



The READOUT

Year 16 Number 7 July 1994

The official newsletter of the Stanislaus Amateur Radio Association

My beautiful old antenna tree

By Larry Ikenberry, K7APT

AS I climbed the old logging road to our building on the mountain, I couldn't quit looking at a gigantic Douglas fir tree down below. With its top higher than our property, I figured it was over 180 feet tall and at least eighty years old.

I watched Old Doug Fir each day that summer as we built our new home. He pierced the horizon, and his top swayed in the wind. I knew he would be a super antenna tree for a longwire antenna.

It was several years before I assembled a ham station in our new home. I had a 50-foot tower, but I wasn't in a hurry to erect it. I first wanted to get a longwire to Old Doug Fir. I bought several hundred feet of solid copper wire and decided to end feed it with 450-ohm ladder line.

I asked a neighbor boy to bring his compound bow with a fishing arrow. We tied a spool of 40-pound fishing line to the arrow and, from our deck, he fired the first shot toward the antenna tree. It reached about halfway. He then walked to the base of the tree and, with a single shot, fired the arrow and line over a limb about two-thirds the way to the top. I hooked the lines together and pulled up the wire.

The result was a 350-foot longwire antenna with one end about 130 feet above the base of the tree. With the other end's rope tied to the roof of the house, the wire was roughly horizontal.

Reception was great, and I worked lots of DX on 10, 15, and 20 meters. I appreciated how well Old Doug Fir held

my antenna aloft. And every day for nine years I admired his beauty. Visiting Radio Amateurs admired him too as he swayed gently in the breeze.

I realized it was only a matter of time before they would clear the land where Old Doug Fir stood. One day, when I heard chain saws, I hiked down through the woods to talk with the tree cutters. They were only cutting hardwood. One of them said, and would wait until fir prices rose before "harvesting" the fir. The guy promised he would let me know before they felled Old Doug Fir, so I could take down my antenna.

Soon all the trees around Old Doug Fir were gone; he stood as a lone landmark. Maybe, just maybe, I hoped, they might spare him—the most beautiful tree for miles around.

Then one morning I awoke again to the sound of chain saws. My heart sank. Then I heard a tremendous

crash accompanied by the sound of my antenna snapping across the roof. When I ran out on the deck, only emptiness filled the space Old Doug Fir had so gloriously occupied. It matched the empty space inside me.

I was so sad I felt sick as I coiled the antenna wire. For I knew that in my lifetime, or that of my son, or even of my grandson, there would never be another tree like Old Doug Fir.

From the November '93 Olympia ARS "Watts News"-George Lanning. KB6LE, Editor. Via the ARNS Bulletin.

The READOUT judged one of the best newsletters

Competing with over 100 newsletters from throughout the country, **The READOUT** was judged as one of the three best in the 1993 publication contest sponsored by the Amateur Radio News Service. (See complete story of page 4).

This is the third year in a row that the newsletter has been rated as "Superior" and the first time that it has shared the top spot as one of the best. Thanks to all of you that made it happen.

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SARA VHF Net

Thursdays @ 8 P.M.

(Except Holidays)

2 meters 145.39 MHz WD6EJF

220 Band 224.14 MHz WD6EJF

10 Meters 28,440 kHz USB

Tuesdays at 730 P.M.

ARES Net Wednesday 800 P.M.

Contributions to *The READOUT* are always welcome and may be submitted to the editor by mail or via packet at KD6JZZ-2 BBS on 144.97 MHz, or directly at my PBBS, WA6ZLO-1 on 144.97 MHz. The deadline for articles is the 15th of the preceding month. Articles regarding religion or politics are not accepted.

Editor

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An ARRL affiliated club!

ARRL membership may be paid through SARA with the club retaining a \$2.00 commission. Please send your ARRL membership form along with your check made payable to SARA. We will deduct the \$2.00 and send a check to the ARRL.

Morse code: the universal language

By Clark J. Evans, Sr. WA4DLL

In February of 1991 an American woman and two Japanese boys came into our Amateur Radio station at the Museum of Science and Industry in Tampa, Florida. The woman, the boys' tour guide, told Lee Pallet, KB4FBX, and me, "You won't be able to talk to these boys. They speak no English."

But then she said the boy in the corner was interested in the station, because he, too, was a ham radio operator. Hearing that, Lee whistled. "CQ CQ" and the boy instantly

whistled an answer in Morse. After that, Lee translated for the tour guide. But at first, she was incredulous, saying, "You can't be communicating with him!" Lee answered, "Oh, we certainly are." and told her their names, where they were from, and more. We hams can communicate regardless of native language, using Morse code, with its standard abbreviations—our universal language.

Original publication unknown—shortened and smoothed a bit by AF6S, Editor of the Amateur Radio News Bulletin.

Washington State law protects Amateurs antenna/tower rights

Washington State has new legislation to protect amateurs. On March 23, the governor signed Senate Bill 5697, a bill that will, according to its backers, limit the ability of municipalities to enact antenna and tower regulations, by pointing out the federal pre-emptions of the FCC's PRB-1.

Credited with promoting this legislation were Dr. Ralph Shumaker, WX7T, and members of the Mike and Key Club of Seattle, according to ARRL State Government Liaison Frank Price, KØ7AC.

Price said that members of the Senate initially were sympathetic to the bill, which is worded in general terms, but they also realized that municipalities have an obligation to consider issues concerning health, safety, and other factors concerning general welfare. "Tests of the provisions of this bill will come, I am sure," Price said, "in the near future."

The bill reads: "No city or town, code city, or county shall enact or enforce an ordinance or regulation that fails to conform to the

limited pre-emption entitled "Amateur Radio Preemption, PRB 1 FCC 2nd 952 (1985)" issued by the federal communications commission [sic]. An ordinance or regulation adopted by a city or town with respect to amateur radio antennas shall conform to the limited federal preemption, that states local regulations that involve placement, screening, or height of antennas based on health, safety, or aesthetic considerations must be crafted to reasonably accommodate amateur communications, and to represent the minimal practicable regulation to accomplish the local authority's legitimate purpose."

The bill's backers told the senators, as background, that "amateur radio operators seeking to erect antenna and support systems are often frustrated or delayed by restrictive local zoning ordinances. While local government actions have been partially preempted by the Federal Communications Commission, amateur radio operators seek to avoid time, expense, and delay challenging local actions that fail to conform to FCC policy." *ARRL Letter*

Amateur Radio and the information superhighway

By Gerd Schrick, WB8IFM



*We've had an
"Information Highway"
for some time already.
It's called TV/Cable-TV*

Is it an information or a communication superhighway one hears a lot of recently, what's it all about and how does ham radio fit in? Over the years we have seen developments where ham radio has been encroached by services for the masses. The CB-explosion of the 70's was in that category. Now, cellular phones are in many hands and while it was once a rarity to see a ham use his walkie talkie to make a phone call from a restaurant table, the hostess in a cartoon now asks the guests: "Phoning or No-Phoning?"

TV/Cable TV

We've had an "Information Highway" for some time already. It's called TV/Cable-TV where dozens of video signals are offered 24 hours a day. But this is done on a one way basis, called "broadcasting." It always struck me as odd that something was called "television" where the person watching had no influence of what to see. The recipient picks up the information but has no way of "talking back". If you don't like the program and throw a rotten egg at the TV, it has no effect.

Connect everybody

Now, what everybody would like to do, is to tell the source what to send and what not, etc. This is in a sense what ham radio has been about all along, and we call this "Communication". The information is transmitted back and forth between individuals.

In broadcasting, an individual input/feedback is added. This is what the government is striving for—connect everybody with everybody else on the ba-

E-Mail

sis of a super high bandwidth system.

Presently the public gets a bit of a taste of this concept in the form of the various "E-Mail" systems which provide mailboxes and bulletin boards, some free of charge, some for a fee. Of course, hams have their Packet Radio, but these systems are pitifully slow and limited. Nevertheless, they beat the mail and can be very useful. In advertisements one now often finds only the telephone and fax numbers, no address.

The enthusiasm of the public for this morsel of "telecom" is great, but it reminds one of the joy of a blind person observing a beautiful sunset. He cannot really see it, but feels something out there to enjoy.

The present system

The present system works fine for brief, written messages; to transmit pictures takes a little longer (Amateur Slow Scan is an example). However, the "slowness" becomes really apparent when one attempts to transmit computer files that take only seconds to move "on-site" but keeps the telephone line humming for minutes. And, of course, a TV picture, or other video, does not even fit through a telephone wire.

The telephone lines, originally designed for voice, have been upgraded and "equalized" in recent years, and for a fee special lines can be provided for high quality audio and faster digital. These type of lines are used by radio and TV stations and businesses.

The average person now can use 2400 baud signals on the ordinary telephone lines and sometimes even gets away with higher speeds using error correction methods.

The next step

The next step up from the "twisted pair" is coax cable, and when I had my telephone wires put under ground in the 70s I was tempted to throw in some RG-58 cables. Along came Cable-TV in

See "Information highway" page 11

ARNNS

BULLETIN

VOLUME XLIII NO. 7

JULY 1994

Atlanta Ham, Readout, W3OK Corral best of top-rated 1993 contest entries

by Bernie Fuller, N3EFN

The Atlanta Ham, edited by Tim Massara, N2EST; The Readout, edited by Bob Pinheiro, WA6ZLO; and W3OK Corral, edited by Clarence Snyder, W3PYF, received top scores in the 1993 ARNS (Amateur Radio News Service) Newsletter Contest. This year's judges consider those three papers the very best of the twenty-seven tough competitors who received the Superior rating.

What made these newsletters stand out? The most important factors were good writing and tight editing. In each case, the editor followed four principles of good writing:

- They write, then rewrite, rewrite, rewrite, before "starting the presses."
- Their writing reflects natural speech. When you talk, you use plain language, concrete words, and recognizable images. Good writing reflects the same naturalness.
- They keep stories, paragraphs and sentences short, to get the message across before the newsletter hits the wastepaper basket.
- They set goals for their newsletter before they place any story, paragraph or sentence.

The top winners have the knack of attracting contributions from members, and their regular columns capitalize on the special interests and expertise found in any Amateur Radio club.

The winners gathered news from a wide variety of sources: periodicals, pack-

et bulletin boards, meetings, Amateur periodicals, ARRL Bulletins, and on-the-scene reporting by the newsletter staffs. Each of the top-rated entrants stressed the educational aspect of their publication by providing articles on technical subjects, training, and Amateur Radio operating techniques.

A major strength of each of these

editors is his ability to take full advantage of computer hardware and software. Each used a computer creatively in both the design and layout stages of production. One benefit of belonging to ARNS is the opportunity to exchange newsletters with other members. If you would like a copy of one of the superior-rated publications, send an SASE to its editor.

ARNNS 1993 Contest Ratings

Paper rated SUPERIOR by our panel of judges:

Publication	Editor
Atlanta Ham	Jim Massara, N2EST
Beaming South	Kelly Bruce, WD4DAT
The Circle City Communicator	Phyllis Frasier, KD6AUU
Counterpoise	David Manescu, W6CCM
Current	Karen Gordon, N8PRQ
Dart	Paul Lawrence, N5TNS
The Diamond Monthly	Daniel Woodrum, N8KUQ
Downlink	Leon Fletcher, AA6ZG
The Ground Wave	Bill Svec, WA4BKW
The Groundwave	Rafael Torres, KD4MTF
Hamtrix	Lester Peterson, W9YCV
Kachina QSO	Judy Roush, AA7UC
The Logger's Log	Ralph Fuller, KA7FIG
Marco Newsletter	Edward Briner, WA3TVG
NARL News	Edward O'Reilly, KA1ZOI
Oklahoma QRP Gp Newsletter	Donald Kelly
QUA/HAM News	R. William DeVore, N4DIT
The Readout	Bob Pinheiro, WA6ZLO
Regional Newsletter	John Woolem, N5TKG
River City ARCS Newsletter	Terry Seeno, N6YQD
SIERA News	Dorothy Uebele, N7MXA
Spark Gap	Eugene McCarty, NV9K
TARA News	Jack Culliton, N2LBZ
Totem Tabloid	Jack Fleming, WABRJV
The Transmitter	David Alpert, KB9CNU
TSRAC ARN News Bulletin	Ralph McDonough, K8AN
W3OK Corral	Clarence Snyder, W3PYF

(Ed. note: A total of 109 newsletters from all over the USA, and a few from Canada, entered the 1993 contest. The READOUT scored 199.5 points out of a possible 200.) The story appearing on this page is a recreation of the original story which appeared in the ARNS Bulletin, Editor, David Barton, AF6S, July 1994.)



Editor's Notes

By Bob Pinheiro, WA6ZLO

Years ago, several members of *SARA* got together one Saturday to install the *SARA* 2M repeater on Black Butte Mtn. near Tracy. I have some fond memories of that day, and I remember we worked hard to get the antennas mounted on the 340 foot broadcast tower owned by KHOP. When we sat down for lunch, everybody enjoyed the Portuguese beans prepared by K6JFS's wife. By the time we broke for lunch, we were all tired and hungry and those hot beans, french bread and a cold drink, all hit the spot.

I also remember the tower rats, Denny, WA6OEC, and Pat, K6AYA, as they scurried up and down the tower. They also had with them some material that I had never seen before. It was a putty like substance they used to fill the openings we cut in the building to feed our coax lines inside. I remember the stuff was very pliable and did an excellent job of plugging the holes. Later, I learned that this material was used primarily to seal duct work and other air conditioning and refrigeration type jobs.

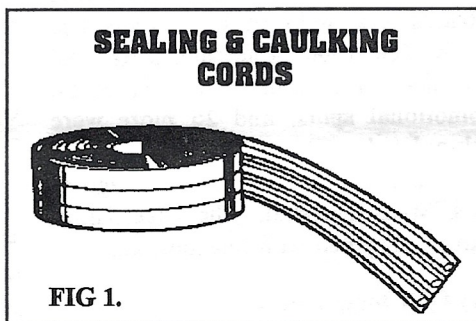
I don't remember, but I think it was Denny and Pat who also pointed out that this material was also good for protecting antenna connections from the elements.

When we finished the job, they gave me what was left of the material which was on a roll of about 25 feet. The box sat around in my garage for a few years until about 1985 when I decided to make some improvements on my antenna system. I was dreading have to goop up all the connection with silicon because the stuff is so nasty to work with.

I remembered the stuff Pat and Denny gave me and searched around in the garage till I found the box. I decided to give it a try. I rolled off several beads of the stuff into my hands and formed a several medium size balls. (Just like playing with Silly Putty!) I then formed the putty (caulk) over all the connections with layers about an inch thick all the way

around. The caulk remains soft and pliable while you are working with it, and once you put it on the connections, it stays in place and will not fall off. Falling off was one of my concerns, the other more important concern was that it would be a conductor. My fears were unfounded.

Last month after nine years, I brought my antennas down (with the help of Ernie (the tower rat), K6UVI, for inspection and changing of the coax. I closely inspected the caulk and found each and every connection securely protected. The caulk had discolored, turning black from it's original gray, and it had also hardened a bit, however it was still pliable and I was able to scrape it off with a pocket knife. The caulk had not



moved from its original positions. Once the caulk was removed, I found that each and every connection was clean, dry and clear of any rust or deterioration of any kind. I was impressed! The stuff really works!

In preparation for going back up with the antennas, I started searching for a source to get a new box of the caulk. I couldn't remember the name, but I remembered that it was basically used in air conditioning and duct work. So, I called a friend of mind in that business and he quickly identified the stuff as "Sealing & Caulking Cords" (Fig 1).

He said I could get it at Hinshaw Supply Company at 1405 Granite Lane in Modesto (off Carpenter road near Home Depot). He said they only sold wholesale, but that he would call them and ask them to sell me a box using his business name.

When I arrived at Hinshaw's they had a box waiting. It cost me \$6.82 for a 25 foot roll. I asked about the possibility of other

hams buying the stuff from them. They said for something as small as this, there would be no problem, but nothing else.

The caulk is marketed under several names including Permagum. The type that Hinshaw's handles is simply call "Sealing & Caulking Cords" and is distributed under the brand name of Nu-Calgon out of Maryland Heights, Missouri. According to the information on the box—

- Cords (beads) are arranged between paper so that one cord at a time may be uncoiled or the entire group unrolled.
- No tools are required, press cords in place with thumb or forefinger- no mess, no smear.
- Openings must be clean, free from moisture, grease or loose particles, adheres to any clean surface.
- Stays elastic, will not harden, crack or shrink.
- For inside or outside use.
- May be painted immediately, will not yellow white paint.
- For hot or cold application.
- Self adhesive-easy to apply.
- Seal duct work and other air conditioning and refrigeration jobs.
- Seal window openings, air ducts, adaptors and extensions and seals against AIR, DUST AND MOISTURE.

It's great stuff! Give it a try!

—The newsletter award came in just before press time. I'm pleased and honored that *The READOUT* was selected as one of the three best in the contest. (See story on page 4). I want to share this honor with all those who contribute to the newsletter each month, especially , N6ZUC, K6UVI and NV6S. Also thanks to those occasional contributors. All together, we got the job done, and apparently, we did it right. Without your help, it would not have been possible. Have a nice summer and stay cool.

73, Bob

Newsbriefs

1994 ARRL repeater directory

Again this year the new edition of the ARRL Repeater Directory debuted at the Dayton HamVention. The 1994-95 edition has been reorganized for easier use "on the run" and has more than 20,000 listings of FM repeaters, packet systems, and propagation beacons.

DXCC application forms

Check those DXCC application forms; the current form is MSD-505 (194) for all new and endorsement applications. Please do not use older forms as they lack spaces for critical information needed for processing at HQ. And business is up again in the ARRL/DXCC Branch. In March, 1,127 applications for new awards and endorsements were received and for the first three months of 1994 applications are up by 18%, QSLs by 48% over 1993. Turn-around time is about three and a half weeks.

Amateur population steady

The US amateur population held steady in January, as the first of a large number of license expirations began. The FCC added 2398 licensees and deleted 2282, leaving 631,726 licensed amateurs at the end of the first month of the year. And the amateur license application backlog is on the rise again at the FCC: on February 1, 9543 were pending, and on February 29 there were 12,868 awaiting action, according to ARRL-VEC Manager Bart Jahnke, KB9NM, who also says turn-around time in Gettysburg is hovering around the FCC's self-imposed maximum of 90 days.

FCC fines

The FCC has reaffirmed a \$17,500 fine against a Chambersburg, Pennsylvania man, Andrew R. Yoder, who the Commission says "willfully and repeatedly" operated an unlicensed broadcast station on 7415 kHz in 1990 and 1991. Yoder

had filed an application for review of the May 1992 FCC forfeiture order; in March the FCC denied the application and gave Yoder 30 days to pay the fine.

In Florida, the FCC issued Notices of Apparent Liability to three citizen 's band operators for violations including using illegal power amplifiers. The fines were for \$ 1000, \$1500, and \$4000. The FCC also released a list of eight individuals cited recently for violations including "operating radio stations with-out proper authorization and operating on unauthorized frequencies." The fines ranged from \$250 to \$6400. No other details were given.

ARRL at Broadcasters convention

Steve Mansfield, NIMZA, ARRL's Manager of Legislative and Public Affairs, reports that more than 400 people signed the ARRL guest register at this year's convention of the National Association of Broadcasters, held in Las Vegas last month. Television professionals took all 50 copies of the League's Amateur Radio promotional spots, and 25 more were back-ordered. "Even if a small number of these tapes are aired on a regular basis," Mansfield said, "the advertising equivalency potential is phenomenal."

May QST biggest ever

May QST was the biggest issue ever, at 240 pages.

Stalkers on Internet

Communications Week magazine reports Internet users are being assaulted by on-line stalker. Stalker send threatening or obscene electronic mail messages and is one of a growing number of computer crimes being committed by way of the nation's on-line services.

Other forms of computer crime include credit card fraud, theft of services by tapping into another person's account, harassment, and distribution of child pornography. The Internet has the dubious distinction of being home to almost 90 percent of all computer crimes under FBI investigation, according to an FBI official.

"As more and more people become computer-literate, we'll see more

computer attacks, even in business," said Frank Clark, investigator for the Fresno, CA Police Department. Clark regularly works with the LAN manager to apprehend computer criminals.

73 Magazine publisher in financial trouble

Wayne Green, owner of Wayne Green Inc. (WGI), has circulated a letter to creditors advising that he "...discovered that my comptroller had apparently modelled the WGI financial system after to one Congress is using, Complete with deficits and some of the more pesky items off the books. Things were completely uncomptrolled."

Green, W2NSD/1, now has an "ex-comptroller", reduced staff and "...gotten rid of the money-losing CD manufacturing division that caused the trouble..."

The company is now back into a profit-making situation. Green is trying to liquidate an "un-believable amount of inventory into cash... ..'Given a little time, I believe we can move it out at 50% on the dollar and thus have enough to pay everyone off. Fortunately, good music doesn't go out of date like magazines."

"If we get forced into Chapter 11, everyone but the IRS and the lawyers will get screwed. I don't want that, nor do you. So, let's work together while I'm solving the problems caused by an un-comptroller." The letter was dated April 18, 1994.

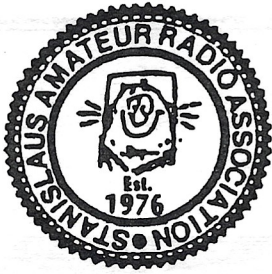
Youngest DXCC

Nine-year-old Casey Haley, AB5RG, received his certificate in April. Casey, an Extra Class licensee, lives in South Houston, Texas.

No reply from Russia to your QSL?

A Moscow newspaper in April reported the arrest of several mail thieves at the Moscow Central Post Office. Postal workers were searching bags of mail for valuables (e.g., currency and International Reply Coupons), then throwing the mail away.

Thanks ARRL-Letter, W5YI Report and the TSRAC ARNB, Adena, Ohio, all of whom contributed to this newsbrief.



SARA Minutes

By Bob Pinheiro, Acting Secretary

The June 21, 1994 meeting of SARA was called to order at 730 PM by President Liz, KD6GIW. 23 members and guests present. Des, W6BMA, thanked the club for all the get well cards and expressions of concern for him during his recent surgery. GIW reported that Ernie, K6UVI, had stepped down as Acting Secretary and Bob, ZLO, had agreed to take over the job until a permanent replacement can be found.

The minutes of the May meeting were approved as printed in the newsletter.

Treasurer Bob, KC6TVE, could not make the meeting but sent a report on the treasury via KD6GIW. As of June 21, 1994:

Income	\$192.00
Expenses	\$414.05
Ending balance	\$1,840.58

No news to report on the communications trailer according to K6UVI. VP, Mark, WB6BJN, reported that he had made some inquiries at the Sundial Lodge as a possible site for a mini-hamfest. He said he would get more definitive information and have it for the next meeting.

UVI reported on the club's communications effort for the Graffiti Bicycle Run held on June 11th. All in all, it was very successful. Unexpected problems developed in Del Puerto Canyon with the remote bases that were set up by UVI and N6ZAA. Only one injury occurred during the run, and that happened when a lady was thrown from her bike in Ripon. She received minor injuries.

President Liz expressed her displeasure with certain people who were calling her at home complaining about various club activities. She requested that complaints be brought to meetings and aired before the members.

The yearly raffle was discussed and finalized. The club voted to offer another Colt .357 Python hand gun with a six inch barrel or \$500.00 cash. A total of 2500 tickets will be printed by KB5FB, Jim, in Turlock. 10 tickets will be sent to each member in the mail. The rest will be distributed at meetings or from the secretary on request. The drawing will be held at the club meeting on October 18, 1994 and the winner need not be present to win.

It was pointed out the majority of the funds from our raffles go to pay the ex-

penses of our newsletter.

GIW announced she would like to see the club honor deserving members each year with certificates in four categories. 1. Most improved member (upgrading license and skills). 2. Youngest ham of the year. 3. Best Elmer and 4. Best Volunteer award. After discussion, it was moved, seconded and approved to implement the program. GIW said she would print the award certificates. A ballot will appear in the newsletter to be filled out and sent in. Berry, KN6ZE, volunteered to tally the ballots.

GIW announced that the club had apparently lost its new club station site at the Modesto Red Cross office. She said the director of the Modesto office called her last week and requested that we removed our equipment from the their building.

The Modesto Red Cross has been going through a period of change and several key people have been fired. As a result, there are a lot of hard feelings among the present staff and some of those discharged. There have been several threats made and acts of vandalism have occurred to their building. When they contacted GIW, they told her that could not guarantee the security of our equipment and requested that we remove it. We were also hoping to use this site for our low level repeater.

In this regard Don, AB6AE, said he was working on securing one of two sites owned by the telephone company. One in Empire and the other in South Modesto.

ZLO reported that LeRoy, NV6S, had ordered the crystals for the low level machine. The frequency will not be announced until the machine is on the air.

GIW asked for somebody to take over the refreshments job for the monthly meetings. Mike, KI7FQ, said he would do it next month.

UVI and Rita, BNV, then briefed everyone on Field Day plans and invited all to drive up to Big Meadow and participate. Meeting was adjourned at 9 PM. Respectfully submitted by Bob, WA6ZLO, Acting Secretary.



Technical Report

By Leroy Campbell
NV6S

I managed to get up the hill on June 10th and have the levels back under control on the 2M machine. I still am not quite happy with the two meter transmit audio level but it is useable and doesn't seem to be distorting signals like before. I'll work on that as I have time.

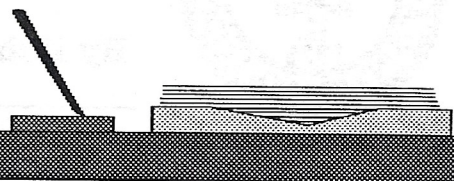
This trip was really rushed as the road was to be oiled the following morning and I didn't want to go up there for several weeks after that. I didn't want to get into any work that could possibly cause

trouble because of the road. I checked the road earlier this week and it still looks bad. A couple more weeks should solve that problem. I do have plans to get the links going soon. I was not able to test all facets of the links while the machine was here in my shack, since I didn't have the link radios here. Of course as you might expect just where I was unable to test I have trouble. I plan to chase that down and see what has happened as soon as possible.

I also have a frequency picked for a low level pair but cannot disclose it until we have it on the air. We will have to experiment and see how it works. I do hope to have that on the air in approximately 4 weeks. Thanks for all for patience and to those that have helped me with the technical chores. 73, LeRoy

FROM THE DESK OF

Tim Low, N6ZUC



I hate computers! My goal was to put together a simple 286 clone with a small hard drive, floppies and a monochrome monitor to use on packet. By careful shopping of the swap meets, and putting the arm on some computer geeks, er friends, of my acquaintance, I was going to do it for under a hundred dollars.

Of course the heart of any "puter" is the mother board, so that's the first thing I looked for, and I found it in the work shop of a fellow ham, and computer guru that I know. "Oh take it", he said, "I don't know what you want with that old boat anchor. You can have it." "Thanks I said". Mother board cost, \$0.00, a good start.

On the first of the month, I was off to the swap meet in Santee, CA. I was sure I could piece together some more of my computer and I soon found out that I was right. I found a nice case for \$10, and a new power supply for \$15, and a serial/parallel port card cost me \$2. So far, right on track.

Hey, there's another guy I know, and guess what? He's selling computer parts. A 20 meg hard drive, mono monitor and vid-

eo card, all for \$30, guaranteed to work. A few more minutes of shopping, and I found an MFM floppy/hard drive controller, and all the cables. Cost, \$10. \$67 total cost so far.

I forgot that Bob, WA6ZLO, when he upgraded, had sent me an old 360 floppy drive, I found it tucked away in the closet. Now all I need is a keyboard.

The keyboard I picked up a few weeks later at an auction held by the Escondido Amateur Radio Club. 101 keyboard, good shape, ten bucks. I found a good used 1200 baud internal modem too, and decided since I was under budget, what the heck? Another ten dollars. Total cost, \$87. I was a happy Puter putterer.

After I let everything sit on the self for about six months, why rush into assembly, it was time to put it all together.

Now, I know what your thinking. Your saying that it had to be a disaster. Nope, it all went together well. The only problem was the mother board was a true blue (IBM), and therefore did not have setup in resident bios. I needed a setup

program on floppy to get it all working. After calling around to dealers and friends, I finally located a copy on a local BBS.

The computer for under a hundred dollars was off and running. Packeting up a storm. My notebook computer was promptly retired from active packet service. Your right this is running too smoothly, and next month, as Paul Harvey says, "The rest of the story"

Questions? Answers? Comments? Direct them to me in care of The READOUT, or drop me a packet to: N6ZUC @ KJ6VC.# SOCA. CA. USA. NA.



E-mail Romeo charged as a stalker

Andy Archambeau wooed the Dearborn Heights, Michigan woman of his dreams by e-mail (electronic mail) sending her computer messages saying, "Good morning, beautiful" and invitations to rendezvous in the Bahamas. Now Archambeau has been charged with breaking Michigan's anti-stalking law for continuing to send computer messages after the woman and police told him to stop.

The American Civil Liberties union is considering defending him, saying there appeared to be no real threat to the woman.

But some computer experts say there is no difference between stalking someone physically and electronically. "He makes it sound like he was being a romantic. But it was very, very spooky," said the 29-year-old woman, speaking on condition of anonymity. "I wasn't sure if they were going to find me in a ditch."

It was a high-tech relationship. She chose him from a video dating service. They talked for hours on the phone and decided to meet at a dating service party. "We had a great time," said Archambeau, a 31-year-old graphic artist from Dearborn Heights. The woman said she felt sparks at first. "At first I have to admit I liked the guy, then he started to get too close too soon. He was talking about marriage and kids," she said. "I

knew him for five days before I told him to get lost." The woman got worried when Archambeau left a message on her answering machine, telling her he had watched her leave work. She filed a police report. "He didn't threaten her, but he did make some remarks that could be construed as possibly leading into something that her safety could be in jeopardy," said Farmington Hills police Detective Brian DeGrande.

The police told Archambeau to have no more communication with her. But Archambeau sent her another computer message. "I've been trying to court you, not stalk you," he wrote April 15. "If you let me, I would be the best man, friend, lover you ever could have." She replied via e-mail: "If you don't

See "E-Mail" page 9

New Hampshire exempts radio towers from property taxes

New Hampshire House Bill 1380, recently signed into law by Governor Steve Merrill, exempts from real estate property taxes 'radio towers, antennas, and related or supporting structures used exclusively in the operation of an Amateur communications station under Federal Communications Commission Amateur Radio Service rules and regulations.

ARRL Counsel Chris Imlay, N3AKD, called the bill an important precedent, saying that it may have far-reaching effects throughout the US as amateurs continue to seek relief from local and state regulation.

ARRL New Hampshire Section Manager Al Shuman, N1FIK, who played a key role in the passage of the bill, largely credits ARRL New Hampshire State Government Liaison (and representative in the state legislature) Ralph Rosen, WIHSB, and a team of ARRL Field Organization volunteers, who testified numerous times before both House and Senate committees.

The matter came to a head when a New Hampshire town added \$9,000 to an amateur's property value, for tax purposes, based on his towers and antennas. While he appealed the assessment in court, Rosen and others initiated the legislation. ARRL Letter

E-Mail

from page 8

leave me alone, you are going to be sorry. You have been warned."

After that, he threatened to send their story to all her computer friends, and mail it to her family and old boy friends. Archambeau was arrested and charged May 4. If convicted of the misdemeanor offense, he could be jailed for one year or fined \$1,000.

Thanks the Modesto Bee and The Associated Press

Guyana applies for reinstatement in IARU

Look for more activity from Guyana. South America Amateurs there have formed the Guyana Amateur Radio Association (GARA) and have applied to reinstate their membership into the IARU which had not been active for many years. The Virginia-based Foundation for Amateur International Radio Service (FAIRS) is providing training, equipment and other technical assistance to GARA.

WSYI Report

FCC to use new souped up patrol cars

According to Broadcasting and Cable Magazine, 'the FCC will roll a new fleet of souped-up spectrum patrol cars out of the garage this summer.' The Commission is including '—a trunk load of mapping and global positioning technology into 10 of its cars. FCC engineers hope the beefed up 'mobile digital direction finder' (MDDF) vehicles will cut the time needed to find illegal radio operators.

A prototype model displayed at the FCC carried \$75,000 worth of signal tracking and location equipment installed inconspicuously in a blue Chevrolet Caprice." WSYI Report

E-Mail stalkers invade on-line services

Communications Week magazine reports Internet users are being assaulted by on-line stalkers. Stalkers send threatening or obscene electronic mail messages and is one of a growing number of computer crimes being committed by way of the nation's on-line services.

Other forms of computer crime include credit card fraud, theft of services by tapping into another per-

FCC prepares for world radio conference

The FCC has begun a proceeding to prepare for the 1995 and future World Radio communication Conferences (WRCs) The Commission is seeking information to assist it in developing U.S. proposals relating to issues on the agenda of WRC-95, and in refining recommended and preliminary agendas for WRC-97 and WRC-99.

WRC-95, scheduled to convene in November 1995 is expected to (1) review the Radio Regulations based upon a report of the Voluntary Group of Experts; and (2) facilitating use of frequency bands allocated to the mobile-satellite service. WRC-95 also will recommend an agenda for WRC-97 and will develop a preliminary agenda for WRC-99.

R. B. (Bob) Vernal, ZL2CA, a frequency planning engineer, at New Zealand Telecom told us at the Dayton HamVention that he believed a resolution impacting ham radio could be adopted at WRC-95: It would permit administrations to decide whether or not they wished to retain the Morse code requirement as a prerequisite for HF Amateur Radio operation. He said his country was in favor of such a position.

WSYI Report

son's account, harassment, and distribution of child pornography.

The Internet has the dubious distinction of being home to almost 90 percent of all computer crimes under FBI investigation, according to an FBI official. "As more and more people become computer-literate, we'll see more computer attacks, even in business," said Frank Clark, investigator for the Fresno, CA Police Department. Clark regularly works with the LAN manager to apprehend computer criminals.

Thanks The TSRAC ARNB, Adena, Ohio.

That ain't nothing

Crossing the line with this story is Marian Eddy, KM7B.

While a Novice, I worked a ham in Arkansas; of course, I certainly will not disclose his call sign. In the course of our QSO, I mentioned that Asia apples, grown in Washington state were

a cross between a pear and an apple. The ham in Arkansas came back in CW "that ain't nothing, here we cross owls with goats and raise Hootenannies." I had to QRT to regain composure.

Thanks Worldradio

Peter I operator pleads guilty to bank fraud

Robert Wilber, N4GCK, one of the operators on last February's Dxpeditio to Peter I Island (3Y0PI), has pleaded guilty to bank fraud and mail theft, according to a report in the Ann Arbor, (Michigan) News.

Under a plea agreement, he will receive 24 to 37 months in federal prison and be subject three to five years of federal supervision following his release. The paper said Wilber took checks totaling some \$113,000 from the mail-box of a University of Michigan professor and cashed them.

He was photographed at an automatic teller machine and his photo appeared in the paper on December 20, 1993. At that time "he knew he was caught," the News said.

Wilber, 35, of Ypsilanti, Michigan, avoided arrest long enough to join the expedition to Peter I. He surrendered upon his return, having spent all the stolen money, the News said. *Via ARRL Letter.*

Quick Tip

Do you carry an extra battery pack for your HT? Most of us do today at some time or another. Did you know that these little power packs can be real dangerous if they get shorted out by...lets say a metal pen in your pocket? Well I found a great way to prevent this and it costs basically nothing. I simply put a wide rubber band from a head of broccoli around the entire pack covering the contacts. This prevents the terminals from shorting out. Now my only problem is getting the kids to eat the broccoli!

from George, N30WG

Roanoke, VA man sentenced to prison for jamming aircraft communications

An unlicensed Roanoke, VA radio operator who identified himself as the "Roanoke Phantom" was sentenced April 24th to 100 months in prison and fined \$2,000 —to be followed by three years of supervised probation.

Rodney E. Bocock was convicted of transmitting false air traffic control instructions, endangering the safety of aircraft in flight and using obscene, indecent or profane language on aviation frequencies. His transmissions included misinformation to pilots, false distress calls and offensive language.

A massive joint effort was mounted by the FCC, FAA, FBI and the Allegheny County Sheriff's Dept. to locate Bocock and was one of the most difficult cases the Commission has had to solve. FCC investigators from across the country were called in to assist in surveillance, radio direction-finding and technical signal analysis work.

The case involved more resources than any other case in FCC history. "This joint effort resulted in resolution of a serious threat to aviation safety," FCC Field Operations Bureau Chief Richard M. Smith said. "The conviction and now the sentencing should send a strong message that people who commit this sort of serious violation will be caught and punished."

W5YI Report

Civic duty?

By Stan Staten

I felt satisfied with my service to the environment. As I returned home I could see that the doves were still perched high above my house.

You see, domestic cats in my neighborhood had disrupted the balance of nature by diminishing the local bird population.

And birds perform the wonderful service of controlling the insect population. Some birds clean up after a woodland creature dies.

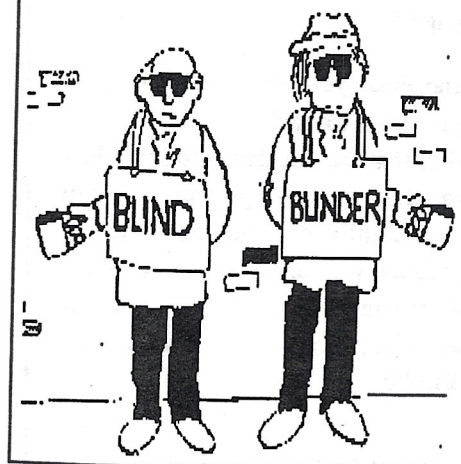
Appreciating the value of birds to the neighborhood, and the mortal danger to them posed by cats, I erected a 50-foot structure and placed three large bird perches atop it, thereby giving the bird population a safe haven to rest where we can enjoy watching them.

This bird perch needs to be grounded from lightning, of course, and it also provides the useful service of draining the local atmosphere of electromagnetic radiation.

In doing this project I was fortunate to find companies that sell equipment wonderfully adapted to these important environmental functions. One of them, Rohn, supplies a suitable modular metal structure in 10-foot sections. The other, Hy-Gain, offers a delightful variety of bird perches.

From the Ice Palace BBS via the January '94 Johnson City ARA (Tennessee) "Feedline" Ed Ingram, WX4S, Editor via ARNS Bulletin.

Yankee ingenuity



CQ DX, a Silent Key



*CQ CQ CQ CQ CQ CQ
No answer to my call
Nor will there be again, for today,
CQ became a silent key,
A victim of that QRM band known as Route 27
CQ was Doberman-Terrier, only nine months.
I can still remember the day we brought him home.
I let the gang on the Friday night net know all about him,
And how I had named him, "CQ DX".
Every time I was here on the rig, CQ was next to me,
Making his comments about the CW tones being too high for him.
Now when I call CQ CQ CQ on the rig,
My thoughts will be with him,
For he now lies at the base of my five band vertical,
Helping me to catch that rare CQ DX*

Written by Ed Donnely, W8MJE, from TSARC Bulletin, circa 1981

Information highway

from page 3

the 80s, adding their heavy coax lines on the poles. Already coax is getting crowded and it is still only one way. There are just not enough channels!

Imagine for any reasonable system, every individual would have to have a coax connection where now only a pair of wires are, then there would be a need for numerous intermediate amplifiers, because high coax line losses. This is not a likely approach.

Satellites and Fibre Optics

Fortunately there are two other technologies available to jump into the breach—satellites and fibre optics. Satellites, by virtue of the vast frequency expanse of the microwave spectrum and the enormous area they cover, can provide quite a chunk of the super-highway. They are a natural for TV-broadcasting and have been used as such in Europe and Japan for several years already. Glass fibres transmit light with such low loss, as com-

pared with coax, that they are a natural to "fibre" up the country and even connect continents. The frequencies of light also provide more bandwidth than microwaves, and electronics, as highly developed as it is, has had trouble designing the interface modules needed.

The idea is to bring a fibre to every house. Then the situation offered by the fibre would beat your present "fast computer" (e.g. 50 MHz clock) by as much again as the computer now beats the telephone line. You will have all the computer activity you can think of, plus picture telephone, TV, Radio, Library of Congress ... and all on one puny fibre line of less than 1/10" in diameter. Of course, one other benefit might be no more telephone interference. I said "might" because there could be the connecting "black boxes."

Finally

Finally, some words about ham radio. As stated above, ham radio is communication, and mostly thought of as a back bone in an emergency, as a backup system in need. And, of course, the system is "wire or fibre" less. We have to make do

with the radio spectrum up to the microwaves and light. So, our efforts should be in the direction of creating a domestic high speed digital net connecting all population centers. What we presently have in terms of a packet network is an inefficient hodge podge. For worldwide connections satellites should be used. We are presently doing a super job on this.

As we are about to lose the 220 MHz band for normal amateur work, it is an excellent idea, as suggested by the ARRL, to use 220 for fixed point to point links for a national high speed network. The technology is well understood and in grasp of most hams. The satellite end of it can be best tackled by our microwave enthusiasts, which have for many years done their work in small groups away from the "mainstream".

As for shortwave, it will still provide a nostalgic form of traditional ham radio connecting hams of many nations and providing a link to the remaining undeveloped parts of the world. So, the future looks bright for all, let's move ahead!

Courtesy of RF-Carrier Dayton, Ohio ARC.



Calendar

- July 9 Foothill's College Swap Meet All Day
- July 19 SARA Monthly Meeting 7:30 PM
- August 7 Livermore Swap Meet 7 AM - Noon
- August 16 SARA Monthly Meeting 7:30 PM
- Sept 10 VE Testing In Modesto 9 AM
Contact W6XK 883-2968
- Sept. 20 SARA Monthly Meeting 7:30 PM
- Oct. 7-9 1st National Hamfest 3 days
Bakersfield, CA.
- Oct. 8 VE Testing In Merced 9 AM
Contact KI6PR 383-2166
- Oct. 21-23 PACIFICON94 3 days
Hilton Hotel, Concord, CA

SARA meets the third Tuesday of each month (except holidays) at the Stanislaus County Administration Building 11th and H Streets in downtown Modesto. The meetings are held in the lower-level conference room at 730 pm. Visitors and interested persons are most welcome to attend. SARA is an ARRL affiliated club and is also affiliated with the Stanislaus County and City of Modesto RACES/ARES programs.

The READOUT is mailed with a bulk mailing permit. Please notify us if you move as the Post Office will not forward bulk mail regardless if you left a forwarding address.



SARA Membership Application

Call _____ Date _____

Name _____

Address _____

City _____ State _____

Are you a member of the ARRL? (Yes) (No)

Home Phone _____

Business Phone _____

Occupation _____

Date of Birth _____

Class of license _____

Year first licensed _____

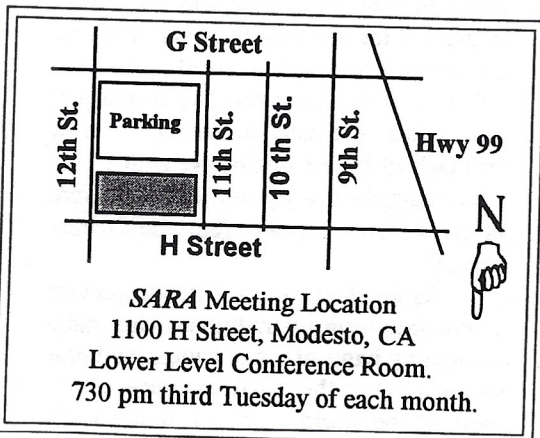
Dues: Renewal \$23.00 per year. Out of area more than 150 miles from Modesto is \$11.00. New first time applicants dues are pro-rated from the month you join the club. Use \$1.91 times the number of months remaining in the year. ie.- You join in July- 6 x \$1.91= \$11.46

SARA repeaters on Mt. Oso at 3,300 feet- 145.39(-) MHz PL 136.5 Hz or * 5 to override the PL. 224.14 (-) MHz, 440.225 (+) MHz PL 136.5 Hz . KA-Node Digipeater 144.91 MHz. Ten Meter Digipetar 28,440 kHz

**Stanislaus Amateur Radio Association, Inc.
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Next SARA Meeting is July 19, 1994 at 730PM & You're Invited!