



SEA PAC



ARRL Northwest Division Ham Convention



Seaside Convention Center Seaside, Oregon

JUNE 1 & 2, 1996

Presented by
Oregon Tualatin
Valley Amateur
Radio Club



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*** Portland Ham Fair ***

September 21, 1996

9am -5pm

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over 350 tables of Flea Market available

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Welcome to SeaPac 1996

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

Co-Sponsors include 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 1, 1996

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

F.A.R.S. - AEA CW Contest

Test your CW skills! Sending, Receiving and Pileup
Check it out. Dolphin Room 9:00AM to 1:00PM (Details page 9)

Kids Krayons & Kartoons

Sea Mist Room

Saturday, June 1 - 9:00 AM to 5:00 PM

Sunday, June 2 - 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, May 31

Registration.....	11:00AM- 8:00PM
Exhibitor & Flea Market Setup (SETUP ONLY).....	11:00AM-9:00PM
ARRL Antenna Design Workshop (Convention Center) 12:00N - 6:00PM	
Ladies Hospitality Suite (Aloha Inn, Room 125).....	5:00PM - 8:30PM

Saturday, June 1

Exhibitor & Flea Market Setup (SETUP ONLY).....	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
FARS-AEA CW Contest (Dolphin Room).....	9:00AM - 1:00PM
Seminars (Seaside & Riverview Rooms)	9:30AM - 5:00PM
ARES Meeting (Town Center Mall).....	10:00AM - 12:00N
QCWA Luncheon & Program (Shilo Inn - Whale 2 & 3).....	12:00N - 2:00PM
ORRC Meeting (Town Center Mall).....	1:00PM - ????????
Banquet Happy Hour.....	6:30PM
Banquet.....	7:15PM - 9:30PM

Sunday, June 2

Registration.....	8:30AM - 12:00N
Ladies Hospitality Suite (Aloha Inn Room 125)	9:00AM - 12:00N
Exhibits & Flea Market.....	9:00AM - 1:30PM
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

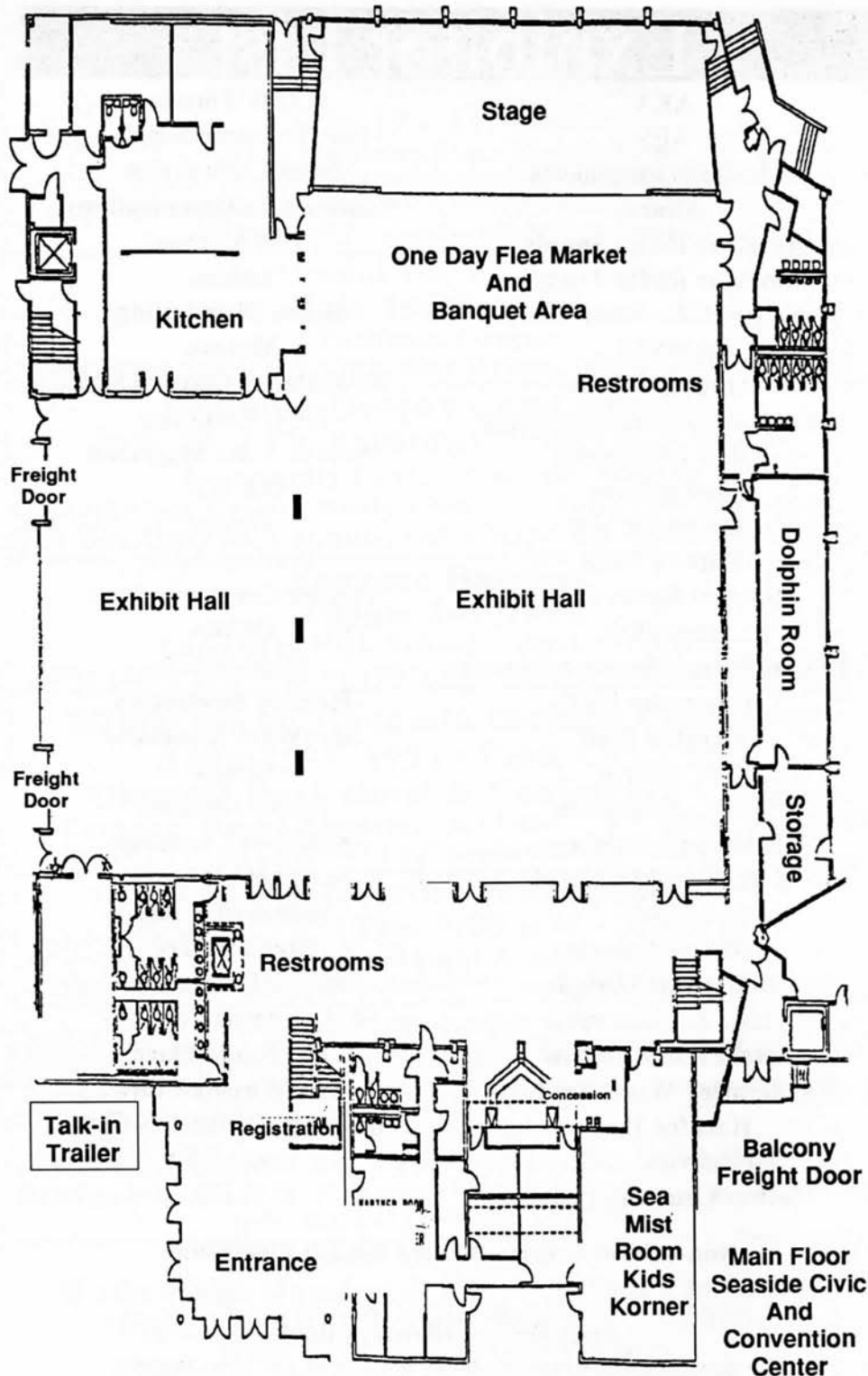
AEA
AES
Advantage Instruments
Alinco
Amateur Radio Supply
Amateur Radio Trader
Amateur Radio Relay Group
AMSAT
Antennas West
Antenna & Satellite Technology
B & B Instruments
Badge Boys
Badges "R" Us
Battery Tech
Bearcat Radio Club
Books Etc.
CommSystems Intermountain
Computer Nut
Cynthia Wall
DC Power
Dilley's Enterprises
Electronic Rainbow
E. H. Yost/Mr. Nicad
FARS
Force 12 Antennas
H. Stewart Designs
Ham & Electronics
Ham Radio Outlet
Handcrafted Wood Products
Hats for Hams
Hoodview ARC
Hutton Communications

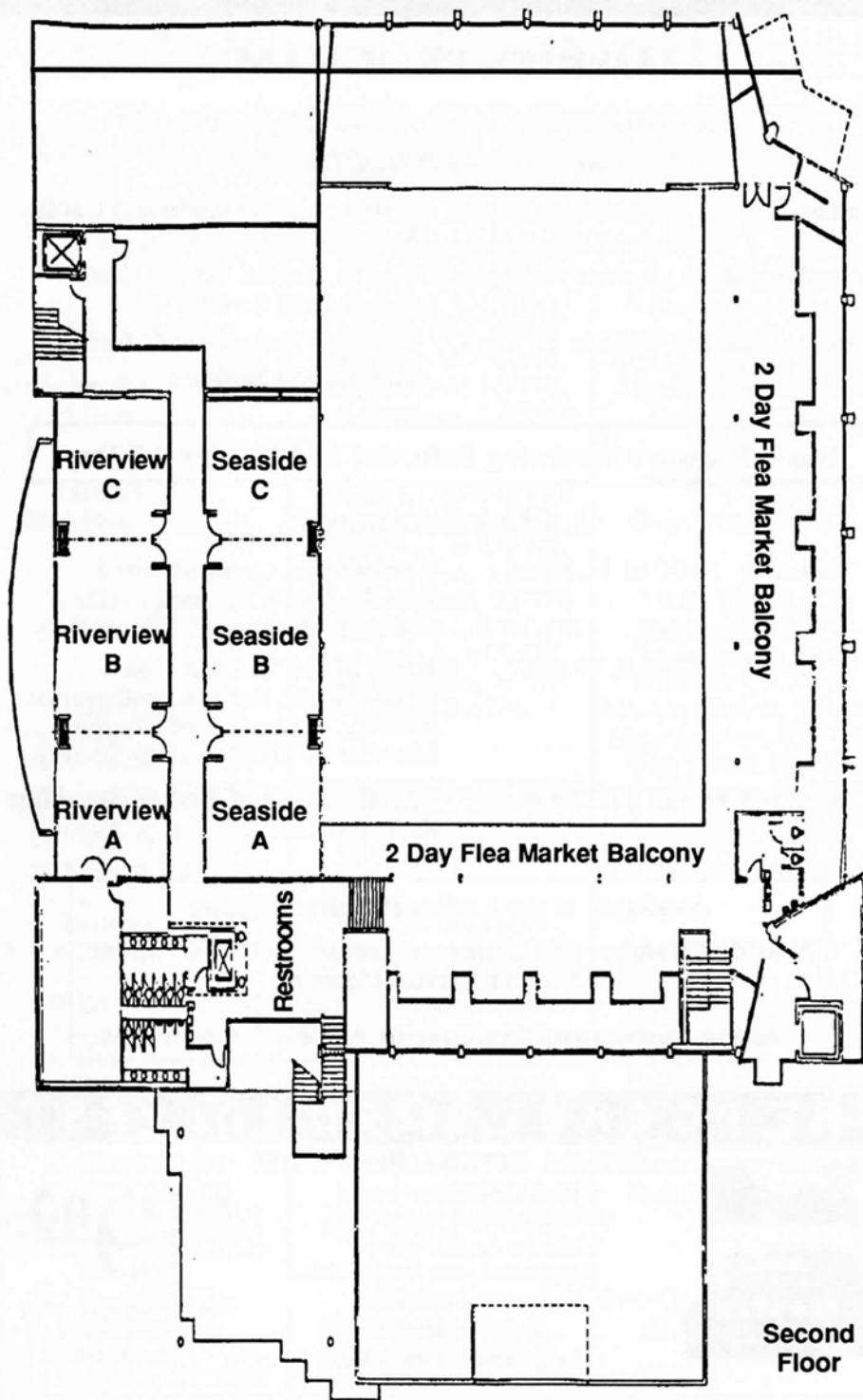
ICOM America
Ideal Industrial Supplies
Index Laboratories
Kenwood Communications
KLM Antennas
Larsen
Molen Distributing
Motron
Navy/Marine Corps MARS
NCG Company
Nuts & Volts Magazine
O.P.E.N.
Orcom
Portland ARC
Premier Communications
QCWA
Radio Shack
Ramsey Electronics
ScanWare Associates
Sciesis
Smiley Antennas
Solder-It Company
Somerset Electronics
Standard Radio
Star Fire Tec
Startek International
T. J. Antenna Company
The Radio Place
The Wireman Inc.
Willamette Valley DX Club
Yaesu USA
YLRL

Non-exhibitor Prize Donor: Borsch Electronics

Prize Donors shown in Bold

Due to publication deadlines we apologize for any changes.





LADIES PROGRAM

Ladies Hospitality Suite, Aloha Inn, Room 125

SCHEDULED HOURS

Friday, May 31	5 pm to 8:30 pm	Coffee, Conversation and Cards Surprise Movie at 6:30 pm
Saturday, June 1	9 am to 4:30 pm	Coffee, Treats, Games, Cards, Puzzles and Seminars
Sunday, June 2	9 am to 12 noon	Coffee, Treats, Games, Cards, Puzzles and Seminar

Blood Pressure Screening Saturday and Sunday All Day

Ladies Seminars

Saturday 10:00 to 11:30am	Genealogy: Computerized Family Tree Climbing Chris Rumbaugh
Saturday 2:00 to 4:30 pm	Birds of the Oregon Coast Herb Wisner, Retired Professor of Biology, University of Oregon Member of The Audubon Society
Sunday 10:00 to 11:30 am	The Romance of Bed & Breakfast Rick Schouweiler, Travel Agent

Available at the Ladies Hospitality Suite
Seaside Chamber of Commerce Treasure Hunt Coupons
(One per Person Please)
and
Seaside Downtown Development Association Coupons

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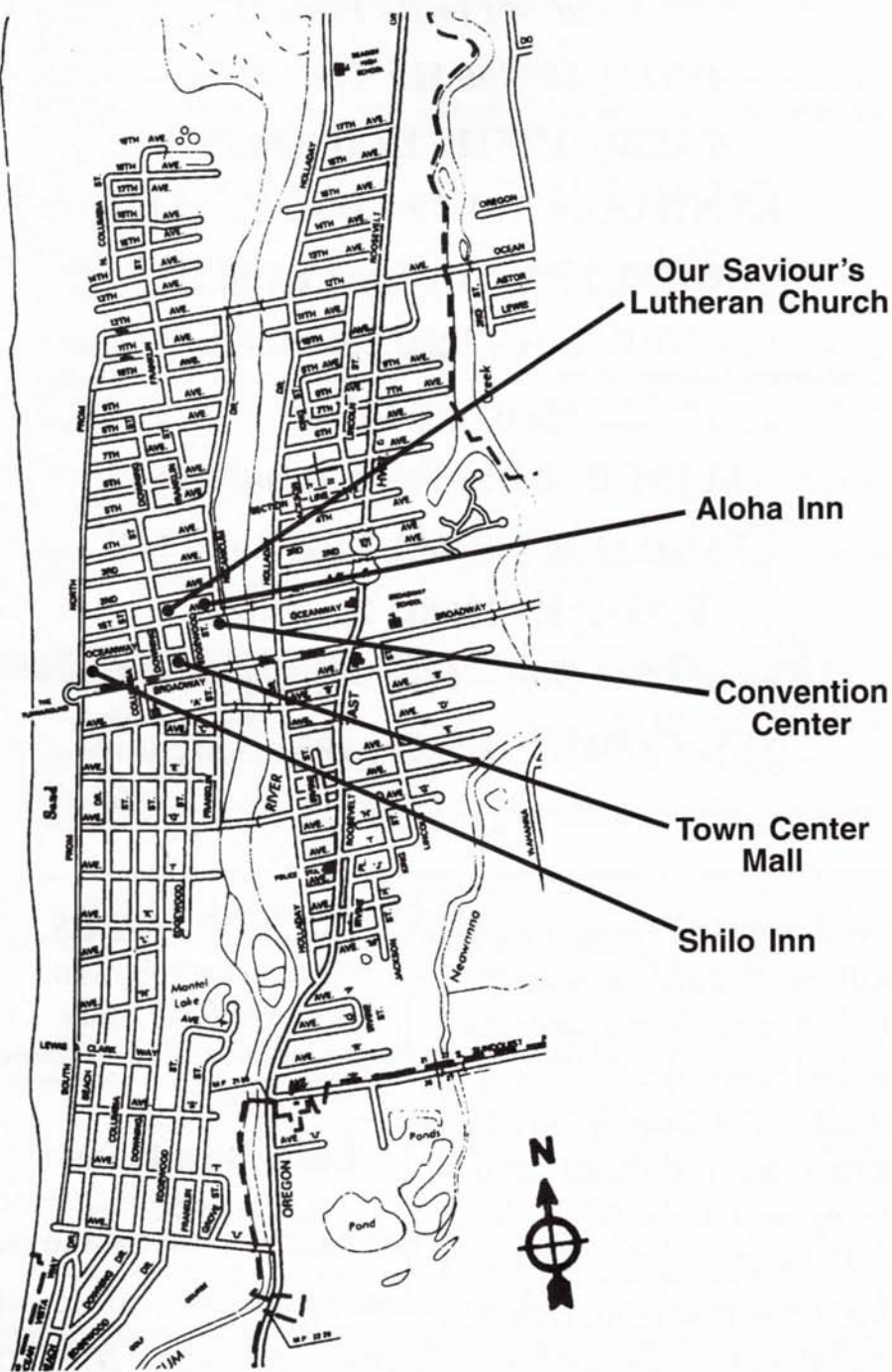
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Seaside Area Map



Prize Drawing Information

Need Not to Be Present

ICOM IC-706 HF Transceiver

YAESU FT51R Dual Band HT

KENWOOD TM-79A Dual Band HT

ICOM IC-W31A Dual Band HT

YAESU FT2200 2m Mobile

Must be present

ALINCO DJ-582T Dual Band HT

STANDARD C-508A Dual Band HT

ICOM IC-2000H 2m Mobile

KENWOOD TH22AT 2m HT

NCG COMET GP6 DB Base Antenna

(NONE BY PROXY - YOU MUST BE PRESENT)

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

SPECIAL

Early Bird Prizes

H. Stewart Designs

BIG DK-DX Mobile HF Antenna

Standard Radio C-108A Mini 2m HT

ICOM IC-T22A 2m HT

F.A.R.S. - AEA CW CONTEST

Test your CW Skills 0900-1300 in the Convention Center's Dolphin Room. The Friendship Amateur Radio Society (FARS) co-sponsored with AEA, will conduct the competition on Saturday, June 1st. This will be similar to the competition held in 1994.

Events will include CW sending, CW receiving at 4 speeds, pencil and paper copy only, and pileup receiving. The pileup tape is a simulation of Sweepstakes Weekend — try it! Medals will be awarded at the SeaPac Banquet on Saturday night for several outstanding competitors in these events. Polish your skills now and plan to join the fun.

Those interested in participation in FRG-97 in Tokyo Japan are invited to stop by the FARS, USA Booth on the exhibit floor. Events at FRG-97 will include CW contests, DX Contest and International Rules RDF.

FARS VICTORIA will join us at the Booth. Those interested in a demonstration on-foot T-hunt should talk with the Victorians early Saturday. They hope to demonstrate (5) Russian-style foxes and Russian Altai RDF Units



HAVE YOU HEARD
ABOUT THE
CASCADIA INTERTIE ?

VISIT THE ARRG BOOTH
FOR MORE DETAILS...

Seminar

Riverview A

Riverview B

Riverview C

Friday Afternoon, May 31

**12:00
noon
to
6:00
PM**

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

Saturday Morning, June 1

**9:30
AM**

**(2) So You Want to
be DX**
Bob Preston, W7TSQ

**(3) Everybody's Favorite Subject
(Antennas)**
Tom Schiller, N6BT

**11:00
AM**

**(6) E-M Fields and
Your Health**
W. Overbeck, N6NB

**(7) 2m NBS Yagis From the Corner
Hardware Store**
Ken Kopp, KØPP

Saturday Afternoon, June 1

**1:00
PM**

**(10) Youth and
Amateur Radio**
Rosalie White,
WA1STO

**(11) Local Terrain
and Launch Angle**
D. Straw, N6BV

**(12) WW2END -
On Board the USS
Missouri**
T. Sanders, W6QJI
S. Warburton, N7KMF

**2:30
PM**

**(15) Electronics
Construction -
Methods, Tools &
Materials**
Emerson Hoyt, WX7E

**(16) QRP SSB
Transceiver Project**
John Liebenrood,
K7RO

(17) ARRL Forum
Mary Lou Brown,
NM7N

**4:00
PM**

**(20) Hidden Trans-
mitter Hunting**
Dale Hunt, WB6BYU

**(21) DSP in Modern
Amateur Radio
Equipment**
Chip Margelli, K7JA

**(22) Spectrum
Management**
J. Kaplan, KG7FU
C. Freinwald, K7CR

Sunday Morning, June 2

**9:30
AM**

**(24) What's New
for Newer Hams**
Rosalie White,
WA1STO

**(25) Wire and
Cable for Radio
Amateurs**
Press Jones, N8UG

**(26) Hazardous
Weather Reporting**
Dan Keaton, National
Weather Service

**11:00
AM**

**(29) Getting it All
Together**
M. L. Brown, NM7N

**(30) Live Displays of
Antenna Propagation
and Lightning
Protection**
Press Jones, N8UG

**(31) "SPICE" Simu-
lation Programs
for Non-linear
Circuit Design**
C. Battjes, KC7IOY

Schedule

Seaside A

Seaside B

Seaside C

Friday Afternoon, May 31

(1) Technical Workshop

**Computer-Aided Antenna/System Design of HF/VHF Stations
Including the Effect of Local Terrain**
Dean Straw, N6BV

Saturday Morning, June 1

(4) Beginning Packet Radio
Max Lindholm, KC7GFW

**(5) New Missions for
Amateur Radio Emergency
Communications**
J. Cline, KI4EX

**(8) Intermediate Packet: Using Packet
Bulletin Board Systems**
Evan Burroughs, N7IFJ

**(9) Digital Modes for
Emergency Comm-
unications**
J. Cline, KI4EX

Saturday Afternoon, June 1

**(13) Overview of the HF
Data Communications Modes**
Ray Petit, W7GHM

**(14) Lessons Learned:
Amateur Radio in
1995/96 Storms**
T. Burroughs, KB7HEK

(18) Amateur Radio and the INTERNET
Al Rovner, WA2TMP

**(19) Pacific Northwest
Disasters: Family
Preparedness**
Ron Kruml, KB7JCP

**(23) Advanced Amateur Packet Radio -
TCP/IP and 9600 Baud (and faster)**
Steve Stroh, N8GNJ

Sunday Morning, June 2

(27) Beginning Packet Radio
Max Lindholm, KC7GFW
(Repeat)

**(28) Amateur Radio
Antennas
and the Law**
W. Overbeck, N6NB

**(32) Intermediate Packet: Using Packet
Bulletin Board Systems**
Evan Burroughs, N7IFJ
(Repeat)

**(33) Ham Radio
Antennas for
Sailboats**
R. Severns, N6LF

Seminar Topic Information

The SeaPac '96 Seminar Program features 33 presentations on a wide range of subjects to meet the interests of convention attendees. Our goal is to provide talks that are both interesting and beneficial to amateurs, and I think you'll agree that we've met that goal!

The program includes seminars in five topic "tracks". Four seminars are dedicated to Beginners, 5 to Emergency Preparedness, 6 to Packet and HF Digital Communications, 12 to Technical subjects not in one of the other tracks, and 6 to General Interest, Organizational, and Regulatory subjects. Beginning Packet and Intermediate Packet seminars are repeated on Sunday morning; I urge those of you who will be here on Sunday to attend the repeat sessions and allow more room for the Saturday-only attendees.

A technical Workshop is being offered again on Friday from 12 noon to 6 PM. Senior Assistant Technical Editor R. Dean Straw N6BV will present "Computer-Aided Antenna and System Design of HF and VHF Stations, with Consideration of the Effect of Local Terrain on Launch Angle". Dean will give the Terrain and Launch Angle section also on Saturday afternoon.

As always, you will receive opinion survey cards in each seminar room. Please fill these out after you have attended all the sessions, and deposit them in the room or at the registration desk. We need your feedback - to all those who have filled them out over the years, a big thank you from the seminar committee!

Gene Single K7IUN, Seminar Chairman

Seminars By Type

Beginners Track: Seminars 10, 15, 24, and 29.

Emergency Preparedness: 5, 9, 14, 19, and 26.

Digital: 4, 8, 13, 23, 27, 32.

Technical: 1, 3, 7, 11, 16, 18, 20, 21, 25, 30, 31, and 33.

General Interest/ Organizational/Regulatory: 2, 6, 12, 17, 22, 28.

NOTE: PLEASE TURN OFF HAND-HELDS DURING SEMINARS

- (1) **Workshop: "Computer-Aided Antenna/System Design of HF/VHF Stations"**
• **R. Dean Straw N6BV**, Senior Assistant Technical Editor, ARRL

FRI 12 NOON to 6 PM SEASIDE A, B, C

The main emphasis of this workshop will be HF systems, plus computer modeling of VHF yagis and other gain antennas. We'll see the launch angles required for efficient HF propagation throughout the world, followed by computer modeling of antenna types. We'll explore the effect of local terrain and environment on elevation pattern for antennas.

- (2) **"So You Want to be DX" • Bob Preston W7TSQ**, Western Washington DX Club
SAT 9:30 AM RIVERVIEW A

This seminar tells you how to do a DX vacation: selecting location, licensing, accommodations, equipment, timing, and travel arrangements.

- (3) **"Everybody's Favorite Subject (Antennas)" • Thomas H. Schiller N6BT**,
President, Force 12 Antennas & Systems

SAT 9:30 AM RIVERVIEW B & C

Tom discusses avoiding the usual traps in antenna technology. A fresh look at gain and antenna characteristics, in plain language, with no smoke and mirrors. There will be an open question & answer time.

- (4) **"Beginning Packet Radio" • Max Lindholm KC7GFW**, AEC, State ARES

SAT 9:30 AM SEASIDE A & B

An introduction on how to assemble your own packet station; how a computer, TNC, and radio allow you to explore and utilize data communication in a network.

Seminar Topic Information

- (5) "New Missions for Amateur Radio Emergency Communications"
• John J. Cline KI4EX, State Director, Idaho Bureau of Disaster Services
SAT 9:30 AM SEASIDE C
John reviews the history of amateur radio emergency communications and explains why amateur radio assets are needed even more today than in the past.
- (6) "Electromagnetic Fields and Your Health" • Wayne Overbeck N6NB, PhD, JD, Professor of Communications, California State University, Fullerton
SAT 11:00 AM RIVERVIEW A
There has been research by medical doctors showing that electro-magnetic fields are associated with certain kinds of cancer. But a group of Physicists has questioned that conclusion. Meanwhile, the FCC is drafting new rules to limit EMF exposure. This talk explains how radio amateurs are affected by all of this.
- (7) "Two-meter NBS Yagis From the Corner Hardware Store" • Ken Kopp KØPP
SAT 11:00 AM RIVERVIEW B & C
Ken will show how to build 5-element NBS-designed 2m Yagi antennas using easily obtained materials. Includes slides, hands-on materials, and a discussion of related feedline and connector information. Lots of show-and-tell.
- (8) "Intermediate Packet: Using Packet Bulletin Board Systems" • Evan Burroughs, N7IFJ, System Operator, Salem Repeater Association BBS
SAT 11:00 AM SEASIDE A & B
An introduction to the WØRLI packet radio bulletin board software; the focus will be on basic bulletin board system usage.

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Don Johnson, W6AAQ's
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H. Stewart Designs (503) 654-3350

Seminar Topic Information

- (9) **"Use of Digital Communication and Mailboxes for Disaster Information"** • **John J. Cline KI4EX**, State Director, Idaho Bureau of Disaster Services
SAT 11:00 AM SEASIDE C
A new approach to using packet and other modes of digital amateur radio communication for State and local emergency operation centers and on-scene multi-casualty response operations.
- (10) **"Youth and Amateur Radio"** • **Rosalie White WA1STO**, ARRL Educational Activities Manager
SAT 1:00 PM RIVERVIEW A
This seminar is for licensed and unlicensed youths. What amateur radio activities do youths like best? What are area youths doing on the air? How can you take part in these activities too? Door prizes will go to the lucky young people.
- (11) **"Local Terrain and its Effect on the Launch of HF Signals"** • **R. Dean Straw N6BV**, Senior Assistant Technical Editor, ARRL
SAT 1:00 PM RIVERVIEW B
DXers and contesters take note: hilltop or valley, swamp or desert, your local terrain will have a profound effect on the elevation pattern of your HF antenna. N6BV from ARRL HQ describes the latest in software to assess these effects.
- (12) **"WW2END - On Board the USS Missouri - A Once-in-a-Lifetime Special Event Station"** • **Tom Sanders W6QJL**, Project Manager, Stan Warburton N7KMF, Project Photographer
SAT 1:00 PM RIVERVIEW C
This is a detailed account of the organization, installation, and operation of a 5-transmitter, all-band, all-mode special event station on board the battleship USS Missouri, using the special call WW2END, on the 50th anniversary of the end of World War II.
- (13) **"Overview of the HF Data Communication Modes"** • **Ray Petit W7GHM**
SAT 1:00 PM SEASIDE A & B
Ray describes and compares the AMTOR, PACTOR, RTTY, Packet, and CLOVER data modes with respect to bandwidth, throughput, data integrity, ease of use, and radio requirements. Which one is for you?
- (14) **"Lessons Learned: Amateur Radio Emergency Communications During the Winter Storms of '95-'96 (an open forum)"** • **Tami Burroughs KB7HEK**, Communications Specialist, Emergency Management Division, Oregon State Police
SAT 1:00 PM SEASIDE C

*** Portland Ham Fair ***

September 21, 1996

9am -5pm

N.W. Collectors' Mkt.

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\$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 restaurant

Grand prize VHF mobile transceiver (need not be present to win)

for info visit Hoodview booth or call Ed W7TWL (503) 257-4822

Seminar Topic Information

An open forum for those who participated with and provided emergency communications to Emergency Management Agencies during the storms of winter '95-'96. Please come prepared to share what went well for your group and offer suggestions for the next disaster which may require amateur radio.

- (15) **"Electronic Construction for the Amateur - Methods, Tools, and Materials"**
•Emerson Hoyt WX7E, Director of Engineering, Hoyt Instrument Laboratory
SAT 2:30 PM RIVERVIEW A
Various electronic project construction methods are described as well as tools and materials used. Numerous examples of these methods will be displayed and shown by color slides.
- (16) **"QRP Single-Sideband Transceiver Project"** • John Liebenrood K7RO
SAT 2:30 PM RIVERVIEW B
QRP doesn't mean CW only! Learn about simple designs for single sideband. NORCAL's Cascade Project is the latest QRP kit. The Cascade is a compact 75m and 20m QRP SSB transceiver.
- (17) **"ARRL Forum"** • Mary Lou Brown NM7N, Director, Northwest Division, ARRL
SAT 2:30 PM RIVERVIEW C
Mary Lou will report on recent news from ARRL, Congress, FCC, etc. on matters of concern to amateur radio. There will be opportunity to discuss issues with ARRL officials.
- (18) **"Amateur Radio and the Internet"** • Al Rovner WA2TMP
SAT 2:30 PM SEASIDE A & B
This is an introduction to the Internet, and amateur radio resources available on the Internet. Topics covered include: World Wide Web, FTP, email, Telnet, and a visit to amateur related sites. This talk is intended for "newbies" (or newcomers) to the Internet.
- (19) **"Pacific Northwest Disasters: Family Preparedness"** • Ron Kruml KB7JCP, Public Educator, City of Redmond, WA Emergency Preparedness Office
SAT 2:30 PM SEASIDE C (This is a 2-hour session)
This seminar is a motivational presentation that will give you the information and tools you will need to prepare for our next disaster. Are you really prepared? What's there to worry about? How bad could it be? Find out what you can do, and assemble a family disaster plan.



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Seminar Topic Information

- (20) **"Hidden Transmitter Hunting" • Dale Hunt WB6BYU**
SAT 4:00 PM RIVERVIEW A
Transmitter hunting is a fun and potentially useful sport. We will discuss techniques, problems, simple equipment, and other topics for the beginning and intermediate hunter.
- (21) **"Digital Signal Processing in Modern Amateur Radio Equipment" • Chip Margelli K7JA, Technical Support Manager, Yaesu USA**
SAT 4:00 PM RIVERVIEW B
DSP! Advanced DSP!! Enhanced DSP!!! What does it all mean, and what can it do for you? This down-to-earth review of modern DSP-based gear will take the mystery - and the math - away so you can understand the latest designs.
- (22) **"Spectrum Management" • James Kaplan KG7FU and Clay Freinwald K7CR, ARRL Spectrum Committee Members**
SAT 4:00 PM RIVERVIEW C
This is a discussion of spectrum management issues: what do we do with our 50MHz and above bands?
- (23) **"Advanced Amateur Packet Radio - TCP/IP and 9600 Baud (& faster)" • Steve Stroh N8GNJ**
SAT 4:00 PM SEASIDE A & B
A discussion of the Puget Sound amateur radio TCP/IP network, 9600 baud, and 56K baud. Steve will also discuss the upcoming ARRL and TAPR digital communications conference in Seattle on September. 20 - 22, 1996.
- (24) **"What's New for Newer Hams?" • Rosalie White WA1STO, ARRL Educational Activities Manager**
SUN 9:30 AM RIVERVIEW A
Learn about new on-the-air operating activities that you'll love trying - - what you'll need in order to do them, and lots of background information to take home with you.
- (25) **"Wire and Cable for Radio Amateurs - Most Common Questions and Misconceptions" • Press Jones N8UG, "The Wireman"**
SUN 9:30 AM RIVERVIEW B
What's new, what's right and wrong. How to select, install, maintain, and troubleshoot cable, connectors, and accessories. Questions solicited before, during, and after the session.

Continuous Coverage HF Mobile Antennas

DK (Don) Johnson

W6AAQ

The Inventor of the **DK³** Screwdriver Antenna
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THE BIG DK-DX

See Henry's booth

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Seminar Topic Information

- (26) "Hazardous Weather Reporting" • Dan Keeton et al, Meteorologists, National Weather Service
SUN 9:30 AM RIVERVIEW C
Learn to observe and report severe weather for emergency managers, Weather forecasters, and the media. You will be able to distinguish tornados and funnel clouds from non-hazardous phenomena, estimate wind speed, etc.
- (27) "Beginning Packet Radio" (REPEAT) • Max Lindholm KC7GFW
SUN 9:30 AM SEASIDE A & B See (4)
- (28) "Amateur Radio Antennas and the Law" • Wayne Overbeck N6NB, PhD, JD, Professor of Communications at California State University. - Fullerton
SUN 9:30 AM SEASIDE C
In spite of PRB-1 (the "limited federal preemption" of local antenna restrictions) more and more cities, counties, and homeowner associations are cracking down on ham antennas - with the blessing of federal courts. Now the FCC proposes to curb local restrictions on TV antennas but not ham antennas. What to do?
- (29) "Getting it All Together" • Mary Lou Brown NM7N, Director, Northwest Division, ARRL
SUN 11:00 AM RIVERVIEW A
Discussion of what is needed for a station; how to select, assemble the pieces, and test them out; getting on the air. Both HF and VHF/UHF stations are covered.

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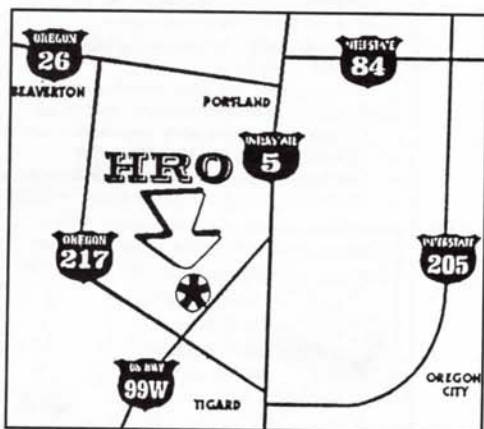
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Seminar Topic Information

(30) "Live Displays of Antenna Propagation and Lightning Protection"

• **Press Jones N8UG, "The Wireman"**

SUN 11:00 AM RIVERVIEW B

A hands-on look at RF signal propagation from a variety of antennas showing pattern, gain, and the effect of surroundings. A second live demo illustrates the characteristics of lightning and related damage control.

(31) "Using 'SPICE' Type Simulation Programs to Study Receiver non-Linear Parts"

• **Carl Battjes KC7IOY, Engineering Consultant**

SUN 11:00 AM RIVERVIEW C

Although two-port network programs are useful in the design of linear circuits, they are useless in the study and design of the non-linear parts. "SPICE" handles these non-linear design problems.

(32) "Intermediate Packet: Using Bulletin Board Systems" (REPEAT)

• **Evan Burroughs N7IFJ, System Operator, Salem Repeater Association BBS**

SUN 11:00 AM SEASIDE A & B See (8)

(33) "Ham Radio Antennas for Sailboats" Rudy Severns N6LF

SUN 11:00 AM SEASIDE C

There are many possible antennas for use on sailboats but because of the conductive standing and running rigging, good performance is not always easy. This seminar will review the problems and present solutions.

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Due to publication deadlines, we apologize for any omissions

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Banquet Program



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Jim Richards (Tenor), is employed by Service America, Inc. as head catering chef at Intel Corp. Bob Wiggins (lead) is retired from United Airlines. Chuck Olson (Baritone) is a retired school teacher and Jay Thornberry (Bass) is a salesman for Rodda Paint Company in Portland.

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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).

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Mary Lou Brown, NM7M, NW Division Director

Rosalie White, WA1STO, Educational Activities Manager

Dean Straw, N6BV, Senior Assistant Technical Editor



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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.

Hamfest Calendar

Glacier-Waterton Hamfest

July 19 - 21, 1996

ARRL Montana State Convention

Three Forks Campground, East Glacier MT.

Contact Bill Vodall, WA7NWP (406) 337-2222

INTERNET: hamfest@tlatech.com

Northwest DX Convention

July 19-21, 1996

Portland, Oregon

Willamette Valley DX Club, Ron Hylton, AD7L (503) 538 7554

Southern Oregon Coast Hamfest

July 19, 1996 Saturday 9:00AM-5:00PM

Community Center, Coquille, Oregon

Contact Coos County Radio Club, Info: (541) 396-4479

RT1 Box 199D #6, Coquille, OR 97423 Or (541) 396-5778

Spokane Hamfest

August 3-4, 1996

University High School Opens 9:00AM

Info: (509) 928-1808 or (509) 448-8445 Fax (509) 921-6912

WIMU Rocky Mountain Division Convention

August 2-4, 1996 • Park City Utah

Olympia Park Hotel & Conference Center

Contact: Duane Anderson, KJ7HO (801) 288-1859

INTERNET: kj7ho@utahinter.net

Tacoma Electronics Fleamarket

August 10, 1996 9:00 AM - 3:00PM

Charles Wright Academy

Info: Alan Hughes, 206-840-4947 or 206-596-7472(pager)

Longview Swap Meet

August 17, 1996 9:00AM - 3:00 PM

Lower Columbia ARA Cowlitz County Fairgrounds

Portland Ham Fair

September 21, 1996 9:00AM - 5:00 PM

Hoodview ARC • N.W. Collectors Mkt, N. Vancouver & MLK Blvd

Info: Ed, W7TWL (503) 257-4822

50th Anniversary

Walla Walla Hamfest & EWA Section Convention

September 27-29, 1996 8:00AM - 4:00PM

Walla Walla National Guard Armory

Contact Dave Pence, KB7WRT (509) 525-2529

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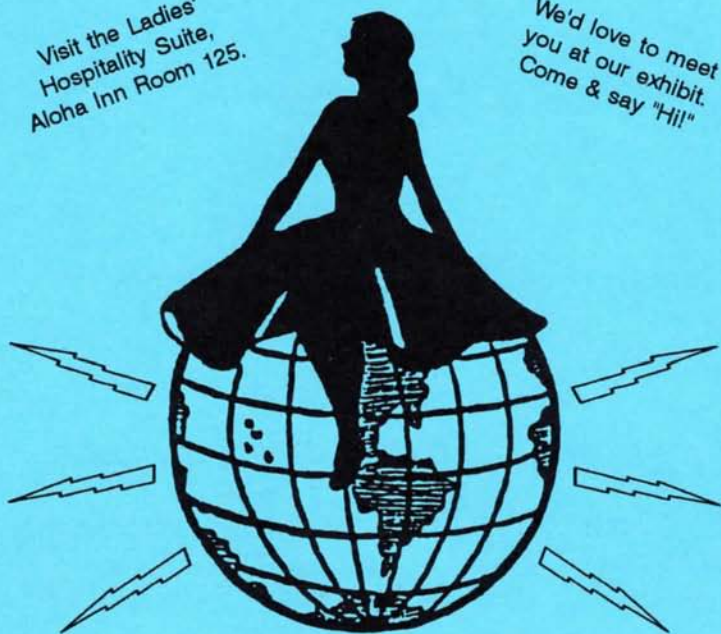
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