



# SEA PAC



## ARRL Northwest Division Ham Convention



## Seaside Convention Center Seaside, Oregon

**JUNE 14 & 15, 1997**

Presented by  
Oregon Tualatin  
Valley Amateur  
Radio Club



# Young Ladies' Radio League

Since 1939, the oldest international  
organization committed to encouraging  
women in Amateur Radio.

*Come by & say "Hi!"  
We'd love to meet you!*

*Everybody's welcome!  
Free drawings!*



**YLS United Around the World  
in Friendship through Amateur Radio.  
Join Us!!**

For further information contact YLRL Membership Chairman

**Phyllis Douglas, K7SEC — (520) 298-6450**

701 N. Camino Del Cordoniz, Tucson, AZ 85748  
or YLRL President

**Marti Brutcher, N6XDS — (503) 684-YLRL**

<http://home.sprynet.com/sprynet/thedunns/ylrlhome.htm>

## Welcome to SeaPac 1997

**T**he *SeaPac Ham Convention* is sponsored by the Oregon Tualatin Valley Amateur Radio Club.

Co-Sponsors include Clark County Amateur Radio Club, Hoodview Amateur Radio Club, Sunset Empire Amateur Radio Club, and TEchnology RAC (formerly Tektronix Employees RAC).

The Sponsors wish to thank all volunteers for their assistance and contributions to the convention. We hope everyone will enjoy themselves to the fullest and be a part in making this event a success.

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## VE Testing

Testing is at Our Saviour's Lutheran Church across from the Convention Center. One session only will be offered at 9:00AM on Saturday, June 14, 1997

**Testing will be by pre-registration only. No walk-ins!**

## F.A.R.S. - Fox Hunt

**F.A.R.S. Fox Hunting Seminar on Saturday Morning  
Hands-on Demo at 1:00pm - - Meet in the Lobby**

## Kids Krayons & Kartoons

### Sea Mist Room

**Saturday, June 14 - 9:00 AM to 5:00 PM**

**Sunday, June 15 - 9:00 AM to 2:00 PM**

For children 5 - 12 years old. Separate arrangements can be made to care for younger children at a nominal cost.

**Talk-in Station: 146.660 (-600) MHz**

# Convention Schedule

## *Friday, June 13*

Registration.....	11:00AM- 8:00PM
Exhibitor & Flea Market Setup ( <b>SETUP ONLY</b> ).....	11:00AM-9:00PM
<b>ARRL/AMSAT Amateur Satellite Workshop (Conv Center) 2:00PM - 7:00PM</b>	
Ladies Hospitality Suite (Aloha Inn, Room 125).....	5:00PM - 8:30PM

## *Saturday, June 14*

Exhibitor & Flea Market Setup ( <b>SETUP ONLY</b> ) .....	7:30AM - 9:00AM
Registration .....	8:00AM - 4:30PM
Exhibits & Flea Market Open to Public .....	9:00AM - 4:30PM
Snack Bar .....	9:00AM - 4:30PM
Ladies Hospitality Suite (Aloha Inn Room 125) .....	9:00AM - 4:30PM
Kids, Krayons & Kartoons (Sea Mist Room) .....	9:00AM - 5:00PM
VE Exams (Pre-registered Only: Our Saviour's Lutheran Church) .....	9:00AM - 12:00N
Seminars (Seaside & Riverview Rooms) .....	9:30AM - 5:00PM
YLRL Luncheon & Program (Oceanview: Tillamook Head ) .....	11:30AM - 1:30PM
QCWA Luncheon & Program (Oceanview: Lewis & Clark I) ...	12:00N - 2:00PM
Pre-Banquet Happy Hour .....	6:30PM - 7:15PM
Banquet .....	7:15PM - 9:30PM

## *Sunday, June 15*

Registration .....	8:30AM - 12:00N
Exhibits & Flea Market .....	9:00AM -12:00PM
Ladies Hospitality Suite (Aloha Inn Room 125) .....	9:00AM - 12:00N
Kids, Krayons & Kartoons (Sea Mist Room) .....	9:00AM - 2:00PM
Seminars (Seaside & Riverview Rooms) .....	9:30AM - 12:00N
Snack Bar .....	9:30AM - 2:00PM
Grand Awards .....	1:00PM - 2:00PM
Convention Closes .....	2:00PM

# Exhibitor List

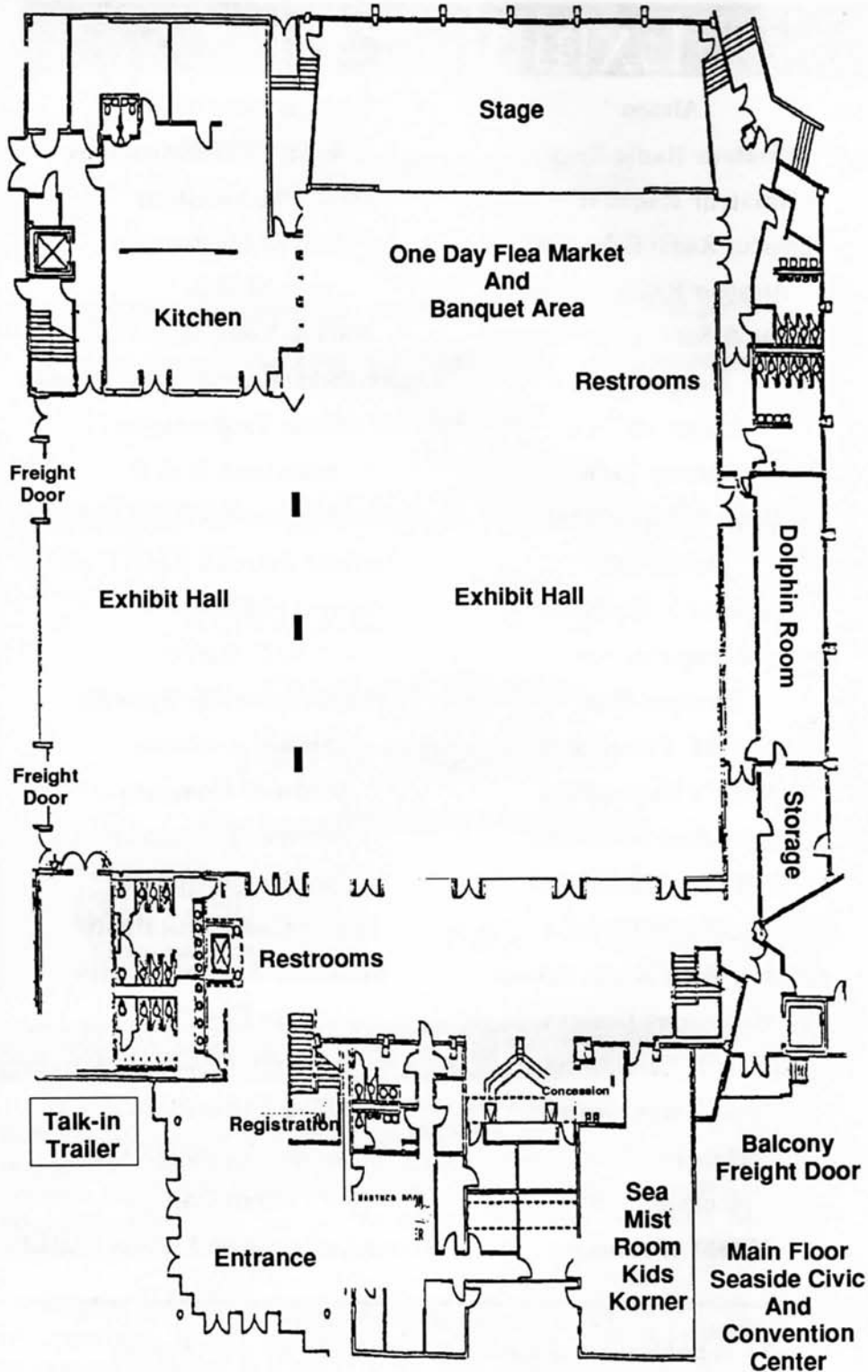
<b>Alinco</b>	<b>Ideal Industrial Supplies</b>
<b>Amateur Radio Trader</b>	<b>Kenwood Communications</b>
<b>Amateur Radio World</b>	<b>KLM Antennas</b>
Amateur Radio Relay Group	<b>Larsen Electronics</b>
Amateur Radio Supply	<b>MARS</b>
Antenna & Satellite Technology	<b>Nuts &amp; Volts Magazine</b>
<b>Badge Boys</b>	Oregon.Packet Experimenters.Network.
<b>Badges "R" Us</b>	<b>Oasis Technologies</b>
<b>Battery Tech</b>	<b>Omnitech R &amp; D</b>
<b>Bearcat Radio Club</b>	Phantoms Amateur Radio Group
<b>Books Etc.</b>	Portland Amateur Radio Club
<b>Thomas J. Bruckner</b>	<b>QCWA</b>
<b>Computer Nut</b>	R. C. Kontes
<b>Cynthia Wall</b>	<b>Sciesis Scientific Systems</b>
<b>DC Power</b>	<b>Smiley Antennas</b>
<b>Dilley's Enterprises</b>	<b>Solder-It Company</b>
<b>Diversified Unlimited</b>	Somerset Electronics
<b>E. H. Yost/Mr. Nicad</b>	Sparkle Enterprises
<b>FARS</b>	<b>Sports Communications</b>
<b>Gordon West Radio School</b>	<b>Standard Amateur Radio</b>
<b>H. Stewart Designs</b>	<b>Star Fire Tec</b>
<b>Ham &amp; Electronics</b>	<b>Startek</b>
<b>Ham Radio Outlet</b>	<b>The Radio Place</b>
<b>Hats for Hams</b>	Willamette Valley DX Club
<b>Hoodview ARC</b>	<b>Yaesu USA</b>
<b>ICOM of America</b>	Young Ladies Radio League(YLRL)

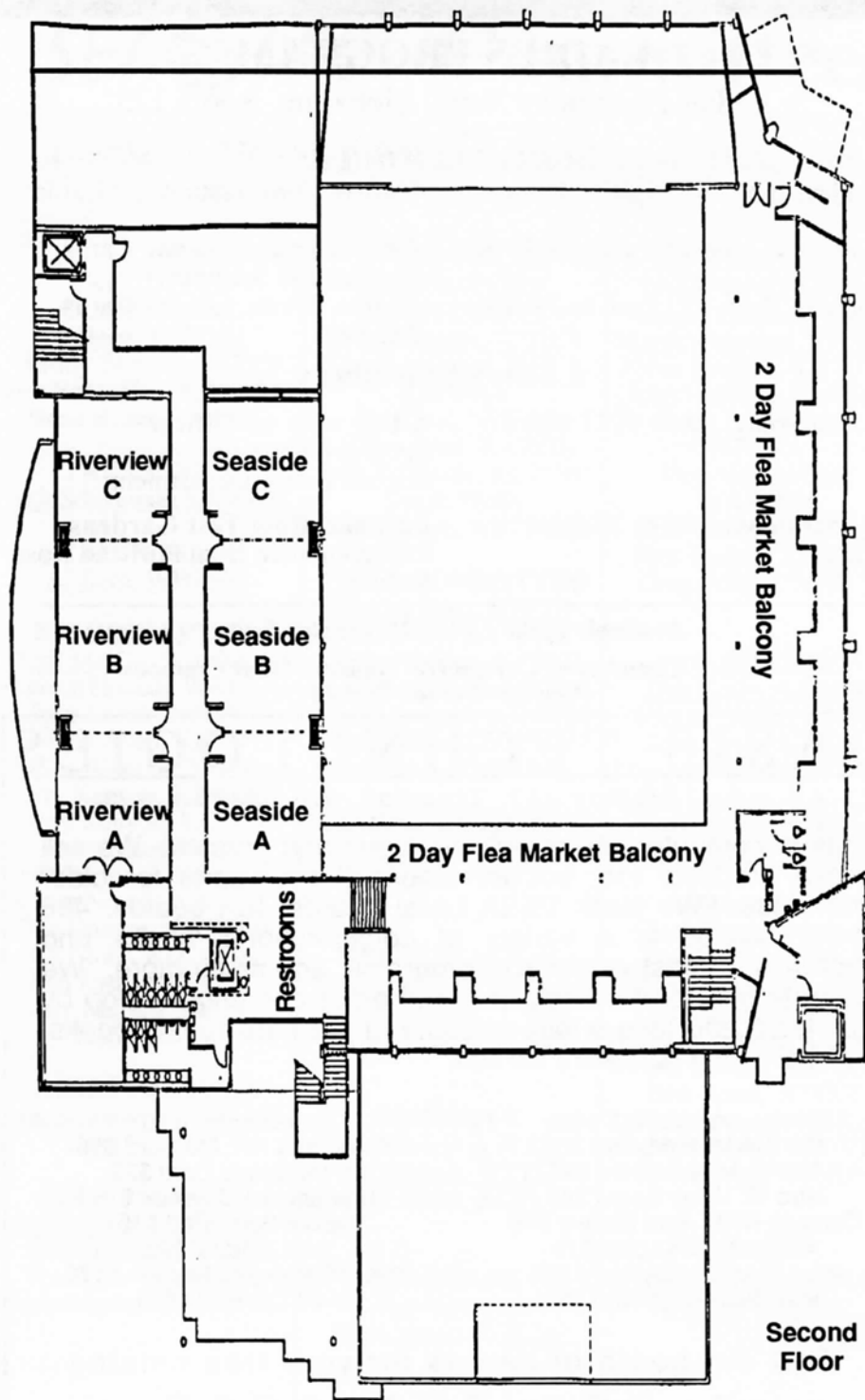
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**Prize Donors shown in Bold**

*Due to publication deadlines we apologize for any changes.*

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**Second  
Floor**

## LADIES PROGRAM

Ladies Hospitality Suite, Aloha Inn, Room 125

### SCHEDULED HOURS

Friday, June 13	5pm to 8:30pm	Coffee, Conversation and Cards
Saturday, June 14	9 am to 4:30 pm	Coffee, Treats, Games, Cards, Puzzles and Seminars
Sunday, June 15	9 am to 12 noon	Coffee, Treats, Games, Cards, Puzzles

### Ladies Seminars

Saturday 10:00 to 11:00am	<b>A Day with an Officer</b> Sgt Dave Bergquist Seaside Police Department
Saturday 2:00 to 3:00 pm	<b>Portland Rose Test Gardens</b> Representative from Portland Rose Society

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Available at the Ladies Hospitality Suite

Seaside Chamber of Commerce Treasure Hunt Coupons  
(One per Person Please)

## OASIS TECHNOLOGIES

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Lots of computer places sell the latest and greatest. We sell these products too, but we also sell new parts for older machines. We stock VESA Local boards, ISA boards, 486 motherboards in a variety of configurations, books and manuals for past versions of programs, and much more. We operate both a storefront and mail order operation. Drop by our table and take a look at some of the hard to find books, software, and hardware we sell.

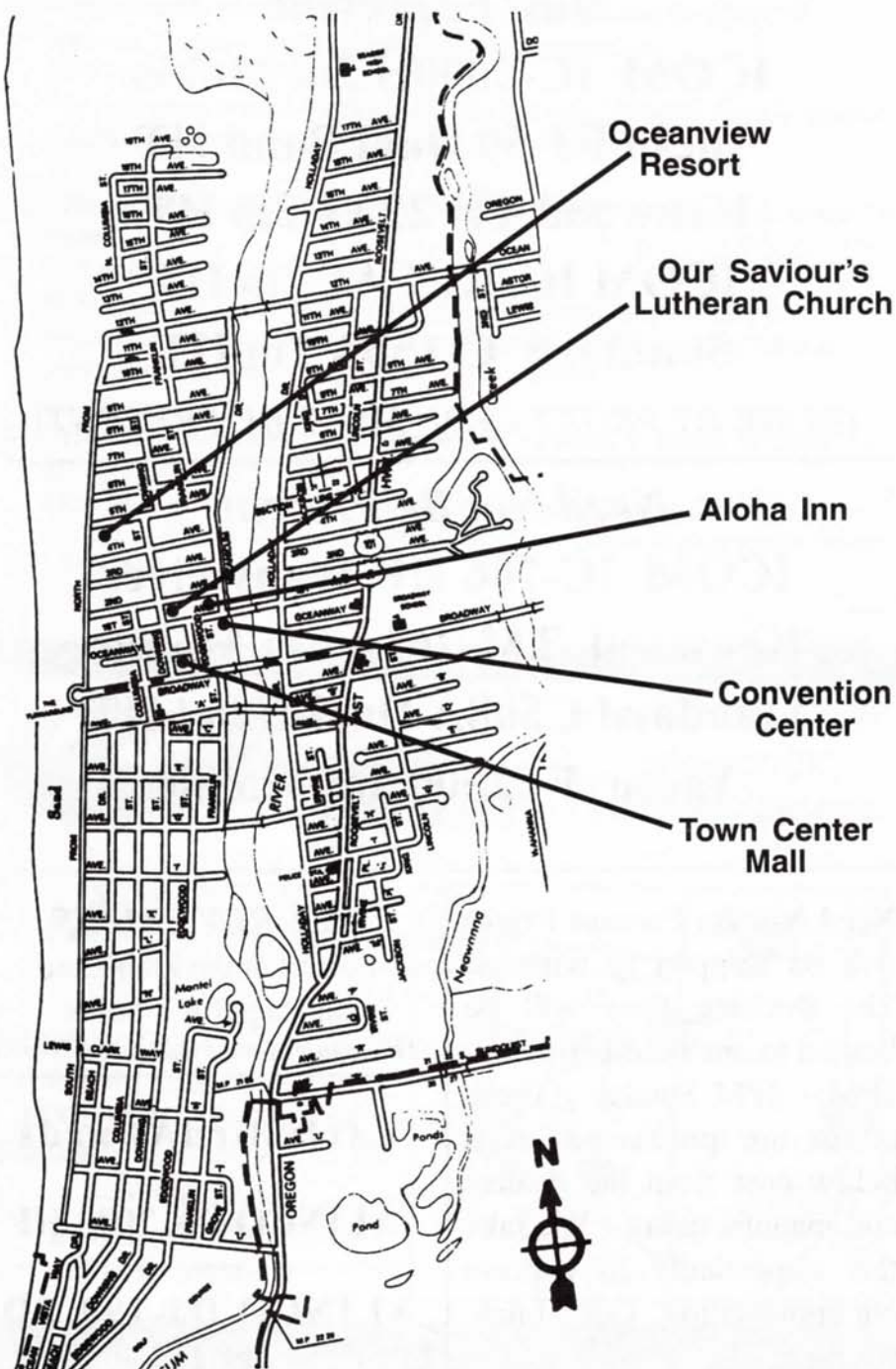
Books - most at 1/2 price  
486 ISA Motherboard \$30  
486 VL Motherboard \$45  
Miro VL Video Board \$40  
Compaq NiMh Aero Battery \$75  
486SX33 CPU chip \$10  
Acer Emerald Keyboard \$20  
Acer Black Keyboard \$20

Software from \$5  
VL Video & IDE I/O Card \$55  
16 Bit Sound Card \$25  
Thunderstick Joystick \$15  
Dexxa GamePad \$15  
14.4 Modem \$25  
56K US Robotics Modem \$170  
16X CD-ROM \$99

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# Seaside Area Map



# Prize Drawing Information

## *Must be present*

**ICOM IC-2000H 2m Mobile**

**Yaesu FT 50 Dual Band HT**

**Kenwood TH 22AT 2m HT**

**ICOM IC 2GX AT 2m HT**

**Standard C-156A 2m HT**

**(NONE BY PROXY - YOU MUST BE PRESENT)**

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## *Need Not Be Present*

**ICOM IC-706 HF Transceiver**

**Kenwood TM-261A 2m Mobile**

**Standard C508A Dual Band HT**

**Yaesu FT2500 2m Mobile**

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### **Need Not Be Present Prizes**

will be shipped to winners. The drawing time will be limited to one hour between 1PM - 2PM Sunday. These prizes are purchased at or below cost from the dealers and manufacturers. We take this opportunity to express our appreciation. Good Luck.

### ***HOURLY PRIZES***

Posted in the lobby and  
on stage for 2 hours

*Those unclaimed will be re-issued*

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### **Early Bird Awards**

**ALINCO DX 70T HF**

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**ALINCO DJ-190 TD  
2m HT**

# F.A.R.S. - FOX HUNT SEMINAR & DEMO

The Frenship Amateur Radio Society will sponsor a fox hunting seminar on Saturday morning:

**(9) "International Amateur Radio Direction Finding"**  
**Rick Williams VE7ASR and G.D. (Joe) Young VE7BFK.**

The seminar will be followed by a hands-on demonstration after lunch. Please meet in the lobby at 1:00pm. The presentation will be conducted according to the rules used in international amateur radio competitions.

Several hidden transmitters (foxes) are used with a brief transmission by each fox in random order. This makes the fox much harder to locate than a single fox who transmits continuously.

The F.A.R.S. group from Victoria, B.C. Canada is very active in fox hunting and will explain IARU rules for the hunt and what frequencies and transmission modes are used, terrain and distances expected and which techniques work to find the fox. Transmitters and direction finding equipment will be on hand for examination.

---



HAVE YOU HEARD  
ABOUT THE  
CASCADIA INTERTIE ?

VISIT THE ARRG BOOTH  
FOR MORE DETAILS...

# Seminar

**Riverview A**

**Riverview B**

**Riverview C**

## *Friday Afternoon, June 13*

**2:00  
PM  
to  
7:00  
PM**

\*\*\*\*\*  
\* **SEE PAGES 12 - 18 FOR SEMINAR TOPIC DESCRIPTIONS** \*  
\*\*\*\*\*

## *Saturday Morning, June 14*

**9:30  
AM**

**(2) Introduction to  
Ham Radio**

Wayne Irwin, W1KI

**(3) Efficient and Economic Reduced-size  
Antennas for the Low Bands"**

Rudy Severns N6LF

**11:00  
AM**

**(7) Live Ham Radio  
Demo**

Wayne Irwin W1KI,

**(8) Computer Antenna Analysis**

Roy Lewallen W7EL

## *Saturday Afternoon, June 14*

**2:00  
PM**

**(12) Electronic  
Construction -  
Methods, Tools, and  
Materials**

**(13) Transmission  
Lines and Losses at HF**

Ed Farmer AA6ZM

**(14) ARRL Forum**  
Mary Lou Brown NM7N,  
Director, ARRL NW Div  
Stephen Mendelsohn  
W2ML, 1st Vice Pres.,  
ARRL; other League

**3:45  
PM**

**(17) Assembling an HF  
Station**

Dale Hunt WB6BYU

**(18) Near Vertical  
Incidence Skywave  
Communications**

Ed Farmer AA6ZM

**(19) AMSAT Phase III  
D: Super Satellite**

Ed Krome K9EK

## *Sunday Morning, June 15*

**9:15  
AM**

**(22) Antennas for the  
Uninitiated**

Marshall D. Johnson Sr.  
KK7CW,

**(23) Heard Island  
1997 DXpedition - The  
Inside Story**

Michael A. Mraz N6MZ

**(24) HF Power  
Amplifier Design  
Simplified**

Patrick E. Buller  
W7RQT

**10:45  
AM**

**(28) Lightning  
Protection and  
Grounding Systems**

Steve Morris K7LXC

**(29) The Global Positioning System**

Gordon West WB6NOA

# Schedule

**Seaside A**

**Seaside B**

**Seaside C**

## *Friday Afternoon, June 13*

**(1) Technical Workshop: "Amateur Satellites Today and Tomorrow"**  
sponsored by AMSAT and ARRL

Ed Krome K9EK • Art Coulombe W7HGK • Cliff Buttschardt K7RR

## *Saturday Morning, June 14*

**(4) Do We Need to Change the License Structure? The ARRL Proposal**

Stephen Mendelsohn W2ML

**(5) Beginning Packet: ARES & RACES Packet Standards**

Ken Wilhelmi N7QQU,

**(6) Learning Experiences from an Actual Emergency**

Allen Vandewarker  
KE6HML

**(9) International Amateur Radio Direction Finding**

Rick Williams VE7ASR,

**(10) Advanced Packet Radio**

Steve Stroh N8GNJ

**(11) A Ham Radio Station for Municipal Emergency Operations Centers**

Alvin Carlson KB7VHI  
Doug Jackson KB7RHF

## *Saturday Afternoon, June 14*

**(15) Amateur Radio and the Internet**

Al Rovner K7AR

**(16) Neighborhood Disaster Preparedness - A How-To Guide**

Ronald G. Kruml KB7JCP

**(20) Computer Remote Control of an Amateur Radio Station for DX and Contesting**

Garth Hitchens KG7GA

**(21) DFing for Search and Rescue**

Carl DiPaolo W7EXH\*

## *Sunday Morning, June 15*

**(25) Future Trends in HF Digital Communication**

Johan Forrer, PhD  
KC7WW

**(26) Advanced Packet Radio**

Steve Stroh N8GNJ

**(27) Ham Operators in Search and Rescue**

Tom Hyers KB7YLY

**(30) DSP Basics**

Clifford Uyeda KJ6HC

**(31) Beginning Packet: ARES & RACES Packet Standards**

Ken Wilhelmi N7QQU

**(32) An ARES-RACES Emergency Plan**

Allen Vandewarker  
KE6HML

# Seminar Topic Information

Our seminar program this year is one of the best ever! As usual, the presentations are in 5 topic "tracks": Beginner, Emergency Preparedness, Technical, Digital, and Organizational & General Interest.

There again is a technical workshop on Friday, on the topic of Amateur Satellites. In addition to the usual topics in the Beginner track, we've added a couple for those who know very little about the art and science of amateur radio - who "just came along for the ride". These seminars are by Wayne Irwin W1KI of the ARRL Headquarters staff, and occur first thing Saturday morning, in Riverview A. If you've wondered what attracts us to the hobby, attend these seminars. See the schedule on page 10 for the other topics.

In the General Interest area are two presentations which include live demonstrations, one on Amateur Radio and the Internet, and the other on Remote Control of an amateur Station - this one is in Puget Sound, and contacts will be made via telephone line from Seaside! We are also fortunate to hear the ARRL First Vice President discuss the amateur licensing structure. We also have a presentation by a participant in the Heard Island DXpedition.

There are six seminars on Emergency Preparedness, eight on Technical topics, and the Beginning Packet, Advanced Packet, and HF Digital Communications in the Digital track. Two are on the subject of Hidden Transmitter Hunting; one is followed by an actual hunt in the Seaside area.

Please note that some of the session times have changed: Saturday afternoon sessions start at pm, allowing attendees a more leisurely lunch hour. Sunday morning's sessions start 15 minutes earlier, to give presenters a little more time.

## NOTE: PLEASE TURN OFF HAND-HELDS DURING SEMINARS

- (1) **"Workshop: Amateur Satellite Workshop (AMSAT)" • Ed Krome K9EK, Art Coulombe W7HGK, Cliff Buttschardt K7RR**  
*FRI 2 PM to 7 PM SEASIDE A, B, C*  
This workshop provides everything you need to "get on the birds". Learn about amateur satellites, orbits, tracking, modes, and equipment. Learn about NASA's SAREX missions and the Russian space station MIR.
- (2) **"Introduction to Ham Radio" • Wayne Irwin W1KI, Ass't to ARRL VEC Mgr.**  
*SAT 9:30 AM RIVERVIEW A*  
This is a seminar for those who "just came along for the ride", and know very little about the hobby of amateur radio. Hear how the technology got started and experience the romance of communicating without wires.

# Seminar Topic Information

- (3) "Efficient and Economic Reduced-size Antennas for the Low Bands" • Rudy Severns N6LF  
*SAT 9:30 AM RIVERVIEW B & C*  
Antennas for 80 and 160m can be very large. Fortunately for the ham with a small lot it is possible to reduce the size significantly, while keeping efficiency high and cost low, with proper design.
- (4) "Do We Need to Change the License Structure? The ARRL Proposal" • Stephen Mendelsohn W2ML  
*SAT 9:30 AM SEASIDE A*  
Is it time to change amateur radio privileges, or are we happy the way we are?
- (5) "Beginning Packet; ARES & RACES Packet Standards" • Ken Wilhelmi N7QQU, Oregon Section AEC-ASM  
*SAT 9:30 AM SEASIDE B*  
This seminar introduces the art of packet communication, with emphasis on the training and standards for emergency use with ARES and RACES.
- (6) "Learning Experiences from an Actual Emergency" • Allen Vandewarker KE6HML, EC, Lake Co. (CA) ARES  
*SAT 9:30 AM SEASIDE C*  
The speaker will recount the emergency, listing the mistakes made, how to effect rumor control, the need for proper documentation, and proper message handling.

## Antennas & Accessories including



### THE BIG DK-DX

Don Johnson, W6AAQ's  
3.5 -- 30 MHz mobile antenna

*manufactured by:*

*H. Stewart Designs*

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Oregon City, OR 97045

See **Worldradio**, Oct 1994 issue

*H. Stewart Designs* (503) 654-3350

# Seminar Topic Information

- (7) **"Live Ham Radio Demo" • Wayne Irwin W1KI, Ass't to ARRL VEC Mgr.**  
*SAT 11:00 AM RIVERVIEW A*  
This is a continuation of Seminar #2 by Wayne, also for those with little knowledge of the hobby. He will demonstrate how communication is accomplished by "wireless".
- (8) **"Computer Antenna Analysis" • Roy Lewallen W7EL**  
*SAT 11:00 AM RIVERVIEW B & C*  
Learn what today's computer antenna analysis programs can - and can't - do for you.
- (9) **"International Amateur Radio Direction Finding" • Rick Williams VE7ASR, G.D. (Joe) Young VE7BFK**  
*SAT 11:00 AM SEASIDE A*  
An overview of transmitter location with 2m and 80m directional receiving equipment. Several examples of suitable receiving and transmitting equipment will be shown and described. International competitions will be described. A practice hunt will be held at 1 PM.
- (10) **"Advanced Packet Radio" • Steve Stroh N8GNJ**  
*SAT 11:00 AM SEASIDE B*  
A discussion of some advanced packet radio trends - spread spectrum in amateur radio, a 56K repeater project in the Seattle area, the obsolescence of amateur radio, and the usual topics of TCP/IP, LINUX, Internet, etc.
- (11) **"A Ham Radio Station for Municipal Emergency Operations Centers"**  
**•Alvin Carlson KB7VHI, Doug Jackson KB7RHF, Co-chairs, ACERT**  
*SAT 11:00 AM SEASIDE C*  
Pre-positioning amateur radio equipment at an EOC speeds the response time and increases the number of operators who can respond. We will describe the implementation of two amateur radio stations designed to support the Beaverton EOC and Tualatin Valley Fire & Rescue in Washington County, OR.

## \*\*\* Portland Ham Fair \*\*\*

**September 20, 1997**

**9am -5pm**

**Collectors' Mkt.**

**N. Vancouver & M.L.K. Blvd**

**\$5 pre reg( \$6 at door) Tbls \$12( 1st) \$10(2nd-5th) \$8(>6)**

**over 350 tables of Flea Market available**

**hourly drawings**

**large clean facility with plenty of parking and on site resturant**

**for info visit Hoodview booth or call Ed N7TL (503) 257-4822**

# Seminar Topic Information

- (12) **"Electronic Construction - Methods, Tools, and Materials" • Emerson Hoyt WX7E, Dir of Engrg., Hoyt Instrument Lab.**  
*SAT 2:00 PM RIVERVIEW A*  
Various methods of electronic construction are discussed. Requisite tools and materials are described, with color slides of each. Many physical samples will be on display.
- (13) **"Transmission Lines and Losses at HF" • Ed Farmer AA6ZM**  
*SAT 2:00 PM RIVERVIEW B*  
A fast, no-math trip through transmission line theory discloses some ways to optimize HF antenna performance. (This is the "long" version of the article in June QST.)
- (14) **"ARRL Forum" • Mary Lou Brown NM7N, Director, ARRL Northwest Division; Stephen Mendelsohn W2ML, 1st Vice Pres., ARRL; other League officials.**  
*SAT 2:00 PM RIVERVIEW C*  
A discussion of the major issues facing amateur radio today. Here's an opportunity to voice your concerns with your Director, Vice Director, and Section Managers, as well as the League 1st Vice President.
- (15) **"Amateur Radio and the Internet" • Al Rovner K7AR**  
*SAT 2:00 PM SEASIDE A & B*  
An introduction to the Internet, and Amateur Radio-related resources on the Internet. This seminar is intended for computer beginners and novices.
- (16) **"Neighborhood Disaster Preparedness - A How-To Guide" • Ronald G. Kruml KB7JCP, Community Disaster Educator, Redmond (WA) Fire Dept.**  
*SAT 2:00 PM SEASIDE C*  
Learn how to organize your neighbors into teams that will allow rapid response to disaster situations. A step-by-step process will be presented along with program handouts.

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Pat - KB7VBY, Charles - KB7ZPD, Rick - N7XKP, Nancy - N7UTH, Bill - K7EFB, Jerry - KC7JAM

# Seminar Topic Information

**(17) "Assembling an HF Station" • Dale Hunt WB6BYU**

*SAT 3:45 PM RIVERVIEW A*

HF operation will get even more exciting as we enter the new sunspot cycle. This will be a practical demonstration of rigs, antennas and accessories to help the newcomer get in on the fun.

**(18) "Near Vertical Incidence Skywave Communications" • Ed Farmer AA6ZM**

*SAT 3:45 PM RIVERVIEW B*

A powerful tool in military and emergency HF Radio Communications. NVIS is easy to achieve with proper frequency selection and antenna design. (This is the "long" version of the Jan. 96 QST article and the "short" version of the New World Radio Book.)

**(19) "AMSAT Phase III D: Super Satellite" • Ed Krome K9EK**

*SAT 3:45 PM RIVERVIEW C*

Phase III D (scheduled for September '97 launch) is a high elliptical orbit satellite that offers communications from 29 MHz through 24 GHz. The program will address the satellite, its orbit, communications, and groundstation requirements.

**(20) "Computer Remote Control of an Amateur Radio Station for DX and Contesting" • Garth Hitchens KG7GA, Engineer, Microsoft**

*SAT 3:45 PM SEASIDE A & B*

Over the past four years I have experimented with various methods of remotely controlling amateur radio stations via radio and telephone links. I will present what I've learned and give a live demonstration of a fully contest-capable, computer-controlled remote station in the Seattle area.

**(21) "DFing for Search and Rescue" • Carl DiPaolo W7EXH, ELT Team Leader; State SAR Coordinator**

*SAT 3:45 PM SEASIDE C*

Whether for Search and Rescue or malicious interference, you can help. This seminar will deal with the basics and the politics of direction finding.

## \*\*\* Portland Ham Fair \*\*\*

**September 20, 1997**

**9am -5pm**

**Collectors' Mkt.**

**N. Vancouver & M.L.K. Blvd**

**\$5 pre reg( \$6 at door) Tbls \$12( 1st) \$10(2nd-5th) \$8(>6)**

**over 350 tables of Flea Market available**

**hourly drawings**

**large clean facility with plenty of parking and on site resturant**

**for info visit Hoodview booth or call Ed N7TL (503) 257-4822**

# Seminar Topic Information

- (22) "Antennas for the Uninitiated" • Marshall D. Johnson Sr. KK7CW,  
Antenna Designer, Pacific Evergreen Communications  
*SUN 9:15 AM RIVERVIEW A*  
The truth about how an RF radiator works and why. No more antenna voodoo!  
Take home valuable ideas for antennas for your station.
- (23) "Heard Island 1997 DXpedition - The Inside Story" • Michael A. Mraz  
N6MZ  
*SUN 9:15 AM RIVERVIEW B*  
N6MZ will discuss the highly successful 1997 Heard Island DX-pedition, of  
which he was a team member. The presentation includes many pictures not  
seen before, taken by the expedition's team members.
- (24) "HF Power Amplifier Design Simplified" • Patrick E. Buller W7RQT  
*SUN 9:15 AM RIVERVIEW C*  
Methods of determining plate impedance, cathode matching, Pi and Pi-L tank  
circuits, tank Q, & construction shortcuts. The beginner or experienced builder  
will find this session useful.

## WORLDWIDE DISTRIBUTION



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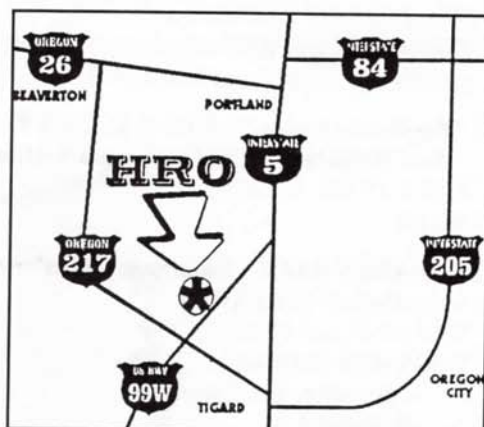
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# Seminar Topic Information

- (25) **"Future Trends in HF Digital Communication"** • Johan Forrer, PhD KC7WW  
*SUN 9:15 AM SEASIDE A*  
Part I: The ionosphere; its effects on HF digital communications; HF channel simulation for testing and evaluation.  
Part II: Contemporary HF modem design; high speed parallel and serial tone modems; application of coding theory.
- (26) **"Advanced Packet Radio" (REPEAT)** • Steve Stroh N8GNJ  
*SUN 10:45 AM SEASIDE B*  
See (10).
- (27) **"Ham Operators in Search and Rescue"** • Tom Hyers KB7YLY, EC, DCARES; SAR Coordinator, Oregon Emergency Management.  
*SUN 9:15 AM SEASIDE C*  
Ham Radio - the people and equipment: how the SAR community can use us; how amateur help can be accepted by the SAR Community.
- (28) **"Lightning Protection and Grounding Systems"** • Steve Morris K7LXC, owner, Tower Tech  
*SUN 10:45 AM RIVERVIEW A*  
What does a good ground system consist of? A lightning strike or transient surge can cause lots of damage to electronic equipment. You'll learn plenty of valuable information.
- (29) **"The Global Positioning System"** • Gordon West WB6NOA, Pres., Radio School, Inc.  
*SUN 10:45 AM RIVERVIEW B & C*  
Learn how GPS (Global Positioning System) works, with a live demonstration. See how important GPS is to ham operators in the field or at home.
- (30) **"DSP Basics"** • Clifford Uyeda KJ6HC, Customer Care Rep., Kenwood Corp.  
*SUN 10:45 AM SEASIDE A*  
This seminar will deal with the basic theory and explanation of digital signal processing. Current applications of DSP will be discussed.
- (31) **"Beginning Packet: ARES & RACES Packet Standards" (REPEAT)**  
• Ken Wilhelmi N7QQU, Oregon Section AEC-ASM  
*SUN 9:15 AM SEASIDE B*  
See (5).
- (32) **"An ARES-RACES Emergency Plan"** • Allen Vandewarker KE6HML, EC, Lake County (CA) ARES  
*SUN 10:45 AM SEASIDE C*  
Topics to be discussed:  
-Operating procedures;  
-Resource List  
-Check Lists  
-ARES Field Resources Manual - HAZMAT Guidebook

# SEA PAC Committees

**Thanks To All The Volunteers Who Helped Make This Convention A Success!!!**

Due to publication deadlines, we apologize for any omissions

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## **BANQUET PROGRAM**

Al Berg, WB7SIC

Committee Chairmen underlined

# Banquet Program



Cynthia Wall, KA7ITT and Steve Jensen, W6RHM

The Saturday night banquet will have an entertaining program that might well be called "Ham Radio They Wrote", since our banquet speakers are Cynthia Wall, KA7ITT, author of the popular ARRL fiction Adventure series, and her brother, Steve Jensen, W6RHM, her number one technical advisor. Together they will tell us how the books that include "*Night Signals*", "*Hostage in the Woods*", "*Firewatch!*", "*Easy Target*", and "*Disappearing Act*" were conceived, researched and written.

Cynthia's writing career began in 1976 when she was so moved by the stories of Vietnamese refugee students in her college classes that she submitted a feature article to the local paper. Today her writing credits include stories in *Seventeen*, *Teen*, *Jack and Jill*, *Child Life*, *QST*, and many Northwest periodicals. She holds a General Class license.

Steve is President and principal consultant of Steve Jensen Consultants Inc., which deals with the field of Electromagnetic Compatibility (EMC) and analog and RF circuit design. It was Steve who decided that Marc in "*Night Signals*" might be able to run his HW-9 off his 9 volt flashlight batteries. Steve holds an Extra Class license.

Since half the readers of Cynthia's books are adults, this brother-sister team works hard to come up with new technical surprises in each book. They plan to share past adventures, and if all goes right, reenact one of Steve's inventions at our banquet.

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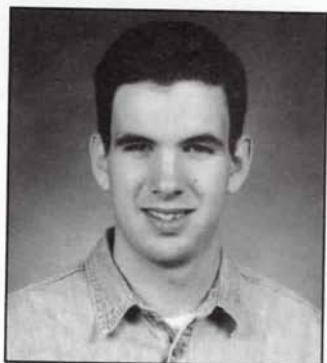
## Master of Ceremonies

Greg Milnes, W7AGQ

Greg was first licensed in 1955. In the mid-60s, he operated W7AGQ/4 from Virginia and was a staff attorney with the Broadcast Bureau of the F.C.C. in Washington, DC. He returned to 7-land in 1967. Greg became a Judge in 1969 and is currently a Circuit Court Judge for Washington County, Oregon.

Greg is ARRL Northwest Division Vice Director, a member of QCWA, DXCC, FARS, Willamette Valley DX Club and OTVARC (past President and Trustee).

# 1997 OTVARC Scholarship



**Wayne Allen**

The OTVARC Scholarship Committee will present the 1997 OTVARC Scholarship at the Banquet. They are pleased to announce the selection of Wayne Allen, KB7OYI, as this year's recipient.

Wayne, an OTVARC member and son of member Wes, K7WWG, is a senior at Hillsboro High School and plans to major in Electronics Engineering at Oregon State University this fall. Having become interested in ham radio while working on repeaters with his dad for several years, Wayne was first licensed in 1992 and soon upgraded to Technician class and started building repeaters of his own. He now has five repeaters, and in addition to operating and maintaining them he helps with maintenance of a number of other repeater systems.

Wayne is very active in public and community service. In addition to his contributions to church, school and boy Scout volunteer programs, Wayne has worked at SeaPac for years and has employed his amateur radio talents in the Trask Mountain motorcycle race, the Portland Marathon, search and rescue, and other events. Wayne earned the rank of Eagle Scout last December.

The scholarship is in the amount of \$1,000 and is awarded on the basis of the applicant's dedication to amateur radio with preference to students planning to major in technical subjects. The scholarship is the principal use of funds earned by The SeaPac Ham Convention

The scholarship committee of 1997:

Carl WS7L, Chair

Ann KJ7ON

## ARRL Guests

**Stephen Mendelsohn W2ML, First Vice President**

**Mary Lou Brown, NM7N, NW Division Director**

**Wayne Irwin, W1KI, Assistant to ARRL VEC**

**Ed Krome K9EK, Art Coulombe W7HGK, Cliff Buttschardt K7RR  
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## RAGS Test Bench

As a service to flea market buyers, the Radio Amateurs of the Gorge (RAGS) will have a test bench on the west side of the exhibit area. Test equipment will include a power supply, speaker, voltmeter, frequency counter, oscilloscope and watt meters. Buyers and prospective buyers are encouraged to make use of this service to check out those flea market treasures and unbelievable bargains.

Neither RAGS nor SeaPac accepts any responsibility for the condition or operability of any equipment, nor can they be held culpable for any equipment damaged as a result of test gear usage.

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