

# The PROPAGATOR

January, 2004

The Monthly Newsletter of South Orange Amateur Radio Association

## Gordon West Program



On Monday, Jan 26 (the first SOARA meeting of the new year), **Gordon West** will be the featured speaker. West will present a program on High Frequency (HF) mobile and portable operation during emergencies.

**LOTS OF LIVE EQUIPMENT AND HF ANTENNAS!**

West will offer tips on how hams may better serve emergency agencies such as those in the recent wildfires. Gordo will bring selected door prizes also. You bring your best questions!

□

## Recruitment Contest

As of today 4 new members have been recruited by club members. Two have already been approved by the Board(\*) and the others will be reviewed soon. The recruiters will be eligible for a drawing in February. Please talk it up so we can get a few more recruits by then. New members:

James Iacono WA9FIJ\* . . . . . wb6t  
 Brian Stankewitsch KE6ZTL\* . . . . . kr6ce  
 Fred Ruckster WB6IIQ . . . . . k6rbs  
 David Wallick KD6GLN . . . . . wb6t

This brings the "pot" to \$100 so it would be great to have a few more by February.  
 Jim, K6EEE, Membership Director □

## Transmitter Hunting Comes To SOARA

SOARA has initiated an informal transmitter hunting activity on the first Sunday of each month. Early this month, two teams hunted and located the transmitter that had been hidden in Ladera Canyon at one of the entrances to the Tijeras Golf Club.

Team **A** comprised of Richard (K6RBS) and Dave (KG6QCI) located the transmitter at approximately 3:00 PM, while Team **B** comprised of Brian (NJ6N) and Steve (KG6OYK) found it about 15 minutes later.

Interestingly, the teams accidentally located me first and lost some time assuming the hidden transmitter was nearby. In fact, it was roughly ¼ mile away.

SOARA plans to continue the activity on the first Sunday of the month as long as there is continued interest. Initially, I will hide the "T" but as the hunters gain experience, we'll let the winner hide the subsequent hunt.

The next hunt is planned for Sunday morning or afternoon, February 1 (details at the meeting), and will last for about 3 hours. The following information will guide the next hunt. I may revise the rules as the days get longer and as the hunters get more skilled.

**Hunt Frequency:** 146.565 MHz.

**Boundary Area:** South Orange County not further north than state route 55.

**Coordination Frequency:** 445.660 MHz (EchoLink will be disabled before the start of the hunt). Announcements will be made on the coordination frequency and occasionally on the T-hunt frequency. The hunt-master can be contacted for information (which he may or may not offer) on the coordination frequency. You can use this frequency to help each other; or lie to each other. SOARA members can monitor the action.

**Hunt Times:** Start Time = 1300

Clues (if requested) = 1500  
 End Time = 1600

### Hidden Transmitter Characteristics:

Sixty (60) seconds of a repeating eight tone sequence followed by the CWID "KG6GI/T 1". The transmitter then goes off the air for the remainder of the cycle. The sequence repeats every 75 seconds. Power level ~ 500 milliwatt.

### Things you may want to bring along:

1. Directional antenna w/ radio
2. Separate communications radio
3. Attenuator (> 80 dB)
4. Magnetic Compass (Declination = 15 degrees east in this area)
5. South County map
6. Protractor or plotter
7. Straight edge
8. Pencil, pen or marker for drawing vectors on map.
9. Thomas Brothers map book (it will be used for clues)

### At the Hidden Transmitter:

When the hidden transmitter is located, you will find a plastic envelope containing a spiral notebook and a sheet of numbered tickets. Note your call and time of arrival in the notebook. Tear off the lowest numbered ticket and note your call and the time on the ticket. The ticket includes a special frequency to contact me for further instructions.

Anyone is welcome to participate. I will try to be around the house before the hunt if anyone needs to borrow any equipment.

### Reference:

You might want to consult the following comprehensive book on the subject of transmitter hunting:

*Transmitter Hunting, Radio Direction Finding Simplified*, by Joseph D. Moell, KØOV, and Thomas N. Curlee, WB6UZZ □





## The Way I See It: Understanding Radio Theory Without Math.

It has been observed that the only thing that doesn't change is that things are always changing. Surely this is true with regard to anything technical. Amateur Radio is certainly a technical hobby, and we look forward with anticipation to the release of new and feature rich rigs each year. New radios represent a welcome change.

Many of you will remember when the radical change of establishing a no-code license class was the subject of hot debate. Then just a few years ago we were faced with "restructuring" and a debate about reducing the code requirements for some license classes. Although there was much discussion about the effects that the changes would bring, it all settled down after a while.

But we all knew that it was only a matter of time until more changes would take place. It looks as if those changes are on the horizon. Thanks to Paul, NZ1M, for bringing this news item to my attention.

*From ARRL Headquarters  
Newington CT January 20, 2004  
To all radio amateurs:*

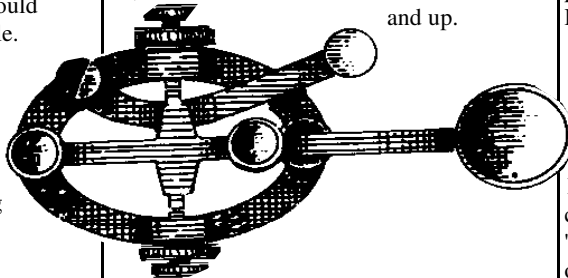
### ARRL to Propose New Entry-Level License, Code-Free HF Access

The ARRL will ask the FCC to create a new entry-level Amateur Radio license that would include HF phone privileges without requiring a Morse code test. The League also will propose consolidating all current licensees into three classes, retaining the Element 1 Morse requirement--now 5 WPM--only for the highest class. The ARRL Board of Directors overwhelmingly approved the plan January 16, during its Annual Meeting in Windsor, Connecticut. The proposals--developed by the ARRL Executive Committee following a Board instruction last July--are in response to changes made in Article 25 of the international Radio Regulations at World Radiocommunication Conference 2003 (WRC-03). They would continue a process of streamlining the

amateur licensing structure that the FCC began more than five years ago but left unfinished in the Amateur Service license restructuring Report and Order (WT 98-143) that went into effect April 15, 2000.

"Change in the Amateur Radio Service in the US, especially license requirements and even more so when Morse is involved, has always been emotional," said ARRL First Vice President Joel Harrison, W5ZN, in presenting the Executive Committee's recommendations. "In fact, without a doubt, Morse is Amateur Radio's religious debate."

The entry-level license class--being called "Novice" for now--would require a 25-question written exam. It would offer limited HF CW/data and phone/image privileges on 80, 40, 15 and 10 meters as well as VHF and UHF privileges on 6 and 2 meters and on 222-225 and 430-450 MHz. Power output would be restricted to 100 W on 80, 40, and 15 meters and to 50 W on 10 meters and up.

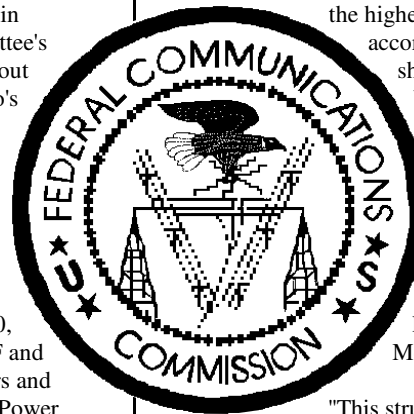


"The Board sought to achieve balance in giving new Novice licensees the opportunity to sample a wider range of Amateur Radio activity than is available to current Technicians while retaining a motivation to upgrade," said ARRL CEO David Sumner, K1ZZ. Under the ARRL plan, current Novice licensees--now the smallest and least active group of radio amateurs--would be grandfathered to the new entry-level class without further testing.

The middle group of licensees--Technician, Tech Plus (Technician with Element 1 credit) and General--would be merged into a new General license that also would not require a Morse examination. Current Technician and Tech Plus license holders automatically would gain current General class privileges without additional testing. The current Element 3 General examination would remain in place for new applicants.

The Board indicated that it saw no

compelling reason to change the Amateur Extra class license requirements. The ARRL plan calls on the FCC to combine the current Advanced and Amateur Extra class licensees into Amateur Extra because the technical level of the exams passed by these licensees is very similar. New applicants for Extra would have to pass a 5 WPM Morse code examination, but the written exam would stay the same. Sumner said the Board felt that the highest level of accomplishment should include basic Morse capability. Current Novice, Tech Plus and General licensees would receive lifetime 5 WPM Morse credit.



"This structure provides a true entry-level license with HF privileges to promote growth in the Amateur Service," Harrison said.

Among other advantages, Sumner said the plan would allow new Novices to participate in HF SSB emergency nets on 75 and 40 meters as well as on the top 100 kHz of 15 meters. "The new license also could get another name," Sumner said. "We're trying to recapture the magic of the old Novice license, but in a manner that's appropriate for the 21st century."

The overall proposed ARRL license restructuring plan would more smoothly integrate HF spectrum privileges across the three license classes and would incorporate the "Novice reforming" plan the League put forth nearly two years ago in a Petition for Rule Making (RM-10413). The FCC has not yet acted on the ARRL plan which would alter current HF subbands.

The ARRL license restructuring design calls for no changes in privileges for Extra and General class licensees on 160, 60, 30, 20, 17 or 12 meters. Novice licensees would have no access to those bands.

See "ARRL to Propose New Entry-Level License, Code-Free HF Access" on the ARRL Web site, [www.arrl.org/news/stories/2004/01/19/1/](http://www.arrl.org/news/stories/2004/01/19/1/), for the specific subband allocations ARRL is proposing for each class. □

Year 2004	Jan.	Feb.	Mar.	Apr.	May	Jun.	Jul.	Aug.	Sept.	Oct.	Nov.	Dec.
General Meeting 7:00 PM	26	23	15	19	17	21	19	16	20	18	15	No meeting
Program	WB6NOA	W6XD			Auction						Auction	
VEC Testing 5:30 PM	26	23	15	19	17	21	19	16	20	18	15	—
Propagator Deadline	18	15	7	11	9	13, 26	11	8	12	10	7	
Board Meeting	2/2	3/1	22	26	24	28	26	23	27	25	22	
ARRL Field Day						26/27						
SOARA picnic								2				
SOARA Holiday Party												7

### ON THE AIR

### Operating Tips by John Walker, AC7GK

As we know, cell phones depend on the alignment of various towers as they pass the signal along as we travel within the various "cells." If there were a large earthquake, flood or other disaster, there is a good chance that the towers would be knocked out of alignment and signals could not be relayed. Or the electricity would be cut off. Or, more likely, the channels would be so jammed up with calls that no one could get through. Or, even more likely, any private use would be preempted by governmental agencies so that official emergency units would be able to get through, similar to how non-RACES radio stations might be forced off the air in an emergency. □

But I recall an emergency operations drill that I conducted from a spot near my house on one of the hills surrounding Salt Lake City. I was able to coordinate the work of ham operators working with governmental agencies, utility companies, the Red Cross, offices of the Governor and the Mayor, the coroner, EMT's, Sheriff's units, fire people, and many more. I was using just simplex, since I had a view of the whole valley where these people were, and nothing could stop my signal from reaching them. Let's keep that in mind when we are tempted to let our radios gather dust since we have fancy cell phones. The radio can always get through. □

### Education

In 2003, SOARA hosted three Amateur Radio training classes, two Technician and one General. These classes would not have been possible without the generous time volunteered by SOARA members. I would like to thank Dale, W8RRV, Steve, KF6TVM, Ray, AE6H, Heiko, AD6OI, Mike, KF6HVO, and certainly not least SOARA's VE testing team for holding special test sessions. I would also like to congratulate all those who passed their tests! I'm sure, with the help and class suggestions from SOARA members, 2004 will be even more successful.

If you are interested in taking a class or would like to help with the classes please get in touch with Chad, KQ6TL, at [classes@soara.org](mailto:classes@soara.org). □

### Hamming on the Cheap

Scrounging gear to get on the air can be an expensive proposition unless you're a cheapskate like me. I wanted to have a home base, a mobile unit and a hand held. Everyone was chatting it up on 2 meters, and repeaters were everywhere; SOARA has 2 of them just waiting for your call, plus you can get in on the SOARA net every Tuesday night at 8PM or listen to the big boys discussing gear, contests - even when the space lab is going to fly over and you can SEE it!

Yup, you have to get on there with all 3, but how - other than spend a gazillion bucks?

Here's how: scamper down to H R O in Anaheim and get a Vertex VX-150. This is the heart of your system and is only about \$119, plus tax. Maybe you can scare up an old hand-held from one of the members even cheaper! Now you have your HT, next you need it to be mobile.

Get an IHMM270 compact magnetic mount antenna for only \$17, match some connectors to fit your radio to your antenna for about \$10, and now you're mobile and without drilling holes. For the home shack, can you solder copper pipe together? If so whip up a J-pole. You can get the info from the 2003

ARRL handbook on page 20.58. Total cost - about \$26 bucks. If you can't get the handbook, call AD6OI on your HT and say "Heiko, what's the deal with the J-pole?" He knows all about 'em. Now you don't have to stick this J-pole thing outside; it will work at just 5 feet off the ground inside.

Okay - so now you have all 3: an HT, a Mobile and a Shack. Of course, you're doing a lot of connecting and un-connecting of your antenna, and you are limited to the life of your battery, but you're on the air, cheap.

Dave "Cruiser" Seroski, KG6QCI  
Kilo Golf 6 Quite Cheap Individual □

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South Orange Amateur Radio Association  
P.O. Box 2545  
Mission Viejo, CA 92690



## Meeting: January 26, 2004 at 7:00 PM Gordon West, WB6NOA

☛ **SOARA** meets at the Mission Viejo Community Center, 26932 Veterans Way, Mission Viejo, the third Monday of every month at 7:00 PM. Changes to the meeting time or place are announced in this newsletter and on the 147.645 two-meter repeater.

☛ **License Exams:** Amateur License Exams are given prior to SOARA meetings. Exams are from 5:00 to 7:00 PM. Walk-in applicants are welcome. For information call Paul Levey, NZ1M, at 949-249-0121.

☛ **Contacting SOARA:** Questions about SOARA? Send e-mail to: [info@soara.org](mailto:info@soara.org), or leave a message at 949-249-1373.

☛ **Web Site:** SOARA maintains a web site with current club information. The URL is: <http://www.soara.org>.

☛ **Repeaters:** The SOARA 2-meter, 70 cm and 224.100 MHz repeaters are open to all licensed hams.

SOARA 2m — 147.645 – (110.9) Laguna Beach

SOARA 2m — 146.025 + (110.9) San Clemente

SOARA 2m — 145.240 – (110.9) Trabuco

SOARA 220 — 224.100 – (110.9) Laguna Beach

SOARA 440 — 445.660 – (110.9) Laguna Beach

The SOARA 220 and HROC 440 repeaters are shared by members of both clubs. Each machine is subject to the operating rules of its respective club. Call KG6GI for details.

SOARA 220 — 224.640 – (123.0) Santiago Pk. (C)

HROC 440 — 447.180 – (131.8) Santiago Pk. (C)

☛ **Nets:** SOARA 2 m repeater open net is held Tuesday 8:00 PM  
40 meter HF net (7.268 MHz +/- for QRM), Sunday 7:30 AM.

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