Modesto CA. Contributions to READOUT are always welcome and may be submitted to the editor, Bob Pinheiro, WA6ZLD at 1221 Mist Flower Ct. Modesto, CA. 95353. SARA owns and operates two F.M. repeaters. 143.39 mhz (-) located on Mt. Oso 22 miles SW of Modesto at an elevation of 3,370 feet. Our 220 mhz repeater operates of 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 on 143.01 mhz, located on Mt. Oso at 3500 feet. Call is KD6EJF-1. SARA conducts an informational net on both repeaters each Thursday evening at 730 pm with the exception of holidays. SARA meets the third Tuesday of each month at the Stanislaus County Administration building at the 12th and H streets in downtown Modesto. Meetings begin at 730 pm. SARA is incorporated with the State of California. SARA is an affiliated club of the American Radio Relay League (ARRL) and Stanislaus County RACES. Dues are \$15.00 per annum, \$7.50 for students up to sophomore in college. Dues are pro-rated for newly joining members from the date they join. ARRL membership and QST renewals may be made through SARA with a 2.00 commission retained by SARA.

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Gene Rong.....NB7JC.....239-9236
VICE PRESIDENT
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Lynn Mindes.....KB6DXX.....523-0141

funnies by KF6QA



"AFTER THE OPERATION I FOUND OUT THE 'DOC' WAS A HAM; BOY I'M GLAD HE WASN'T A DENTIST!"

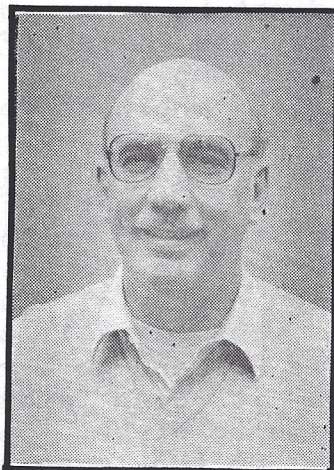
KF6QA

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Meet **WA6ZLO**



Bob Pinheiro

READOUT Editor
Past SARA President
Charter Member

PROGRAM THIS MONTH

**THE HISTORY
AND DAILY OPERATION
OF THE
RANCHO SECO NUCLEAR
POWER PLANT
NEAR SACRAMENTO**

730 PM

SARA MEETING

WX STATION REBROADCASTS

During the recent bad weather and flooding many ears were glued to the National Weather Service weather station, KEC 57, in Sacramento. The station operates 24 hours a day on 162.400 MHz from their transmitter located near Jackson in Amador County. There are similar stations located around the country. This brings to mind the legal question as to whether or not it is legal to re-broadcast portions of the weather stations reports on Amateur radio. The answer is NO! The retransmissions of programs or signals emanating from any class of radio station other than Amateur is clearly prohibited by section 97.113 (c) of the Amateur rules. However, it is permissible if the weather station offers the information via a recorded telephone message. Because of the fact that getting it by telephone is not in the broadcasted form, it is legal to dial the number say through an autopatch and get the information that way.

**ARRL
affiliated club**

(Monster Towers Tour continued from front page)

of pre-stressed concrete each 45 feet long. The original owners of the structure, Channels 3-10- and 13 formed the Transtower company to operate the tower which went on the air on January 10, 1962 providing television coverage over 25,000 square miles. The original owners (3-10-13) each had one corner of the triangle platform at the top for their antennas. Later, Channel 6 side mounted their antenna at the 1100 foot level on the tower and the latest Sacramento TV station, Channel 58, is also side-mounted on the original tower. Last year, Channel 3 built a new so-called "monster-tower" nearby, going up to 2,000 feet. Channel 40 quickly followed with their own 2,000 footer just a short distance away. We will not be able to tour the newer facilities, but you will be able to get a close up look at the towers. Our tour will be limited to the original tower and the equipment housed in the building at the base. Our host will be Bob Hess, Chief Engineer of Channel 13. This is a rare opportunity to take a tour like this and

would not have been possible without the help of Chuck Haight who is a retired assistant engineer for channel 13 and now the chief at channel 19 in Modesto. The tour will start at 10 am. To get there go north on I-5 to Twin Cities road which is 5 miles north of Thornton. Turn west (left) on Twin Cities Rd. and go 5 miles to where it dead ends at the Sacramento River. Turn left again on the levee road and go 2 miles to Walnut Grove. As you enter Walnut Grove from the North you will come to the confluence of the Mokelumne and the Sacramento Rivers. You turn east on the north bank of the Mokelumne and drive to the base of the tower (about 2/10 of a mile). We will be monitoring 39 if you need assistance locating the spot. Please be on time! The tour should last about an hour. Next month we will publish a map in READ-OUT showing you how to get there. Put this one down on your calendar. That's May 24th, 1986 at 10 am. Don't miss it!!

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GENERATOR ELECTROCUTION

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A very serious hazard to electric utility workers has developed as a result improper installation and use of emergency generators. In a recent accident reported to Cal/Osha, a utility crew was replacing a 4160 volt line with a 17,000 volt line. They had disconnected and grounded the upstream supply source but had left connected the downstream line which fed a lodge some distance away through a stepdown transformer. The lodge had an emergency generator in the event of power outages. Engaging the generator requires operation of two independent switches in proper sequence. When the utility workers disrupted the power to the lodge, the lodge's generator was turned on. However the knife type switches were not operated correctly which allow voltage to feed back up the line through the transformer, which was acting then as a stepup transformer instead of the usual stepdown. The result, electrocution of a lineman when the line was energized with 4160 volts. With the proliferation of small, inexpensive auxiliary

generators in businesses and residences, the chances for a similar accident to occur increase dangerously. For instance, a home owner, anxious to prevent his freezer from warming during a power failure, could inadvertently create a condition which could kill a utility worker miles away. If you have a generator remember that the law requires that a positive means be provided to prevent a BACKFEED situation as described in this article. Conversely, utility workers are required to ground all possible sources of supply when working on de-energized high voltage lines. (Thanks Cal-Osha News and Jack, WA6CYR)

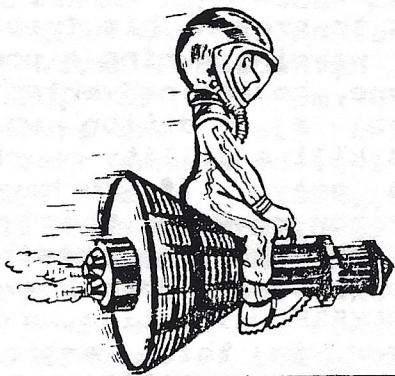
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COMPLIMENTARY COPIES

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Each month we have several complimentary copies of READOUT available. If you know of someone, Amateur operator or not, that would be interested in receiving a copy of READOUT please let WA6ZLO know by phone or letter. His address and telephone number are on the roster.

SATELLITE MAILBOXES



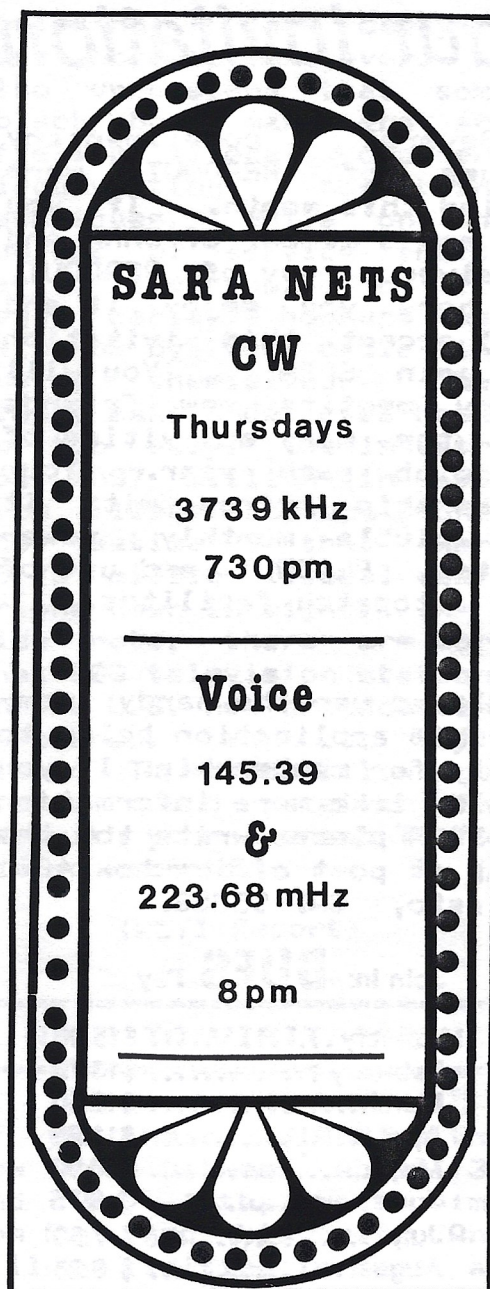
The FCC's January 13th ruling makes the concept of "flying mailboxes" a legal reality. PACSAT, an acronym for packet satellite, is a joint venture between AMSAT—the Radio Amateur Satellite Corporation and VITA—Volunteers in Technical Assistance. Sometime next year, a spring-top cylinder will be loaded onto a NASA space shuttle. The garbage can sized container is actually what NASA calls a get-away special—a cheap (\$20,000) ride into space. Inside the canister will be a very sophisticated Amateur satellite that will use packet radio as its primary access mode. Its \$1 million dollar price tag must be paid for by donations which are still being solicited. Packet radio is an error free system of computer-to-

computer communications traveling nearly simultaneously in both directions on the same frequency. PACSAT will circle the globe in a low polar orbit every 90 minutes at a 500 mile altitude. Since the earth is rotating beneath, PACSAT passes over every point on the earth four times a day and will be in sight of an Amateur station for a ten minute period. PACSAT will be covered with solar cells, contain its own propulsion system, transmitters, receivers and microprocessors holding 4 megabytes of memory to run its mailbox. Using automatic store and forward technology, messages will be uplinked at 480 characters a second to PACSAT for subsequent automatic retrieval any place in the world. The international information exchange potential is mind boggling!

The PACSAT system is unbelievably simple and low cost compared to existing commercial systems! Instead of three multi-million dollar geostationary satellites and large expensive antennas, PACSAT simply systematically moves around the earth inhaling, storing and exhaling traffic much

like your mailman. Very inexpensive ground equipment will fit in a briefcase. Even an ordinary coat hanger makes an acceptable receiving antenna. An Amateur packet station (small portable computer, a terminal node controller and a radio) is all that is needed. The packet station will simply query PACSAT to see if any messages are waiting for it to download. Packet stations can even turn themselves on and off to coincide with known PACSAT orbits. The disadvantage of PACSAT is "time"—it isn't instantaneous like those of expensive global systems. It can take up to 10 hours to deliver a message depending on the location of the addressee and sender. PACSAT is not an untried system. The Amateur UoSAT OS-CAR 11 presently carries a working PACSAT prototype system. Japanese Amateurs hope to orbit a similar store and forward system this fall. Low orbit Amateur messaging will soon be with us!

FIELD DAY: We are thinking about participating in Field Day June 28-29. Can you help? If so, contact Gene, KI6DC.



**Stanislaus Amateur
Radio Association, Inc.**

Your Invitation

Several complimentary issues of READOUT were mailed this month. If you are not a member of SARA and received a copy of READOUT, we hope you enjoy it and will accept this invitation to join SARA. You will enjoy meeting new friends and the many activities of the club each year. Your membership brings with it the club's monthly newsletter, READOUT and use of the autopatch facilities.

Please use the handy membership application below to apply for membership. If you would like more information on SARA please write to the Club at post office box 4601 Modesto, CA. 95352.

Join In: **DUES** Pay

January	\$15.00
February	\$13.75
March	\$12.50
April	\$11.25
May	\$10.00
June	\$ 8.75
July	\$ 7.50
August	\$ 6.25
September	\$ 5.00
October	\$ 3.75
November	\$ 2.50
December	\$ 1.25

Membership

MEMBERSHIP APPLICATION

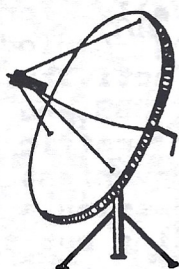
Date	_____	MEMBER OF AARL?	_____
Name	_____	Address	_____
City	_____	Home Phone	_____
Zip	_____	Bus. Phone	_____
Bus. Address	_____	Date of Birth	_____
Occupation	_____	Year First Licensed	_____
Class of License	_____	Membership year (19)	_____
FOR OFFICIAL USE ONLY:			
Treasurer ()	_____	Welcome/Autopatch letter sent: ()	_____
Entered Roster ()	_____	Entered Mail List ()	_____

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DISH DEALERS PARANOIA

=====

Backyard TV dish dealers are suffering from scrambling paranoia. They are going out of business in droves! Sales of home satellite systems nose-dived in January and the loss deepens. Business is now off some 50 to 80%. Super buys are to be found everywhere as dealers liquidate inventory. The public is confused as to



what is really going on. The press and broadcast media are adding fuel to the fire sale. Potential buyers fear that satellite programming will cost them plenty more than if they paid for cable. Descrambling hardware is in short supply- at least that's what the media is leading the public to believe. End result? Hardly anybody's buying! Those that are, are buying at bargain basement prices. The home dish market is in absolute chaos. Dealers are

Page 9

panicking! The backyard dish boom appears over. We also understand that some "black box" marketers are offering illegal decoders circumventing scrambling techniques. While on the subject of service theft, part of the problem of illegal cable TV hookups must be borne by the cable industry themselves. They simply make undetected hook-up too easy. The industry lost \$897 million in 1983 from illegal hookups alone. They estimated that there were \$6.75 million illegal users or one user in eight. In a side note, there are more than 200 television stations in the U.S. now broadcasting in stereo. You can buy a stereo TV set or a low cost stereo sound receiver for use with your present TV for stereo reception.

(W5YI Report)

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WJ60 TO VISIT JAPAN

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If you hear 7J1ABS on the low bands between April 30 and May 16th, work him! Tom Farr and his wife Ann will be visiting in Japan at that time and will be looking to work SARA members on 10, 15, 20 and 40. He will be on SSB and CW. He will be using his temporary Japanese call, 7J1ABS. Have a good time Tom!

PACKET RADIO OPERATING TIPS

The explosion of Packet Radio has brought increased numbers of Amateurs into the world of digital communications. With this growth, the standard packet frequencies, and especially 145.01 MHz, are becoming overloaded and packet organizations all over the country are searching for ways to ease the growing pains until technology can catch up. Until the UHF backbone and some type of network control is in place and operational, we are going to have to face the crowding problems and try to make the best of them. There are certain things we as packet operators can do to cut down the crowding and the volume of traffic, here are a few.

1. Beacons- There are only a few times that beacons should be seen. Notice of items to the general packet community, tests and calling CQ for a few beacons. But, the time for general beacons on packet radio is long past. They have no place in today's network. 100 stations with a beacon every 10 minutes which goes through three digipeaters results in an average of 40 beacons per minute, almost one each second. This by itself can

kill the entire network. If you add CW ID's to this the entire system goes nowhere. CW ID's are NOT required by the FCC. Beacons are not required by anyone. Please do not use them unless necessary.

2. Try not to use Bulletin Board Systems (mailboxes) during times of peak channel activity. The new generation of BBS systems are geared to automatically forward traffic during periods of low channel activity. Try to use local BBS and let it forward your traffic for you at a time convenient to everyone. Accessing a remote BBS does nothing but tie up multiple digipeaters. Add in a few retries and your remote BBS activity could be killing activity in three states. Please use common sense when BBS'ing.

3. Do not use 145.01 for direct contacts and think that you are helping to reduce channel activity by not going through the digipeater. It makes no difference! The digipeater still hears you and holds the packets that it has for forwarding. If you are going to talk direct, please move

off of 145.01 which is the primary frequency for packets going across county.

4. Use digipeaters wisely. Don't use them just to see how far you can go. Use the absolute minimum of digipeaters necessary. Where possible, move off 145.01 and communicate directly.

Above all, use courtesy and common sense. 1200 baud is faster than 300 baud, but it is still limited. Too much activity will turn a packet channel to glue and nobody's message gets through. Try the BBS's during slack times. A good rule of thumb is to stay off the BBS systems on 145.01 between the hours of 4 pm and midnight local time. This allows all the folks talking in "real time" to get their packets through in a reasonable manner. If we all work together, we can keep the magic in packet until the high speed networking controllers come out and ease the burden. Until then, we must all work together. (Thank WA6FTX and The Birmingham newsletter)

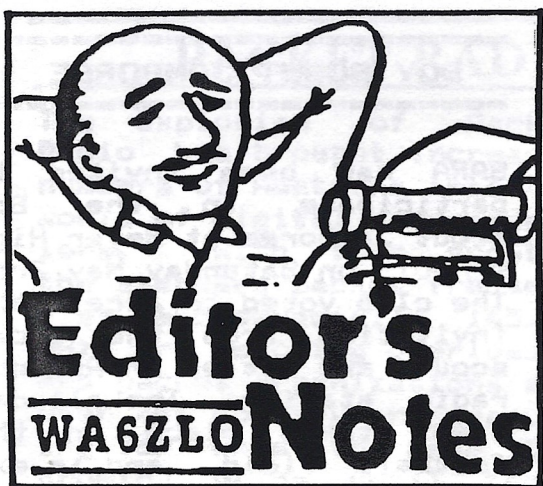
LICENSE: When does your license expire? Have you looked lately? Need a 610 form? Contact Bob, WA6ZLO.

BOY SCOUT JAMBOREE

SARA has been invited to participate in the Boy Scout Jamboree at Beyer High school on Saturday May 3rd. The club voted to accept the invitation from the local scouts and set up an Amateur radio station. The all day event takes place on the football field and is expected to draw 300 or more scouts and their families. Bill, W6AFS, has volunteered to organize the SARA effort. Bill plans to have in operation a low band ssb and cw station, two meters, and packet. Volunteers are needed to furnish and operate equipment and to help construct a display booth. If you can help in person or with equipment, please contact Bill at 523-4352 as soon as possible. If you can only spare an hour or so, come by and at least answer questions. Remember, there will be many potential hams in their ranks.

WANTED:

CW check-in's on the
SARA CW net
Thursday's at 730 pm
before the regular net.
Freq. 3739 (+/-) QRM.



It is rumored that one of our members recently had an embarrassing episode. For years this person has religiously buckled his seat belt each and everytime he got into his car. Recently, his car needed to go into the shop for repairs. The clunker the garage loaned him did not have seat belts. It displeased him, but having no choice he drove it to work. When he got to work he forgot that he didn't have a seat belt on and when he stepped from the car his pants fell down! +++ Our membership continues to grow as we reach 165 for the year to date. Welcome aboard new members Dale Root, KB6KYI, of Riverbank. Dale is a General and lists his occupations as truck driver and real estate broker. He was first licensed in 1985.

W6EVQ, Gene Perry, of Tracy joins the club for the first time. Gene is retired and holds an Extra Class license. He was first licensed in 1931. Welcome to Dave Grow, WB6VGH of Modesto. Dave is an Advance Class and is a project manager for Teledyne CME in Mountain View. George Ledoux, K1TKJ of Modesto is a television manufacturing engineer and has a Technician Class. He has been licensed since 1961. Welcome to Chuck Haight, ex-W2NSI. Chuck is the chief engineer for KCSO, channel 19 in Modesto. Chuck let his license expire, but passed the General test in Pine Grove last month and will be back on the air as soon as the new ticket arrives. At the same session, Jerry KL7GHT upgraded to Advance. Congratulations!. Welcome back an old member Don Butterfield, WA6QWY of Oakdale. Don is an Advance Class and is a watchmaker with his own shop in Oakdale. Also welcome to Lynnette Knight, KB6LNR of Riverbank. Lynn is a Novice and is a bus driver for Modesto City Schools. Welcome back Pat K6AYA of Oakdale and Ray, WA6KHX and Dorothy Curling, WD6DKX of Modesto.

The new Manteca low-level two meter repeater has apparently found a home on 146.985 MHz. As of now, Bill, KA6PKL, is still putting the finishing touches on the machine at his home QTH. When finished, it will be moved to a City water tower in downtown Manteca which will be it's permanent home. +++ Bruce, KB6DYA, has accepted a new job with the City of San Francisco as a power house operator at their facility at Moccasin Dam. Congrat's Bruce! +++ This year's Fresno Hamfest will be on May 2-3 and 4 at the Airport Holiday Inn in Fresno. Lenore Jensen, W6-NAZ, well known writer of Amateur articles will be the banquet speaker on Saturday night. Something new this year will be a drawing for a "Couple Caper!" What's that, you say? Well, the winners will get a free room at the Inn, a bottle of champagne, bubble bath, chocolates, fresh flowers and complimentary breakfast for two. +++ I received a report from Saratoga that a mysteriously tainted toilet paper has given rashes to at least seven people using restrooms serving businesses in a two-story building. Investigators suspect that vandals may have sprayed the

paper with Mace or some other chemical irritant. I heard one report that the possible culprit was RF contamination from a nearby two meter repeater as a result of a rash of "BS" that had been heard on the repeater lately! +++ Our President's new Advance class call has arrived. Goodbye to N6JRC and hello to KI6DC. +++ Joe Fontes, N6LSB has his new Extra call. He is now WQ6W. +++ If you're planning to take-in the Expo 86 Worlds Fair in Vancouver, BC this summer look for the Amateur Radio exhibit on the main floor of the Canada Pavilion. The exhibit will stress the public service aspect of Amateur Radio and will demonstrate the latest in Amateur radio technology, including OSCAR satellites, ATV and Packet Radio. The station will be operated by members of various British Columbia Amateur radio clubs. +++ Belated condolences to Lewis, KA6ZSM of Grass Valley on the recent death of his wife. We didn't find out about it until this month. +++ WB6ISA, Wilma of Escalon is recuperating from a broken foot suffered recently. Someone asked if she broke it kicking the OM, Jack, out of the house. My

(Continued on Page 14)

Notes from P-13

sources say.. "Not So!" +++ Congratulations to Sheila Grothe and Jeanne Stevenson who upgraded to Generals, They both have new calls. Sheila is N6NGB and Jeanne is N6NBC. +++ Thanks to an electronic gadget called a translator, the residents of Lone Pine and Independence in Inyo County can listen to Modesto's poplar easy music station KBEE-FM. The FCC granted a license for a translator operating on 99.3 MHz with a power of 10 watts. KBEE-FM's signal is picked up directly off the air from an antenna located high in the Sierra above Lone Pine and fed to the translator by microwave. So the next time you're driving through that part of the Owens Valley (Near Death Valley) tune in KBEE-FM on 99.3 MHz. +++ W6SUP of Auburn gets credit for this one heard recently on the SARA repeater. "I worked six South Americans and 17 neighbors on 20 meters last night!" And the "Bumper Snicker" of the month award goes to this one. "It use to be Wine, Women and Song. Now, its Beer, the Old Lady and TV." If you have a "bumper snicker" send it in to me and share it with us.

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+++ Make your plans to take the TV tower tour on May 24th. You will be amazed with what you'll see. Don't miss it! That's it for this month, have a good one. 73, Bob, WA6ZLO.

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PACKET THIRD PARTY TRAFFIC WAIVER

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The FCC granted a temporary waiver of the third-party traffic rules as applied to packet radio transmissions above 50 MHz. The ruling thus allows Amateur stations operating above 50 MHz in a packet radio network under automatic control to retransmit third-party traffic. However, the rules still require a control operator at the Amateur station originally introducing the traffic to a packet network to screen the traffic for any prohibited traffic. The ARRL had petitioned for the waiver arguing that the FCC ruling requiring a control operator on duty at all times was neither practical nor effective in the context of packet radio technology and that the development of the packet radio network would be severely hampered if the order was not amended. (W5YI Report)

**PACKET DIGIPEATERS
ON 145.01 MHZ**

>>>> WASHINGTON <<<<

Seattle:
WN7ANK...3004'...Tiger Mtn.
Emumclaw:
WB6DCH...Gateway to W0RLI
on 14.103 MHz

Olympia:
WB7RTGF...500'.....Low level
Spokane:
N7BI-4...5500'.....Mica Peak

>>>>> OREGON <<<<<

Portland:
W7XI-1...1800'..Mt. Living-
ston
K7IFG....700'.....Low level
Eugene:
KS7Y-1...3200' .Praire Peak
Newport:
UNK.....1060'..Otter Crest
Ashland:
WB7SZM-1..Low Lv.....Ashland
Fallbrook:
W6SDP....3600'..N. Cal/S. Ore

>>>>> CALIFORNIA <<<<

Shasta Bally:
WA6YNG-1.9000'..N. Ca/S. Ore
Mt. St. Johns:
W6AMT-7...8000'.Sac Vly /Ore
Modesto:
WD6EJF-1.3500'.Sac & SJ Vly
San Jose:
W6AMT....3600'.SF & So. Bay
King City:
W6AMT-1...2300'...Cen. Coast
Arroyo Grande:
W6IXU....200'...(MB) S. Cen.
Coast

Fresno:
WA6DSA-2..Low Lv.(MB).Fresno
WA6RWN...8000'(solar).E. of
Fresno

Visalia:
WA6YLB...5700'... SJ Valley
Santa Ynez:
W6AMT-2...4000'.S.Cent Coast
Santa Barbara:
KA6SOX-1.3200'Arroyo Grande,
to San Diego
Los Angeles/San Bernadino:
AA6TN-1..8600'LA/ San Diego
N6BMO-1..2400'LA/ San Diego
W6AMT-4...2565'LA/ San Diego
Fullerton:
WA6VSE...300'..Fullerton/SD
Palos Verdes:
W6AMT-3...1500'LA/ San Diego
NK6K-1...1500'LA/ San Diego
San Diego:
WB6HHV-1.500'.....San Diego
Torrey Pines:
KA6IQA-1.....San Diego
KA6IQA...(MB).....San Diego

PENDING:
White Mtn.
WA6RWN-1.14,200.(solar pwr)
Near Tonopah
So. Cal /N. Az /S. Nv.
LA/Vegas:
W6AMT-5...9114'.LA/Las Vegas

(MB)= Mailbox
(Solar)= Solar Power digi.

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SARA NAME BADGES
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Need a SARA name badge? Con-
tact Gene, KI6DC or write to
SARA at the P.O. Box. Price
just under \$4.00

STATION LOG

ARRL
affiliated club

The March 18, 1986 meeting of SARA was called to order by Vice President, John, KB6OU, at 730 pm with 43 members and guests present. VP John announced that President Gene, KI6DC, (new call) was unable to be present because of his back injury. Introductions were followed with the reading of the minutes of the February meeting. Minutes corrected to indicate Lynn KB6DXX is the Treasurer and not the Secretary who won the raffle. The minutes of the educational committee meeting were missing from the minutes as published in READOUT. They have apparently been misplaced or lost. Treasurer KB6DXX gave the treasurers report. Expenses from 2-18 through 3-18-86 were \$375.33. Income for the same period \$502.70. Bank balance as of 3-18-86 \$2,047.21 with all bills paid. The educational fund holds \$309.65 with the balance of \$1,737.56 in the general fund. Membership stands at 163. WA6ZLO reported that the bulk mailing of the READOUT is going smoothly with no problems. WJ60, Tom, reported that the CW net is going fine and in-

vited all to participate at 730 pm on Thursday nights (before the regular two meter net) on 3739 MHz (+ or - QRM). W6AFS reported that the Kantronic Terminal Node Controller on the digipeater went out and had to be shipped back to the factory. The new oscillator circuit for the 220 machine has arrived and has been installed. The machine is ready to go back in service. The main two meter machine has been shut down because it apparently developed a spur in the transmitter. AFS reported that we have been operating on our backup machine which is operating off a battery. ZLO reported on the Voice of America trip with only 8 seats left on the bus. The group will depart at 730 pm sharp from the parking lot behind our meeting place and return around 5-7 pm. KB6DXX reported that he is temporarily heading the educational committee and that the next Novice class has been scheduled to begin April 8th and run each Tuesday night for eight weeks. Contact DXX to sign up. VP John requested a volunteer to plan the SARA Dinner-Dance.

KB6DXX stated that he thought that Russ, KB6VI had expressed a willingness to head the committee for the event. KB6DXX announced the NARCC (Northern Amateur Radio Council of California) meeting was to be held next month in Sacramento. N6EKV will represent SARA. Motion made and seconded to pay our dues to NARCC. The dues have been increased to \$20. Motion carried. W6AFS moved that the club buy a 10 amp power supply to replace his personal supply which we have been using on the backup two meter repeater and to buy a battery charger to charge the backup battery on the backup repeater. Second by ZLO and approved. Cost expected to be around \$100.00. VP John reported that the Boy Scouts had invited SARA to participate in the upcoming Jamboree at Beyer High School on May 3th. Moved, seconded and approved. AFS to chair the committee. Short break at 817 pm for refreshments. Raffle prize of \$12.00 won by Bev Butterfield (WA6QY's wife). Meeting adjourned for tour of Sainte Broadcasting transmitter building plant in Modesto. Respectfully submitted by Laverne, KB6ECF, SARA Secretary.

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PRESIDENT INJURES BACK

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SARA President Gene, KI6DC, has been nursing a very sore back as a result of a fall. Gene was helping Ron, KA6-IL0 put up a new antenna when he fell about four feet from one roof onto a lower roof. Gene had to be removed from the roof with the assistance of the Manteca Fire Dept. and spent several days in a Manteca hospital recuperating.

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220 & DIGIPEATER BACK

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The SARA 220 mHz repeater and our digipeater on back in service after repairs. The 220 machine was put into service on March 23, and the digipeater on March 31, 1986. The 220 machine has a new oscillator circuit and the digi was repaired by the factory. Bill, W6AFS and Jack, W60IN did the work on the 220 machine while Mike, W6VY put the digipeater back on the hill. The two meter machine also got a tune-up while Jack and Bill were on the hill. The digi is operating on 145.01 mhz. A new latch was added to the 220 control circuit which allows the digi to be reset by tone control in case of trouble.

SATELLITE JAMMING

The FCC issued a warning on February 4th that satellite uplink operators and backyard earth station owners can be slapped with a \$10,000 fine and imprisoned for up to 2 years if they maliciously jam another's satellite transponder. Programmers, including super station WOR in New York have reported that jamming is getting to be a big problem.

OTHER SATELLITE NEWS

-Panasonic and Comsat have developed a flat plate (or planer) antenna for satellite broadcast reception that, when mounted on a roof, can be disguised as a chimney, window or skylight! They will manufacture the device as a joint venture. The plate is actually a rectangular box with one or more movable elements that do not have to face the satellite. It is easier to mount, esthetically more desirable and can be used for all types of satellite programming.

-An 18 year old "hacker" from Kirkland, Washington, has been charged with electronically breaking into the

computer of the Microsoft Co. among others. Michael Wilkerson systematically checked some 50,000 telephone numbers for modem tones.

- Tandy/Radio Shack has introduced a "do-it-yourself" Realistic-2500 Home satellite System at \$1995. Step by step set up is expedited by a 30 minute video cassette manual.

Meet KB6GYM



Christia Duncan

Manteca, Ca.

THE AMERICAN RADIO RELAY LEAGUE, INC.

SECTION MANAGER

SAN JOAQUIN VALLEY

Charles P. McConnell W6DPD

FCC has granted the ARRL Petition for Extraordinary Relief in PR Docket 85-105. This action allows VHF Packet stations to handle third party traffic while operating under automatic control while FCC considers the 19 Petitions for Reconsideration filed in this Docket. As a result of this action VHF packet stations may continue to handle third party traffic without a control operator being present at the control point.

FCC has filed a Report and Order in Docket 85-168 which allows the use of F2A emission on the 29.5 to 29.7 repeater subband. This allows the use of tone modulated CW on IDers on 10 meter repeaters.

Remember in planning for Field Day that contacts on 18 and 24 MHz will count for points (18 MHz when it is authorized for our use). The Worked All States award (WAS) can now be earned on 24 MHz. The use of 10 MHz for ARRL awards and contest credit will not be authorized because of Amateur Radios secondary status on that band.

An FCC monitor in Florida cited a number of Amateurs for violations of Section 97.112 of the rules regarding using Amateur Radio for material compensation. This has caused some consternation among FCC officials. The FCC interpretation of this section remains as it is printed in *The FCC Rule Book* on pages 6-10. It is recommended that prices *not* be given but that phone numbers be exchanged and the final dickering be done on the telephone. The interpretation is that "Amateurs may *from time to time* discuss the availability of certain pieces of Amateur Radio equipment but that such activity *should be limited to an occasional nature.*" This means that the same station should neither list items each net session nor on a number of different nets during a week. This needs to be watched more closely or the FCC may change its interpretation of this section which would hurt all Amateurs.

The above information was taken from *The ARRL Letter*, V5N6.

CALENDAR

April 22, 1986.....SARA Monthly meeting.....730 p.m.
 Program: Rancho Seco Nuclear
 Power plant, Sacramento

May 2-3-4, 1986..... Fresno Hamfest Airport Holiday
 Inn.

May 20, 1986.....SARA Monthly meeting.....730 p.m.
 Program: Slide/sound program on
 raising pheasants.

May 24, 1986 Tour of TV towers at Walnut Grove

June 17, 1986.....SARA Monthly meeting.....730 p.m.
 Program: Bud , KB6JHU, on Indust-
 rial Photography.

July 15, 1986.....SARA Monthly meeting.....730 p.m.
 Multi-Projector Slide/Sound on
 Alaska with Mrs. Bunnie Rader
 (Rescheduled from January)

August 19, 1986.....Color Video of April trip to VOA
 video taped by W6DYF 730 p.m.

Sept. 16, 1986.....SARA Monthly meeting.....730 p.m.

Sept. 5-6-7, 1986.....ARRL National Convention at the
 Convention Ctr. San Diego

Oct. 3-4-5, 1986.....Pacific Div. ARRL Convention at
 the Le Baron Hotel San Jose

October 21, 1986.....SARA Monthly meeting.....730 p.m.

Nov. 7-8-9, 1986.....Ham West Convention in Las Vegas

Nov. 18, 1986.....SARA Monthly meeting.....730 p.m.



Address Correction Requested

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