

# The READOUT

Year 14

Number 5

May 1992

## Engineer Sues Over Alleged Illegal and Defective Microwave

*Claims  
.....  
Possible  
.....  
Brain  
.....  
and Eye  
.....  
Damage  
.....  
From  
.....  
Illegal  
.....  
Unit*

A radio engineer in Arlington, Va, said he was burned by radiation from an illegal microwave transmitter has sued a Utah communications company for \$5 million dollars plus damages.

Keith Angstadt, is charging that the unlicensed, jury-rigged microwave transmitter operated by Multicom Telecommunications, based in Salt Lake City, doused him with enough microwave radiation to impair his eyesight and cause possible brain damage. The Texas company that installed the system was also named in the suit.

Angstadt said his troubles began May 31,

1991, when he was setting up antennas in Washington D.C. He said he heard a strange noise coming from somewhere else on the roof of the building he was working on. He said he investigated and found the source to be coming from what he believed to be a microwave receiver.

Angstadt said he stayed several feet behind the unit to avoid harmful radiation. Nevertheless, by the time he returned to the building, co-workers told him his face was extremely red.

By the time he got home his face was on fire and had started to blister. Angstadt said the next day he noticed his eyesight was

considerably worse. He said it was like looking through a dirty glass. He went to the doctor who told him the cornea in both eyes had been burned. He realized that he had received a harmful dose of microwave radiation.

In the suit, Angstadt said the alleged errant system had been rebuilt to operate in the C-band as an uplink and done so without an FCC license. The FCC later fined Multicom \$2,000 for this violation. Even though Angstadt said he took precautions when approaching the unit, he said he still took large enough dose to permanently damage his eyes

*See 'Suit' page 10*

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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 Meter 28,440 kHz USB

Tuesdays at 730 pm.

Contributions to *The READOUT* are always welcome and may be submitted to the editor by mail or via packet at N6REB-BBS on 145.79 MHz. The deadline for articles is the 15th of the preceding month. Articles regarding religion or politics are not accepted.

#### Editor

Bob Pinheiro, WA6ZLO

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Modesto, CA. 95355

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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.

## Virus Planted in Iraqi Computers Before War

U.S. intelligence agents reportedly inserted a computer virus into a network of Iraqi computers tied to that country's air defense system several weeks before the start of the Persian Gulf War.

According to a report in U.S. News and World Report, the virus was designed by the super-secret National Security Agency at Fort Meade, Md. and was intended to disable a mainframe computer.

Citing two unidentified senior U.S. officials, the magazine said the virus appeared to have worked, but it gave no details. It said the operation may have been irrelevant because of the allies' overwhelming air superiority.

The secret operation began when American intelligence agents identified a French-made computer printer that was to be smuggled from Amman, Jordan, to a military facility in Baghdad, the magazine said.

The agents in Amman replaced a computer microchip

in the printer with another microchip that contained the virus in its electronic circuits. By attacking the Iraqi computer through the printer, the virus was able to avoid detection by normal electronic security measures, the report said.

"Once the virus was in the system, the U.S. officials explained, each time an Iraqi technician opened a 'window' on his computer screen to access information, the contents of the screen simply vanished," U.S. News reported.

The report is part of a book, based on 12 months of research by U.S. News reporters, called *Triumph Without Victory; The Unreported History of the Persian Gulf War*, published last month.

U.S. News also said it calculated, with the help of private defense analysts in Washington, that as few as 8,000 Iraqi soldiers may have been killed in the war.

## Radios & Computers Targets Of Heightened Air Security

Heightened commercial airline security has not yet prevented Amateurs from carrying radios and computers aboard domestic flights, but hams should be prepared for greater scrutiny of electronics

device. As of last February, domestic carriers were under a "Level 4" security alert but several major carriers said their policies concerning radios had not changed; they were

*See 'Security on page 6*

# Corrections to Novice Frequency & Time Conversion Charts

The Amateur Frequency and Time Conversion charts appearing in the February issue of *The READOUT* had a few errors. On the Frequency chart, the errors were in the Novice operating privileges for CW, RTTY, DATA and MCW. The errors in the Time Conversion chart appear in the PDT/MST time column. Below are corrected charts. You may paste the corrected charts over the old ones, or use the new charts to make corrections to the originals. We have also added Hawaii Standard and Daylight time to the Time Conversion chart. Thanks to NW6G who caught the errors and brought them to our attention. If you find any other errors, please contact WA6ZLO.

NOVICE	CW ONLY	VOICE
160 Meters	NONE	NONE
80 Meters	3675-3725 kHz Limited 200 watts PEP output	NONE
40 Meters	7100-7150 kHz Limited 200 watts PEP output	NONE
30 Meters	NONE	NONE
20 Meters	NONE	NONE
17 Meters	NONE	NONE
15 Meters	21,100-21,200 kHz Limited 200 watts PEP output	NONE
12 Meters	NONE	NONE
10 Meters	CW RTTY OR DATA 28,100-28,300 kHz Limited to 200 watts PEP output	28,300-28,500 kHz Limited to 200 watts PEP output
6 Meters	NONE	NONE
2 Meters	NONE	NONE
1.25 Meters	CW RTTY DATA MCW IMAGE 222.1-223.91 MHz Limited to 25 watts PEP output	222.1-223.91 MHz Limited to 25 watts PEP output
70 Centimeters	NONE	NONE
33 Centimeters	NONE	NONE
23 Centimeters	CW RTTY DATA MCW IMAGE 1270-1295 MHz Limited to 5 watts PEP output	1270-1295 MHz Limited to 5 watts PEP output

UTC	EDT AST	CDT EST	MDT CST	PDT MST	PST	HST Hawaii	HDT Hawaii
0000	2000	1900	1800	1700	1600	1400	1500
0100	2100	2000	1900	1800	1700	1500	1600
0200	2200	2100	2000	1900	1800	1600	1700
0300	2300	2200	2100	2000	1900	1700	1800
0400	0000	2300	2200	2100	2000	1800	1900
0500	0100	0000	2300	2200	2100	1900	2000
0600	0200	0100	0000	2300	2200	2000	2100
0700	0300	0200	0100	0000	2300	2100	2200
0800	0400	0300	0200	0100	0000	2200	2300
0900	0500	0400	0300	0200	0100	2300	0000
1000	0600	0500	0400	0100	0200	0000	0100
1100	0700	0600	0500	0200	0300	0100	0200
1200	0800	0700	0600	0500	0400	0200	0300
1300	0900	0800	0700	0600	0500	0300	0400
1400	1000	0900	0800	0700	0600	0400	0500
1500	1100	1000	0900	0800	0700	0500	0600
1600	1200	1100	1000	0900	0800	0600	0700
1700	1300	1200	1100	1000	0900	0700	0800
1800	1400	1300	1200	1100	1000	0800	0900
1900	1500	1400	1300	1200	1100	0900	1000
2000	1600	1500	1400	1300	1200	1000	1100
2100	1700	1600	1500	1400	1300	1100	1200
2200	1800	1700	1600	1500	1400	1200	1300
2300	1900	1800	1700	1600	1500	1300	1400
2400	2000	1900	1800	1700	1600	1400	1500

# FCC Shifting Blame of RFI & TVI Complaints to Manufacturers

Drastic reductions in federal spending have prompted the FCC to change its approach in dealing with local radio-frequency interference (RFI) and television interference (TVI) complaints. Individualized, on-site help from FCC public service staff will be more difficult to obtain. On the other hand, the FCC is apparently raising its expectations of the industry to manufacture products that are more immune to interference. Amateurs who are often unfairly blamed for interfering with susceptible consumer devices should welcome this change, if it brings real results.

"Rather than investigating individual cases of interference to home appliances, the FCC is redirecting its resources to appliance manufacturers, exploring possible future regulatory action and taking other steps to reduce the likelihood that interference will occur in the first place," according to FCC Baltimore Engineer-in-Charge Robert Mroz, in a standard letter sent to RFI complainants.

Similar letters are being issued by other FCC Field Operations Bureau offices (FOB). The letters offer tips on fixing RFI, urge consumers to seek help from manufacturers and enclose the FCC's Interference Handbook. Mroz said the FCC asked Ana Curtis, Attorney-Advisor to the FOB's Public Service Division, if this "self-help" approach represents a major policy change. She described it as a "shift in focus," but hastened to note that "we are not discontinuing enforcement. We will still enforce our rules, but we are not going to respond to simple home electronic entertainment equipment complaints by sending out an inspector. We have put the burden where it rightfully belongs, on the manufacturer.

"The focus will not be so much working out matters between the complainant and the radio operator, but we will focus more on the big players," she said. "We do a lot of training and industry contact. More money will be spent in that area. This is not new, but the emphasis we are putting on it will increase."

Curtis noted that the Communications Act--the law that created the FCC -- was amended several years ago to give the FCC authority to establish standards for RFI immunity for home electronic products. "The Commission has not done so, because the industry said it would look out for itself and that market forces would operate so that consumers would prefer

products that don't have these problems. What we've said is that the marketplace would take care of it."

"But we have still been expending too much money trying to resolve the interference by sending staff out to investigate," she said. "We find that the radio operators are more likely than not, operating within legal limits. All we're really doing now is instead of spending money sending out staff to look at a problem, the first stab we'll let the cable TV and the telephone companies and the manufacturers handle it."

She noted the local FCC public service staff may still ask for written responses from Amateurs and consumers in order to gather information about a specific interference problem. but there will be fewer instances of such detailed inquiry, she explained, unless there is an indication that violations of FCC rules may be involved.

We asked if there was any chance the FCC would decide to use the legal authority it has to require RFI-immune products. "We have asked the Private Radio Bureau and the Office of Engineering and Technology to look at the issues, for example, the impact of filters pre-installed in products," she said. She could not tell how the matter would be resolved, but said "It will be pursued, because the Commission is getting less money but is being asked more and more to solve these interference problems." -W5YI Report

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## FCC Imposes Maximum Fine on Pirate Broadcaster

Donald W. Bishop, NØEA, (Amateur Extra Class) of Overland Park, Kansas, has been issued a Notice of Apparent Liability for Monetary Forfeiture (fine) in the amount of \$10,000 by the FCC for his illegal pirate radio operation last fall. Bishop was charged with playing the taped transmissions of a long active pirate known

as "The Voice of Laryngitis" of his ham radio. The illegal operation allegedly took place on 15,050 and 7,420 kHz for several hours while Bishop was driving to Colorado. The FCC's long-range direction finding network pinpointed his pirate broadcasts and had him stopped by the Colorado State Highway Patrol.



**FROM THE  
DESK OF**

**N6ZUC**



**Tim Low, Escondido, CA.**

An aspect often overlooked when pursuing our hobby, is that of safety. It's something I as well as most other Hams give little thought to. It was brought home recently by an unfortunate accident. A contester in Texas was climbing his tower, trying to correct an antenna problem and fell off. He fell only 20 feet, and suffered severe internal damage. He later died of those injuries. He left behind a young widow and child. He should've worn a safety belt.

Tower climbing is one of the more hazardous activities associated with Ham radio. As demonstrated above, even a fall from a relatively short distance of 20 feet can be deadly. Tower work should be performed only with the proper safety considerations. A good rule to follow, "if your feet are off the ground, the safety belt is on."

Tower work is also physically demanding, and should be performed only by those in good condition. Anyone with heart trouble or dizzy spells, ect., should keep the feet firmly on the ground. With any tower work, there needs to be a helper down below to pull ropes and act as a spotter for the guy up the tower. Let someone else do the climbing.

An acquaintance of mine recently was involved in a traffic accident while jabber-

ing away on the repeater. Lucky for him it was only a very minor fender bender. The two way can be a great companion on those long commutes, but don't lose sight of the fact that while behind the wheel, the number one priority is your driving. If you're in heavy traffic, put the mic down and keep your mind on the task at hand, driving. Live to talk another day.

High voltage lines and antenna's don't mix. Plan ahead for your antenna installation. That perfect spot next to the power line might be tempting, but don't do it. If you must use that location, ask the power company to move the lines. Better yet, if possible, have them buried. That will eliminate the hazard and prevent reradiation, improving your pattern. Despite the warnings included with all antennas sold, every year people are killed who fail to read and head.

It scares me when I hear people with no technical background or specific knowledge, talking about getting inside equipment and trying to "fix it". First off these tinkerers usually do more damaging than repairing. In some of this equipment lives lethal voltages. Most notably in high power amplifiers.

When I was a young, green, Broadcast Engineer, I found out first hand what it feels like to become the conductor in a high voltage circuit. 2500 volts DC high. I had the side off a one (1) kilowatt transmitter trying to find the cause of an overheating problem. I was holding my

hand up near the fan in the top of the transmitter, checking air flow. I came in contact with the output network. It felt something like having my arm in a giant vise. It was my right hand, and my back was against another cabinet. That's the only thing that saved me. If it had been my left hand, you would not be reading this now. I later found a burned spot about the size of a quarter on my right shoulder blade where the current exited.

I was lucky, and stupid! First off never attempt repairs on high voltage equipment without company. Someone to smack you with a 2x4 if you get stuck across the finals of your Henry 2k amplifier. This person doesn't have to know electronics, just where the off switch is. I shouldn't have been doing what I was doing with the power applied, and alone. Stupid, but I learned.

A few things to keep in mind when troubleshooting. Never attempt repairs when tired or sleepy. Never while taking drugs of any kind, and never alone. While making measurements of high voltage points, keep your left hand in your back pocket. Remember that your left is your heart hand. Always remove any jewelry. I know a guy who didn't, and is now missing a finger.

That's it. Just use your head. Common sense is the key. Death is inevitable, and some day we'll all face it, but death or injury from stupidity is inexcusable. Enough preaching. 73, Tim.

# 'Airline Security'

From page 2

simply being more stringently enforced.

Amateurs always should carry their FCC license with them and also should be prepared to remove batteries from radios if asked to do so, as well as pen lap top computers and be prepared to turn them on upon request.

Some international carries, British and German in particular, may have much tighter restrictions. All Amateurs traveling on international flights should consider the possibility they may not be allowed either to carry or to check as baggage radios and/or computers, and should check with carrier about the possibility of making arrangements in advance.

*Tnx RaRaRag via ARRL Letter.*

# Talking Arrows

You're out in the woods tracking elk. And there, in heavy cover, you can make out the silhouette of a giant bull! You pull one of your best arrows from your quiver, put it in the bow, draw back and ...release. Un fortunately, the arrow careens off a small sapling and head off into the woods.

Now, thanks to the ETS Corporation, that arrow doesn't have to be lost forever. "Beacon" is a small, lithium-powered transmitter

that inserts into the shaft of the arrow. If the arrow is lost, all you do is pull out your direction-finder. If the arrow is within 300 yards, a beeping tone and lighted signal strength meter on the receiver will tell you when you're heading in the right direction. Of course, if you hit the elk, the transmitter has a different purpose.

*Tnx Monitoring Times.*

# Sheriff Using Lasers To Catch Speeders

The Sheriff's Department in Charleston, South Carolina, is using a laser to catch speeding motorists. According to Sheriff Richard Allen, laser technology has changed the rules of the speeding game. "We're stopping cars that look like a Radio Shack surplus store inside."

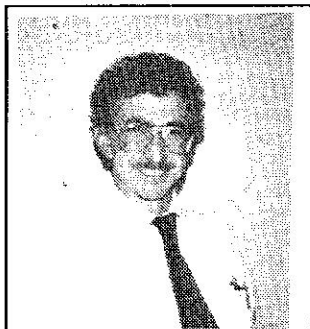
Lasers cannot be detected by conventional radar detectors. Light pulses are sent out, with

each pulse measuring the distance to a car. The car's speed is calculated by measuring how quickly the pulses are reflected. The entire process takes about one third of a second!

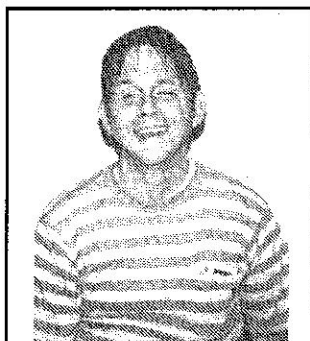
Motorists that enjoy driving in the fast lane will be happy to learn that several companies are attempting to produce the first "Laser Detector."

*-Tnx Monitoring Times.*

## Meet SARA Members

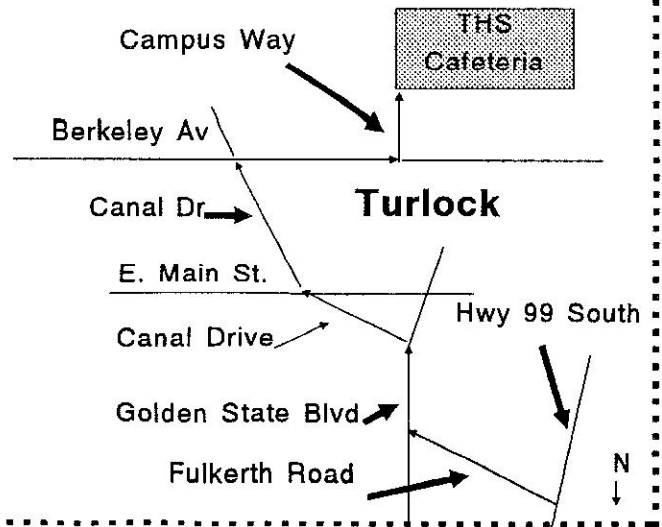


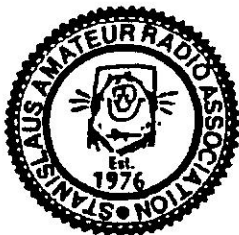
**Dave Burmann**  
**WA6GUO**



**Mark Lemmons**  
**WB6BJN**

Turlock ARC  
Auction  
Turlock High  
School  
Cafeteria  
May 9, 1992  
10 am  
Doors open  
at 9am  
Auction at  
10 am  
Talk In  
147.03 MHz





# SARA Minutes

By Ernie Rader, K6UVI

The regular monthly meeting of SARA was called to order by President Jim, N6KMR at 7:36 PM on April 21, 1992. Introductions took place as the sign-in sheet was passed around.

*Secretary's report:* moved and seconded to accept the minutes of the previous meeting as printed in **The READOUT**.

Copies of the Fresno Hamfest pre-registration form were offered, and the secretary thanked all who participated in the American Diabetes Spring Ride and Stride. Communication from Action Letters was offered.

*Treasurer's report:*

Beginning Balance --- \$2,775.48  
 One deposit----- \$283.45  
 Resulting Balance --- \$3,058.93  
 Expenses:  
 Postage ----- \$187.58  
 Fund Raising items ---- \$135.17

Liability Insurance --- \$606.00  
 Miscellaneous ----- \$44.00  
 Total ----- \$972.75  
 Ending Balance ---- \$2,086.18

Jim noted that since neither the Repeater Committee Chairman nor the Field Day chair were present, no new information was available from them. Field Day is still to be held at Jim's ranch, and he has the club generator for repair.

Brad, KC6TDH reported that the Fox Hunt is scheduled for Saturday the 23rd of May at 8 AM.

Rita, KD6BNV reported that she's looking into getting a club banner made and is investigating getting badges with the SARA logo on them. Also vests, hats, etc.

Under new business, thanks was given to Jack, WB6IDT for the gift of call books and repeater directories for the club station.

The secretary reported that the library needs to be organized and coordination with Phil, WD0FFX, will be undertaken.

Secretary further reported that a link between The Red Cross and **SARA** is being undertaken, and the provision to reduce the number of high level repeaters at the latest NARC meeting had been defeated.

June 13th will be the Graffiti Walk and Ride. The secretary is still waiting for communication from them. Bob, ZLO complimented our professionalism in handling the ADA Ride and Stride. He also reported that **The READOUT** received a "Superior" rating in the annual nationwide Amateur Radio News Publication Contest. Meeting was adjourned at 8:06. Respectfully submitted, Ernie, **SARA** secretary.

## ARRL V.E. Exam Schedule for Northern California

This is a listing of the scheduled **ARRL** Volunteer Examiner test sessions in this portion of Northern California. To take a test you must show two means of identification, have the original of your license and a copy of it, if you are licensed; have the original of any CSCE to prove you passed a test before any VE group.

All tests are walk-in. Fee is \$5.40 except for Novices for whom there is no charge. No-coders welcome.

**Hercules** May 17 Jul 19

415-467-2467

**Merced** Oct 10

209-383-2166

**Modesto** Jun 13, Sept 12

209-883-2968

**Novato** Jun 6, Sept 12

415-897-8950

**Oakhurst** Jun 13, Sept 12

209-683-8430

**Redding** May 9

-916-243-6339

**Sonora** Nov 14

209-586-4917

**Turlock**, May 9

209-883-2968

VE Exams in Modesto are conducted at the Chrysler School on Conant Ave just off Sisk Rd. For more information contact Chet Jensen, W6XK, 883-2968.

**Next SARA Meeting**  
**June 16, 1992**  
**730 pm**  
**Speaker: Jim Martin**  
**Stanislaus Co. OES**

# PacSat News



By Tim Bosma, AB6FL

In the past three columns we've reviewed the hardware and software necessary to work the digital microsats. In the last column we learned that a tracking program was helpful in spotting the location of the satellites; using satellites involves adapting to the Doppler shift of the received frequency by using the PSK modem to control the receive frequency; and what the initial contact looks like on Pacsat-12.

This month we'll deal more with operations. As you recall at the end of our last column we had begun to receive signals from Pacsat-12. By initiating the C or "CAPTURE" command, we were copying files that had been requested by other Pacsat users. This is not much different than tuning a 2 meter rig with a TNC to 145.790 and opening up the monitor function to receive all the traffic from N6REB-2 and capturing it to a file.

There is a difference in directory file structures. Generally with a Packet BBS like N6REB the directory files are stored on N6REB, or can be captured in the monitor mode. To get a directory from the Pacsats, you must connect to the satellite and specifically request the directory. Once the directory is downloaded, the Pacsat software then stores the directory on your computer. When viewed, the directory structures are about the same. The

two most striking differences one notices is the file numbering system and the download column. In a recent example from Lusat, the directory ran as shown in the table below.

You notice immediately the file number sequence uses alpha and numeric characters. The 'dl' column indicates the number of times a specific file has been accessed and downloaded. Also note the "to none from none" files at the bottom of the listing. They are diagnostic data files collected by the satellite about it's operations. If I were to download the 2609 "AL" file. I could then use a program like SHOWLOG to review a previous orbit or orbits and watch my attempts to connect or upload a message. From that I can get information which may help me to correct a problem or improve my station. The 'eltlog' entry, 263d, is a file that contains bit error messages and the location of the spacecraft when they occurred. The SHOWLOG program shows the satellite orbiting around the earth and displays who was connected and what they were doing.

#### FILE PROCESSING:

One of the first and most basic connections to the Pacsat then is to download a directory. To accomplish this you connect to the satellite requesting one of three things, using the PG software. MINE ...this functions gets you your mail.

BULLETINS ...this downloads all the general "to ALL" messages  
ALL ...this dumps everything.

You'll note that you have to request your mail. It does not automatically tell you when you have mail, however were you to request an ALL listing, it would highlight any directory entry with your callsign in it. Once you get a complete directory the software will automatically disconnect you from the bird. At this point you quit the PG software and enter the PB or "broadcast" software. Using the PB software you can then request a file by file number and the satellite will acknowledge the file broadcast request by returning "OK AB6FL" and then starting the broadcast download of the file.

The interesting point here is that you are NOT CONNECTED. The Pacsat is transmitting the file in sequenced segments and your software receives the broadcast. While its receiving, it marks any missed segments. The PB screen will advise you if you have any missed segments or "HOLES" in the received file. Once the initial file broadcast is completed then you ask for a "FILL" and the software sends the satellite a list of the HOLES you have. The Pacsat will then "fill in the holes."

The beauty of this process is that you can download (and upload) 100,000 byte files over several orbits! This feature makes satellites the only way to exchange large files over long distances. Try passing anything over 5000 bytes through the present packet system is a great way to make friends with sysops! Or better yet, try this on 300 Baud HF systems.

number	to	from	time	size	file name	dl	key word
2630	ab6fl	wb6llo	8:04 04/02	1218	equipment	1	modification
262a	all	ei6ah	23:14 04/02	6445	FV.COM	20	test program
261d	ab6fl	vk8so	14:49 04/02	1332	Thanks	1	PSK help
2617	ab6fl	WH6l	21:14 04/02	577	Mahalo!	1	AL911215
2609	none	none	00:08 04/02	20373	AL920204	3	
263d	none	none	04:53 04/02	935	eltlog	7	



tion Building downtown at 12th and G. Brad, KC6TDH, will there starting at 8 am to check in the hunters with the hunting to begin at 9 am. The first hunter(s) to find the transmitter will find a message attached to it which must be relayed back to Brad on 145.39 MHz to confirm the winner(s).

Everyone is welcome to come out and have some fun. Even if you don't have any direction finding equipment, you can still have fun by just observing the action. You are more than welcome to tag along and watch the fun. T-Hunting is fun, but more importantly, it's an important art that can pay off handsomely when you need to find a jammer or some source of interference that might be tearing up the repeater or the equipment in your ham shack. So, don't be shy, come and participate or observe.

On June 27 and 28 the club will participate in National Field Day Activities. More about this next month. As with the T-Hunt, everyone is most welcome and encouraged to attend as a participant or observer.

The number of new Technician Class licensees continues to skyrocket! It has been a year since the kickoff of the Codeless Technician in the United States and the figures clearly show that it is no flash in the pan! Interest

Amateur Radio Service in history- an increase of some 73%. There were nearly 47 thousand newcomers in the year ending February 1992 versus about 27 thousand for the year ending Feb. 1991. And, if you exclude the March figures, the increase is greater- 81%.

There can be no mistake about it, the Technician level is now the path of choice for entry into the Amateur Service being chosen by two-thirds of all first time licensees. Not only has the code-free Technician Class proved popular, but the number of newcomers choosing the Novice/Code route is at an all time low. It appears the FCC was right in their view that, given a choice, most newcomers to ham radio would elect codeless entry.

The ARRL has been hit with a law suit filed by the Lambda Amateur Radio Club (LARC), an organization for lesbian and gay ham radio operators in New York City. The suit was filed under a recently enacted Connecticut state gay rights law. LARC charges the ARRL has repeatedly rejected advertisements in QST submitted by LARC after publishing it once in late 1985. LARC charges the ARRL contends their (LARC) ad is unacceptable despite the fact that QST continues to publish the ads of ham

oper W4DDV, have lost their case in Federal Court to have Michaels of Tucson, Az, ruled a common law "nuisance." An Arizona trial court found that the FCC had exclusive jurisdiction over radio frequency interference (RFI) matters and that state courts were precluded from remedying any alleged private nuisance caused by interference from the operation of ham radio. The decision was upheld by the Appellate Court.

On April 26, 1991, the neighbors, Arthur Still and his wife, brought the action to the Federal District Court of Arizona. The alleged three causes of the action: (1) obstacle to enjoyment of life (2) decreased property values (3) health hazards generated by the electro-magnetic fields.

The court ruled "The FCC has considered the preemption issue and has concluded that the jurisdiction to control interferences over the airwaves rests exclusively with the Federal Communications Commission... The law of nuisance would obstruct the FCC's ability to regulate RFI matters. Moreover, the court does not have the jurisdiction to review the decision reached by the FCC."

That's it for this month. 73 and enjoy your summer.

# SARA Transmitter Hunt Saturday May 23, 1992 at 8 am

ator Joseph Michaels  
Next door neighbors of ham  
yn Rand  
ses to atheists

## Note of Appreciation From KFDH

Thanks from Pat and me, from the bottom of our hearts."

### Microwave Law Suit

From front page

and cause possible brain damage as well. He said he brought the suit not only to make up for the damage done to him, but also make the public aware to the danger posed by microwave transmitters.

-Thanks Radio World

### Forgot Sales Tax

The club Treasurer has inform us the price of the club badge is \$6.44. We had listed them as \$6.00 and overlooked adding in the sales tax. So, if you would like to have a **SARA** club badge with your name on it, send your check or money order for \$6.44 made payable to **SARA**.

Until you make up your mind to do it, you will never know the fun that can be had in participating in a T-Hunt (transmitter hunt). I know what you're thinking, "I don't have any equipment, why bother!" You can still have fun without direction finding equipment. Just observing the hunters trying to figure out where the transmitter is hidden is plenty of fun.

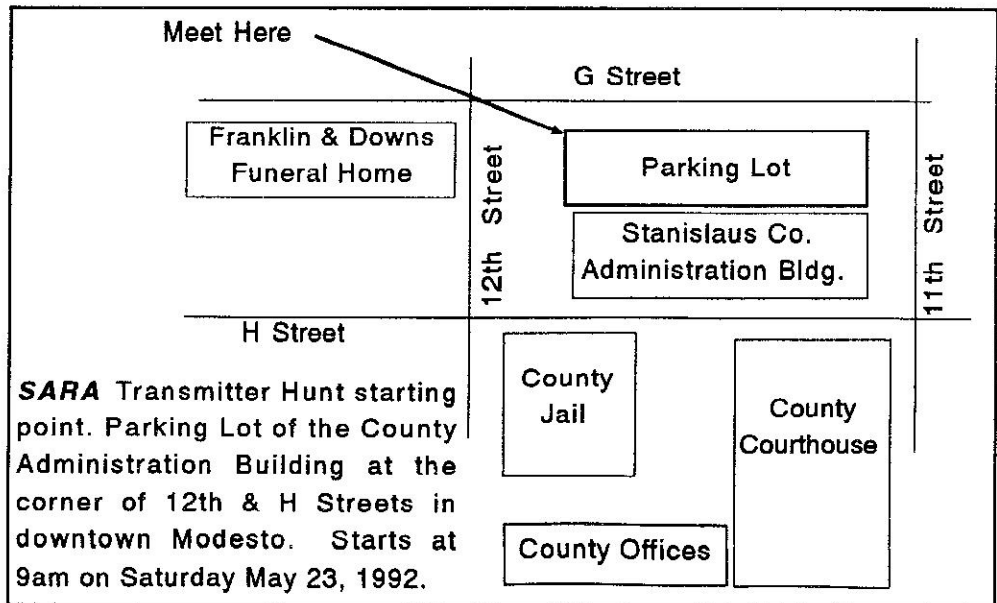
For those of you with equipment, you are sure to have a good time looking for the fox which will be hidden by Brad, KC6TDH.

The hunt begins promptly at 9 am when the transmitter is activated. All hunters and observers will meet at the Stanislaus County Administration

Building at 12 and H streets in downtown Modesto (see map below).

Brad will be there at 8 am to take the \$1.00 per team entry fee until 9 am. The entry fee will make up the prize to be collected by the winner(s) who find the transmitter first. There will be a message taped to the transmitter and the finders must transmit the message on 145.39 MHz in order to be declared the winner. Everyone is welcome!

Remember, you don't have to have equipment to participate and have fun. You may like it so much that you may acquire equipment for the next hunt and really have some fun. Remember the date is Saturday May 23, 1992.



**SARA  
1992 FUND RAISER  
GRAND PRIZE  
ZENITH CAMCORDER  
OR  
\$500.00 CASH  
DRAWING TO BE HELD  
DURING FIELD DAY ON  
JUNE 27, 1992  
\$1.00 DONATION PER  
TICKET.**



# Calendar



- May 1-2-3, 1992 .....Fresno Hamfest .....3 Days
- May 9, 1992 .....Turlock ARC Auction .....10 am  
Turlock High School Cafeteria
- May 19, 1992 .....SARA Monthly Meeting .....730 pm
- May 23, 1992 .....SARA T-Hunt.....TBA  
In Modesto
- Jun 16, 1992 .....SARA Monthly Meeting .....730 pm
- Jun 27-28, 1992 .....SARA Field Day.....2 Days  
16519 Sycamore Ave. Paterson

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 most welcome. SARA is an ARRL Affiliated Club and is affiliated with Stanislaus County and the City of Modesto RACES.

The club owns and operates three FM repeaters using the club station call of WD6EJF. Frequencies are 145.39MHz, 224.14 MHz & 440.225MHz. The club's digipeaters, WD6EJF-1, operates on 145.79 MHz and WD6EJF-2 operates on 28.103 MHz. All repeaters and the digipeaters are located on Mt. Oso, 18 miles SW of Modesto at an elevation of 3400 feet in the Coast Range mountains. SARA conducts informational nets each Thursday evening at 8 pm on the 2M and 220 repeaters.

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To:

**Next SARA Meeting is May 19. 1992  
at 730 pm & You're Invited!**