



ARRL NW Division Ham Convention

May 31st, June 1st & 2nd, 1991

Seaside Convention Center

Seaside, Oregon



OTVARC And ICOMMERICA INC.

Present: The Winning Team At Wild West Casino Night

Friday May 31, 1991, 7:30-10:30PM.
Seaside Elks Lodge-3 Blocks South Of Convention Center

Blackjack * Roulette * Craps

OTVARC

ICOM will be co-sponsoring Casino Night this year. There will be food, lots of prizes and a no host bar for those who wish a strong libation.



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VE Testing	
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SEA PAC 1992 Registration Form	
For Convention	Don't Miss The Transmitter

For Convention
Information And
Announcements
Listen On:
145.450_{MHz}
(-600)

Don't Miss The Transmitter Hunt. Sunday, 1PM See Seminars Page 16

Ladies Treasure Hunt See Page 32.

Convention Schedule Friday, May 31

Friday, May 31	
Registration	11AM-8PM
Exhibit & Flea Market Setup	11AM-9PM
Social Casino Night (Elks Lodge)	7:30-10:30PM
Saturday, June 1	
Registration	8AM-4:30PM
Convention Hall Hours	9AM-4:30PM
Ladies Treasure Hunt	All Day
Snack Bar	All Day
Kids Krayons & Kartoons (Mariner Room)	
VE Exams (Pre-Registration)(Our Saviour Church)	9AM-12N
Seminars (Pages 15–18)	9:30AM-5PM
Ladies Luncheon (Dolphin Rm 2&3, Shilo Inn)	11:30 AM-200PM
QCWA Luncheon (Oceanview Resort Motel)	12N-2PM
VE Exams (Walk-Ins, See Page 3 For Details)	1PM-4PM
ORRC Meeting (Town Center Mall Meeting Room)	1PM-???
TOPS Meeting (Riverview A&B)	4PM-???
Banquet (Convention Center)	7PM-9:30PM
Sunday, June 2	
Registration	8:30AM-12N
Convention Hall Hours	9:30AM-2PM
Seminars (Pages 15–18)	9:30AM-12N
Snack Bar	9:30AM-2PM
Kids Krayons & Kartoons (Mariner Room)	
Grand Awards (Convention Center)	1PM-2PM
Convention Closes	
SEA CAPAC 2.	1991 NW Division Ham Convention

SEA PAC 2

Special Events ICOM Wild West Casino Night

Friday-7:30PM - Social Casino Night at the Seaside Elks Lodge. An evening of fun and exciting "No Stakes" gambling. Test your ability at blackjack, roulette and craps. Free hors d'oeuvres and no host bar available.

VE Testing-Two Sessions:

9AM

1PM

Remember

Although this session is set aside for preregistered candidates, we may be able to accommodate a few walk-ins on a space-available basis. To preregister, send a completed FCC Form 610, photocopy of your current license (if applicable) and check or money order for \$5.25 payable to ARRL/VEC. Mail these by April 30 to Sea-Pac VE Team, c/o R. Mayer, 6115 S.E. 13th Ave., Portland, OR 97202. We can seat 60 people at a session, so applications will be taken on a first-come, first served basis.

Although we accept pre-registrations who specifically request an exam at the afternoon session, we anticipate that the greater number of candidates will be walk-ins. If there are applicants for the morning session we cannot seat, they will have preference for admission to the afternoon session. Candidates will need to present the same items as for the morning session: A photocopy of your current license (if applicable) completed FCC Form 610 and check for \$5.25 payable to ARRL/VEC.

All candidates must present 2 pieces of I.D. at the test session: Their original ham license (if applicable) and valid photo–I.D., either a driver's license or DMV I.D. will satisfy this FCC requirement.

Testing is conducted at Our Saviour's Lutheran Church (across from the Convention Center). Please be prompt!!! Late arrivals will not be guaranteed a seat in the test session. If you have any questions, call H. Lea T. Ball, AL7W, at (503) 777–1032.

Ladies Luncheon

Saturday-11:30AM - Shilo Inn-Dolphin Rooms 2 & 3. "Travel Today In The USSR" presented by Mary Lou Brown, NW Div. Vice Director.

QCWA Luncheon

Saturday-12N - Oceanview Resort Motel..

TOPS Meeting

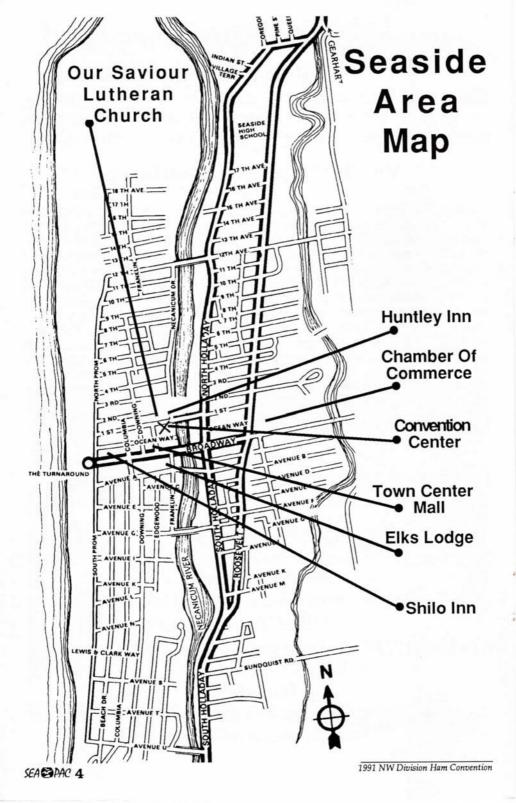
Saturday-4PM - Convention Center, Riverview A&B Rooms.

ORRC Meeting

<u>Saturday-1PM</u>-TownCenterMall(Broadway & Edgewood), upstairs meeting room.

Banquet

<u>Saturday-7PM</u>- Convention Center main floor. Doors open at 6:45PM. Featuring Gordon West, WB6NOA.





FLASH! HAM RADIO OUTLET NOW OPEN IN PORTLAND!!!!

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BARBARA ROBERTS GOVERNOR



OFFICE OF THE GOVERNOR
STATE CAPITOL
SALEM, OREGON 97310-0370
TELEPHONE: (503) 378-3111
May 31, 1991

GREETINGS:

I am very pleased to welcome members and guests of the Pacific Northwest Ham Radio Operators for the Northwest Divisional Convention in Seaside. Inviting Ham operators from the Soviet Union as part of the Friendship Amateur Radio Society will add further to the goodwill relationships that are being built between our two countries.

You will gain on a personal basis as well, for now you will have faces and smiles to associate with the information and laughter you have shared over your radios.

If this is your first trip to Oregon, I hope you will also have time to visit other areas of the state. We are proud to show off our scenic beauty, and I am confident you will enjoy the friendliness of our people.

Again, welcome to Oregon and my best wishes for a successful convention.

Toberta

Sincerely,

Barbara Roberts Governor



Welcome to SeaPac 91!

BE SURE TO STOP BY OUR BOOTH FOR YOUR FREE GIFTIII







AMERITRON

ROHN



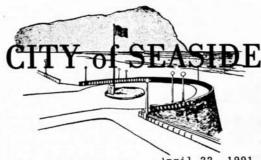
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AND REMEMBER, WE FEATURE QUALITY EQUIPMENT AND ACCESSORIES FOR ALL YOUR HAM RADIO NEEDS!

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989 BROADWAY

April 22, 1991

PACIFIC NORTHWEST HAM RADIO OPERATORS,

On behalf of the citizens of Seaside it is with great pleasure that I welcome you to the Northwest Divisional Convention.

For some of you this will be your first visit to our City..you are in for a really great weekend. To the rest of you, WELCOME BACK!

Seaside is still on a roll...we celebrated the first anniversary of our new City Hall/Fire Station complex and will soon complete a large addition to the Convention Center and Police Station. The Convention Center will be the finest in the country for a city of our size.

Please keep in mind, if it is fun to play in Seaside, and it is, it is fun to live and work in Seaside. Come on back and join us..we'll have a ball!

Sincerely,

Walter N. Johnson

Mayor

WNJ:td

FARS AND RADIO SPORT IN AMERICA, 1991



RADIO GAMES -- USA

FARS Wants You!

You can become a member of the most exciting amateur radio organization under the sun - the Friendship Amateur Radio Society, Inc. (FARS).

FARS is a non-profit, public benefit corporation dedicated to enhancing radiosports, friendship, travel exchanges, and cooperative ventures between hams across the globe. FARS is an outgrowth of the first US/USSR Friendship Radio Games held in Khabarovsk, USSR in 1989 (see March & May 1990 issues, **QST**).

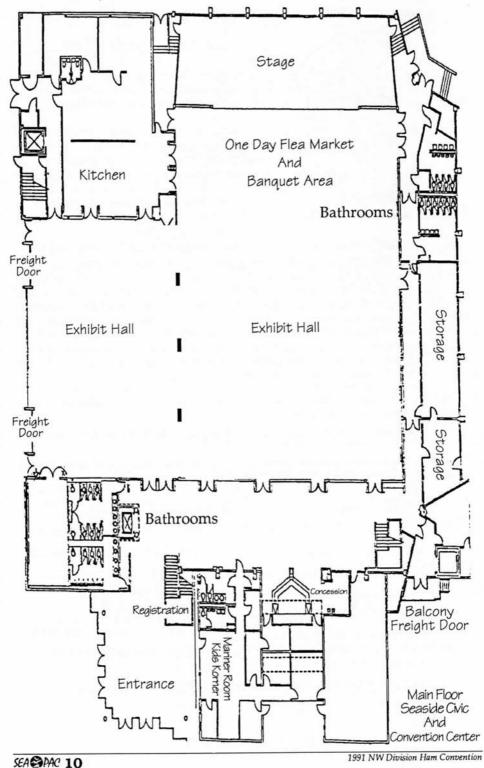
In 1990 FARS invited two Soviet amateurs from Khabarovsk to attend SEA-PAC to engage in planning for the 1991 games you are now attending.

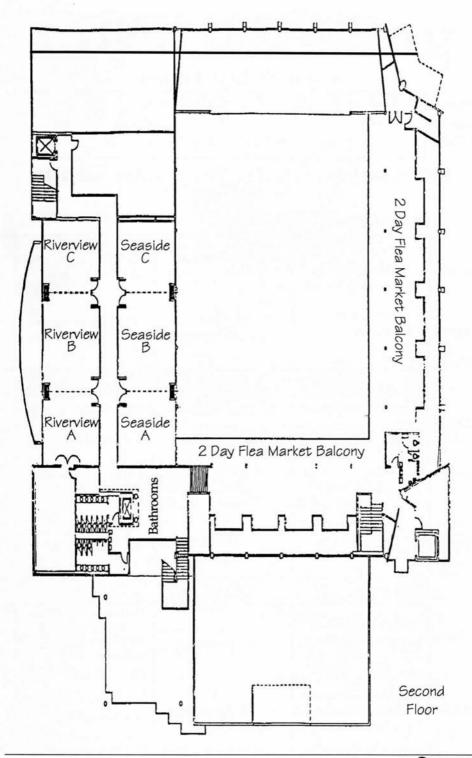
NOW, in 1991, FARS brings you the sister city Radio Sport Games, featuring teams from the US, Japan, and the Soviet Union. Your expertise, support and participation in the "91 games" and other FARS' programs is needed and welcomed! Associate members will receive a special, numbered, members' certificate and commemorative FARS lapel pin bearing the logo you see here, made in USSR.

All associate members are eligible to apply for US/USSR exchanges, and to participate in the 1991 radiosports games and awards programs. Those joining as Benefactors will be honored with a handsome wall plaque.

is my \$10 annual men	abership donation.
YBS! I wish to receive my \$15 annual newsle	e monthly updates of FARS activities in the FARS newsletter. Enclosed is ter donation.
is my annual donati	me a special member and be mentioned in FARS' annual report. Enclosed on (includes basic membership) of: \$100 SUPPORTING \$250 BENEFACTOR \$1,000 or INDIVIDUALS OR ORGANIZATIONS. FARS lapel pins (made in the USSR!). \$7.50 each enclosed.
NAME	LEVODENES
STREET	CITY
STATE ZIP	ARE YOU AN ARRL MEMBER? YES NO
TELEPHONE (optional)	MAIL TO: FARS
VISIT OUI	BOOTH AT SEA-PAC Portland, OR 97213 SEA-PAC GAMES AWARDS PRESENTATION

ATTEND OUR SEA-PAC GAMES AWARDS PRESENTATION
MEET MEMBERS OF THE SOVIET, US
AND JAPANESE RADIO SPORT TEAMS







Seaside Elks Lodge

Friday, May 31 7:30PM WILD WEST CASINO NIGHT
An evening of fun "No Stakes" gambling. Snacks,

excitement and prizes. No host bar.

Convention Center

	Mariner	June 1 Seaside	Riverview	
9:30AM	GETTING THE MOST FROM YOUR ANTENNA SYSTEM (2) Ken Kopp, KØPP	BUILDING A BIG BERTHA LINEAR AMPLIFIER (30) Hon. Greg Milnes, W7AGQ	CW RECEIVING (24) FARS	
11:00AM	BUILDING AFFORDABLE HIGH PERFORMANCE YAGIS FOR HF (28) Ken Glanzer, K7GCO	PACKET RADIO FOR THE BEGINNER (20) Jeff Freedman, K7JF	CW RECEIVING (24) FARS	
	Afte	rnoon, Saturday, Jun	ie 1	
1:00PM	AUTOMATIC REMOTE MOUNTED HF ANTENNA TUNERS (8) Gordon West, WB6NOA	INTERMEDIATE PACKET RADIO (21) Jim Wagner, KA7EHK	CW PILEUP RECEIVING (25) FARS	
2:30PM	BALUNS-WHAT THEY DO	ADVANCED PACKET RADIO (22) Jim Wagner, KA7EHK	CW SENDING (26) FARS	
4:00PM	THE MYSTIQUE OF GROUNDING (18) Al Chandler, K6RFK	TOPS	CW SENDING (26) FARS	
		Sunday, June 2		
9:30AM	AMSAT-DEDICATED TO KEEPING AMATEUR RADIO IN SPACE (32) Doug Loughmiller, KO5I	2 METER TROPO DUCTING FROM WEST COAST TO HAWAII (9) GORDON WEST, WB6NOA	SARES—THE SOVIET AMATEUR RADIO EMERGENCY SERVICES (17) Eugene Stavitsky, UW9CA/KB7LJW Mike Zavarukhin, UW9CN/AA7CH	
11:00AM	SHERWOOD TO SHUTTLE—SAREX 1990 (19) Jim Yohe, KF7KY	OREGON ARES ANNUAL MEETING (5) Bob Dorman, KV7F	Ham Radio In Japan (31) Yoshio Abe, KD7AM	

Schedule of Seminars Shilo Inn Convention Center Saturday, June 1 Dolphin Whale 1&2 Dolphin 2&3 RESOLVING INTERFERENCE HOW THE DX BULLETIN SEE PAGE 14 TO NEIGHBORS ELECTRONIC OF COVENTION IS PRODUCED (3) 9:30AM EQUIPMENT (12) BROCHURE Chod Harris, VP2ML Larry Stuker COMPUTER BASED UTILITY EMERGENCY PROGRAMS FOR DXERS & PREPAREDNESS (10) 11 DOAM HF OPERATORS (4) Chet McCoy, W7LRB Al Rovner, WA2TMP Afternoon, Saturday, June 1 THE AMATEUR AUXILIARY TO AMATEUR RADIO MEETS THE FCC'S FIELD 1:00PM AMATEUR ASTRONOMY (34) **OPERATION BUREAU** (29) Sandy Mikalow, K7OOZ Luck Hurder, KY1T TRANSMITTER HUNTING IN THE ARRL FORUM (27) SOUTHERN CALIFORNIA (13) 2:30PM J. Scott Bovitz, N6MI Kevin Kelly, N6QAB/5 Joe Moel, K0OV Mary Lewis, W7QGP WONDERFUL WORLD OF MF & THE CODELESS LICENSE HF COMMUNICATIONS-WHAT TO 4:00PM (6)EXPECT ON 160 - 10 METERS Mary Lou Brown, NM7N Rush Drake, W7RM (15) Sunday, June 2 SMALL EFFICIENT WOMEN IN HAM RADIO: ANTENNAS FOR 160 & WHAT'S IN IT FOR YOU (7) 9:30AM 80 METERS (1) Mary Lou Brown, NM7N Ken Kopp, KØPP WHAT DID YOU LEARN TO BE ANNOUNCED IN SCHOOL TODAY? (11) 11:00AM Cynthia Wall, KA7ITT

Schedule of Seminars Continued:

Oceanview Resort Motel	Shilo Inn Dolphin	Town Center Conference Rm	
	LADIES LUNCHEON		11:30AM
QCWA LUNCHEON	LADIES LUNCHEON		12:00PM
Aft	ernnon, Saturday, J	une 1	J -
QCWA LUNCHEON	LADIES LUNCHEON	ORRC MEETING	1:00PM
QCWA LUNCHEON	LADIES LUNCHEON		2:00PM
		7	2:30PM
	Sunday, June 2	<u> </u>	
			9:30AM
alor i		- L	11:00AM

SEMINAR TOPIC INFORMATION

1. Small, Efficient Antennas for 160 & 80 Meters Ken Kopp, KØPP. SUNDAY 9:30 AM, Seaside B.

Ken will discuss several approaches to making the most out of limited space for antennas on these two bands. He will also cover receiving loops and ground systems.

2. Getting the Most From Your Antenna System Ken Kopp, KØPP. SATURDAY 9:30 AM, Seaside B.

This seminar will discuss why some antennas work and others don't. Emphasis will be on open wire and coax feed lines, connectors and tuners. Will have materials for a "hands-on" display.

3. How the DX BULLETIN is Produced Chod Harris, VP2ML. SATURDAY 9:30 AM, Riverview A.

This is a slightly tongue-in-cheek look behind the scenes of a state-of-the-art publishing operation. For hams and non-hams alike.

4. Computer-Based Utility Programs for DXers and HF Operators Al Rovner, WA2TMP. SATURDAY 9:30 AM, Seaside C.

Several utility programs will be demonstrated representing logging, contesting, DX database statistics, propagation forecasting and others. The programs are specific to IBM and clone computers.

5. Oregon ARES Annual Meeting Bob Dorman, KV7F. SUNDAY 11:00 AM, Seaside A.

The present status, future aims and projects of the Oregon ARES will be discussed. This seminar is intended primarily for Emergency Coordinators and Assistant ECs but is open to all ARES members and those interested in emergency services.

6. The Codeless License Mary Lou Brown, NM7M. SATURDAY 4:00 PM, Seaside B.

Mary Lou will have the latest information on the new entry-level codeless license. She will discuss the background of the license, current FCC regulations and examination procedures.

7. Women in Ham Radio: What's In It for You Mary Lou Brown, NM7N. SUNDAY 9:30 AM, Riverview A.

Women have been involved in amateur radio since its beginning. Today there are many facets of the hobby in which women are active. Some of these will be discussed, with information on how to get started.

8. Automatic Remote-Mounted HF Antenna Tuners Gordon West, WB6NOA. SATURDAY 9:30 AM, Seaside A.

This is a demonstration of remote active-automatic antenna tuners. Discover which type of tuner may tune a "condo" or marine random long wire system.

Continued next page

SEMINARS CONTINUED

9. Two Meter Tropo Ducting from West Coast to Hawaii Gordon West, WB6NOA. SUNDAY 9:30 AM, Seaside A.

We will hear recordings of contacts between Southern California and Hawaii on 2 meters, 220, 450, 1270 MHz, and even 10 GHz. The program will include a laser demonstration of how tropospheric ducting occurs in the atmosphere.

10. Emergency Preparedness-WHEN, Not IF Chet "Lucky" McCoy, W7LRB. SATURDAY 11:00 AM, Riverview A.

A seminar designed to minimize the mystery and maximize the interest of amateurs in the handling of emergency traffic.

11. What Did You Learn in School Today?

Amateur Radio in the Classroom

Cynthia Wall, KA7ITT. SUNDAY 11:00 AM, Riverview A.

The author of ARRL's newest fiction series, 'Night Signals' and 'Hostage in the Woods' talks about using amateur radio as a cross-curriculum tool to teach everything from writing to science.

12. Resolving Interference to Neighbors' Electronic
Entertainment Equipment
Larry Stuker, FCC Public Affairs Specialist. SATURDAY 4:00 PM,
Seaside A.

Larry brings our regulatory agency's approach and viewpoint to this perennial problem.

13. Transmitter Hunting in Southern California J. Scott Bovitz, N6MI, Kevin Kelly, N6QAB/5, Joe Moell, KØOV. SATURDAY 2:30 PM, Seaside A.

The greater L.A. and Orange county area has the most active transmitter hunting group in the country. Come see a unique slide show and hear the panelists discuss the Southern California style of T-hunting.

14. The Great SeaPac Transmitter Hunt J. Scott Bovitz, N6MI. SUNDAY 2:00 PM, Outside.

A Southern California-style transmitter hunt will be held on 2 meters. Three spiffy certificates will be awarded to the first, second, and third place finishers. Winner will be based on the lowest elapsed mileage from start to finish.

15. The Wonderful World of MF & HF Communications What to Expect on 160 through 10 Meters Rush Drake, W7RM. SATURDAY 2:30 PM, Seaside C.

A band by band analysis of openings from the Pacific Northwest to the world, with times, locations and bearings in chart form. Rush will discuss what to expect through the remainder of Cycle 22, and will show several low-budget antenna designs.

16. Baluns - What They Do and How They Do It Roy Lewallen, W7EL. SATURDAY 1:00 PM, Seaside C.

SEMINARS CONTINUED

Roy will discuss the theory and application of the balun, with emphasis on HF applications.

17. SARES - The Soviet Amateur Radio Emergency Service Eugene Stavitsky, UWØCA/KB7LJW and Mike Zavarukhin, UWØCN/ AA7CH. SUNDAY 9:30 AM, Riverview C.

Eugene and Mike will give an update on Emergency services development in the USSR, with recent information concerning planning, development and operations.

18. The Mystique of Grounding Al Chandler, K6RFK. SATURDAY 4:00 PM, Seaside C.

A discussion of the problems of getting a good RF ground as it applies to antennas, radios, towers and power mains.

19. Sherwood to Shuttle - SAREX 1990 Jim Yohe, KF7KY. SUNDAY 11:00 AM, Seaside C.

A documentary of Sherwood's Hopkins Elementary School's SAREX contact with astronaut Ron Parise, WA4SIR on 9 December, 1990.

20. Packet Radio for the Beginner Jeff Freedman, K7JF and Bob Knight, N7CLZ. SATURDAY 11:00 AM, Seaside B & C.

Packet radio can be very confusing to the beginner. This seminar discusses the basics of station setup, including radios, antennas, modems or TNCs and terminals. Basic operating principles and use of bulletin boards will also be covered.

21. Intermediate Packet Radio Jim Wagner, KA7EHK. SATURDAY 1:00 PM, Seaside B.

Enjoyment of packet radio can be increased when you understand the basics of networks and bulletin boards. Efficient use of these resources will be outlined in this session.

22. Advanced Packet Radio

Jim Wagner, KA7EHK - Moderator. SATURDAY 2:30 PM, Seaside B.

Several panelists will discuss a variety of topics including node parameter settings, TCP/IP and the "layer description" of AX.25.

23. CW Competition: Receiving, 'Pileup' Receiving and Sending

John White, K7RUN-Moderator. SATURDAY 9:00 AM to 5:00 PM.

24. CW Receiving 9:00 AM to 12 Noon, Riverview B & C.

25. CW "Pileup" Receiving 1:00 PM to 2:30 PM, Riverview B & C.

26. CW Sending 2:30 to 5:00 PM, Riverview C.

Both team and individual contestants will compete. There will be opportunity for a limited number of interested persons to observe the competitions. Times are approximate.

Continued next page

SEMINARS CONTINUED

27. The ARRL Forum
Mary Lewis, W7QGP. SATURDAY 2:30 PM, Riverview A & B.

This forum will cover recent laws restricting possession of receivers; spectrum preservation; license fees; volunteer examination procedures; amateur radio in the classroom and many other topics of current importance to amateurs.

28. Building Affordable High Performance Yagis for HF Ken Glanzer, K7GCO. SUNDAY 11:00 AM, Seaside B.

Ken will explain how to build that dream antenna using low-cost materials and ingenuity.

29. The Amateur Auxiliary to the FCC's Field Operations Bureau Luck Hurder, KY1T. SATURDAY 11:00 AM, Seaside A.

Luck is Deputy Manager of ARRL Field Services. He will bring us up to date on the enhanced Official Observer program and the ARRL monitoring system and discuss how they relate to our day to day Amateur Radio operations.

30. Building a 'Big Bertha' Linear Amplifier Hon. Greg Milnes, W7AGQ and Stan Griffiths, W7NI SATURDAY 1:00 PM, Seaside A.

This seminar will discuss how to scrounge and apply surplus and fleamarket parts for building a large HF linear power amplifier. Slides will be shown of the project's progress and the amplifier will be on display.

31. Ham Radio in Japan

Yoshio Abe, KD7AM - Moderator. SUNDAY 11:00 AM, Riverview C.

Several Japanese hams will give a short talk, interpreted by Yoshio, followed by opportunity for personal contact with the Japanese visitors.

32. AMSAT-Dedicated to Keeping Amateur Radio in Space Doug Loughmiller, KO5I. SUNDAY 9:30 AM, Seaside C.

An illustrated talk on the future direction of the amateur satellite program.

33. ARRL Educational Workshop Rosalie White, WA1STO. FRIDAY 4:00 to 8:00 PM, Seaside C.

Held on Friday from 4 to 8 PM, this seminar is especially for amateur radio volunteer evening instructors and school teachers who use ham radio in class, ham radio recruiters, or those who are interested in any of these activities.

34. Amateur Radio Meets Amateur Astronomy Sandy Mikalow, K7OOZ. SATURDAY 1:00 PM, Riverview A.

This is a multimedia illustrated presentation on the melding of hightech amateur astronomy with amateur packet radio. Sandy will talk about transmitting images and controlling an observatory by means of packet radio.

FLYWEIGHT BODY with HEAVYWEIGHT FEATURES

Alinco's New DJ-F1/F4T Realized Super Compact Body and Plenty of Features including:

*40 Memory Channels store Frequency, Shift direction, Split operation Setting, Tone encoder/Tone decoder setting (with optional Tone squeich unit), DSQ setting, Tone frequency and Offset frequency independently.

*Digital Signal Display and Memory

The DJ-F1T/F4T has special memory channels for transmitting, receiving, and store "Two Digit" DTMF Tones, for communication messages. This feature allows for the DJ-F1T/F4T to receive a "Two Digit" message and display it at any later time, at the convenience of the operator.

*Wide Band Receiving range

F1T:140-170MHz(AM Mode 118-136MHz after modification) F4T:430-460MHz *Battery Pack Lock

*Pager and Code Squelch

*Triple Stage Selective Power Output *5W Output Power with Optional Battery Pack EBP-18N

*8 Scan Modes

*Programmable VFO Range Func-

Battery Save Function

*Six Channel Steps - 5, 10, 12.5, 15, 20, and 25KHz

*Priority Function (Dual Watch)
*Automatic Power Off (Pro-

grammable Timed)

*Automatic Dialer Function *Illuminated DTMF Keypad

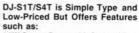
*Many Optional Accessories such as:

EMS-8:Remote Control Speaker/Mic.

EME-11:Earphone/Mic. with PTT/VOX

EME-10:Headset with PTT/VOX EJ-2U:Tone squelch Unit EDC-33:Quick Charger (Compatible with standard battery pack)

and many more. . . .



* 5W Output Power with Optional Battery Pack EBP-18N

*Triple Stage Slective Power Output *Dry Cell Battery Case Lock

* Programmable VFO Range Function * Frequency Lock, PTT Lock Function

*One Touch Squelch De-Activation Function

*8 Scan Modes

*Wide Band Receiving Range

Available Features with Optional DTMF Unit (DJ-10U) and DTMF Keypad (ESK-1) Include:

* Pager and Code Squelch

 Digital Signal Display and Memory Function

* Automatic dialer Function

*Many Optional Accessories Available

Specifications
 Frequency Range:

DJ-F1T/S1T TX:144-148MHz

RX:140-170MHz (AM Mode 118-136MHz after Modification) DJ-F4T/S4T TX:440-450MHz

RX:430-460MHz

Output Power:

with Battery Pack EBP-16N (Standard for F1T/F4T) Hi:2W(F1T/S1T) 1.5W(F4T/S4T)

Mid:1W Low:0.1W
* with Optional Battery Pack EBP-18N

Hi:5W Mid:1W Low:0.1W

Hi:2.5W(F1T/S1T) 2W(F4T/S4T) Mid:1W Low:0.1W

Weight:

DJ-F1T/F4T Approx.:13.2 oz.: with Standard Battery Pack DJ-S1T/S4T Approx.:13 oz.: with Dry Battery case

Dimensions:

4.3(H) × 2.1(W) × 1.5(D) inch (Without Projections)

Specifications and features are guaranteed for amateur bands only and subject to change without notice.

ALINCO ELECTRONICS INC.

438 AMAPOLA AVE. LOT 130 TORRANCE, CALIFORNIA 90501 Phone: 213-618-8616 FAX : 213-618-8758

STAY TUNED with

ALINCO



Our new TS-850S just made t competition obsolete

No competition class transceiver is even in the same ball park as the TS-850S.

You'll find a superior intermodulation dynamic range of 108 dB throughout the entire 100 kHz to 30 MHz range. Kenwood's TS-850S is the

Kenwood's TS-850S is the only transceiver to feature Digital Signal Processing (DSP) – in both transmit and receive modes (with the optional DSP-100). This feature provides such greatly enhanced signal purity and richness that you'll want to experience it, to fully appreciate it.

Other advanced technology in the TS-850S includes 10 Hz step dual VFOs, multi-mode scanning, full and semi break-in CW, superior interference reduction, keyer, dual noise blanker, and RIT/XIT. 100 memory channels store, transmit, and receive frequencies independently. High boost for SSB signal "punch".

Microphone Supplied.
The Kenwood TS-850S. All band. All mode. One year warranty. In a class by itself!

DSP-100 Digital Signal Processor.

AT-300 160 - 10 m external antenna tuner.
AT-850 160 - 10 m internal antenna tuner.
DRU-2 Internal digital recording unit.
IF-232C Computer interface. PG-2X
DC cable. PS-52 Power supply. SO-2
TCXO. SP-31 Matching external speaker.
VS-2 Voice synthesizer. VG-455C-1 500
Hz CW filter for 455 kHz IF. VG-455CN-1
550 Hz CW filter for 8.83 MHz IF.
VR-88CN-1 270 Hz CW filter for 8.83
MHz IF. YK-88SN-1 1.8 kHz SSB filter for 8.83
MHz IF. YK-88SN-1 1.8 kHz SSB filter for 8.83

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COMMUNICATIONS & TEST EQUIPMENT GROUP
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Srand Aware AwB FUNCTION NOTOK ž 14250.00. ON AIR ATTUNE AIP KENWOOD DIGITAL SIGNAL PROCESSOR DSP-100 CUICK MEMO N. N êš ENT 27.2 20 40 80dB 0.83 455 -FILTER-KENWOOD HETTANSCENER TS-8508 8.83 10 85 50 100 150 W PLAY-P METER OLA POWER -- ALC -AGC KEY SPEED - 3- CAR 18981 PROC - MONI HIGH BOOST PROC # REC/SEND . # THRU/AUTO -POWER - VOX - FULL MAN I SEMI PHONES OFF ě

Kenwood meets or exceeds all specifications. Contact your dealer for a complete listing of specifications and accessories. Specifications are subject to change without notice. Complete service manuals are available for all Kenwood transceivers and most accessories. One year warranty in the U.S.A. only.

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EXHIBITORS

AEA Alinco AMSAT Amateur Radio Relay Group Amateur Radio Supply Ameritron Antennas West ARRL Auto Ham Bless Your Heart Central Oregon Radio Amateurs Charles Simmons Computer Nut Comet Antennas, (Warren Robinson) Coos County Radio Club Curley's Engraving Cynthia Wall, Author C-COMM D.C. Power DX Bulletin Electro-Comm **EPO** Software ETO-Alpha Linears **FARS** Ham-Pro Antennas Ham Radio Outlet Handcrafted Wood Products Hats For Hams Hustler Inc. H. Stewart Design Hoodview ARC **ICOM** Judy's Jewelry Kenwood USA Larsen Electronics MARS MFJ Motron Electronics Mr. Nicad Multi-Band Antennas **OEM Services** OTVARC Portland ARC Portland Radio QCWA **QSL-ART** Ramsey Electronics Reno Radio **RF Parts** Smiley Antennas Standard Amateur Radio Products St. Helens Electronics Sunset Empire ARC Swiech Comm. Systems Yaesu YLRLWillamettte Valley DX Club

Due to publication deadlines we apologize for any omissions.

Banquet



Gordon West, WB6NOA

Gordon West, WB6NOA, has been a licensed ham for 25 years and holds a commercial general radiotelephone license with radar endorsement. In his numerous monthly articles in over 17 national magazines, Gordon makes the technical easy to read and fun to understand. His recent amateur radio licensing books, sold throughout the country by Radio Shack, have been a sellout. Everyone seems to enjoy his humorous style of writing.

Program

Gordon West is a life member of the American Radio Relay League and a fellow with the Radio Club of America. All of this hard work has led to his recent nomination as ARRL Instructor of the Year.

Best of all, Gordo "live", allows us to take a humorous look at our amateur radio operating and some serious thoughts on where we are headed in the amateur radio service. He teaches radio classes almost 7 days a week so we are pleased to have "Gordo" for our banquet speaker.

Whoops, Did I Say That?

A half-hour of hilarious recordings of hams making foul-ups on the air. Gordon West tunes into the lighter side of ham radio operators who will literally crack you up! Listen to a ham, on the air, when his tower blows down in the wind. Hear another ham fall completely asleep during a long-winded 160 meter QSO. Better yet,

listen to an old-time ham opening up the trap door of his Henry 3–K amplifier to see whether or not the tubes are glowing blue or red. (A snap that can be heard around the world!)

Finally, Gordon West works these hilarious recordings into a down-to-earth review of where we've been in the technology, what the future may hold for us in new operating modes and why we should have more.

Master Of Ceremonies Jerry Dimmitt, WA6FCY/7

Jerry Dimmitt, WA6FCY/7, master of the subtle quip, has twenty-eight years of broadcasting experience. He has been a ham since 1958 and holds a general class license. Active on 2 to 75 meters he is a member of ARRL, QCWA and 10–10 #17418.

Jerry became a talk show host in Lancaster, California at the early age of 18. Since that time, he has worked in Eugene, Portland and Seattle. Jerry's talk shows were the highest rated in both Seattle and Portland.

Catch Jerry "on the wrong side of a 20 year cycle with a full moon on the 3rd Tuesday" and "Gentle Jer becomes "Mad Dog Dimmitt!" Then listen for the fun as "Mad Dog" Dimmitt tells an unsuspecting caller who "ticks him off" to.... "go leap!" It's hilarious. Jerry's listeners love both sides and they generally get both sides.

2 Raffles! -- 3 Prizes!

icom IC-24AT

Dual-Band HT

(sells for more than \$400) Tickets - \$1.50 each or 4 for \$5.00 First Prize AEA MM3

Morse Machine (sells for about \$170)

Second Prize

ICOM GC5

Station Clock

(sells for about \$70)

A Non-Profit Organization

Tickets - \$1 each, or 6 for \$5

Raffle B

Hoodview Amateur Radio Club

See you on the convention floor!



Presenting the second annual awards for an Amateur Radio Operator and two outstanding clubs at the banquet Saturday night, June 1, 1991.

Ham Of The Year:

Nominations Are:

Judith Shrader, KA7OFM, is the Jackson County Emergency Coordinator for A.R.E.S. She has encouraged hams to work with search and rescue. Being a VEC Judith has helped countless people become hams through her teaching them code and theory. She is also secretary/treasurer of Rouge Valley ARC where she has been a member for 5 years. Judith is also active in public service.

Roger McCoy, W7ADV, has been active in public service for over 25 years most notably during the St. Helen's eruption. In addition he has assisted the Red Cross and several government agencies in emergency communica-

tions planning.

Two Club Awards:

Outstanding Achievement

At press time we have one nominee–Valley Radio Club of Eugene. The ham community has benefited most notably by the VRC's effort to secure a Lane County Amateur Radio Antenna Ordinance, a two year effort.

Consistent Contribution

Valley Radio Club of Eugene. Their First ARRL charter was in 1932, over 50 years of service. They maintain a club station, are active contesters, donate equipment to new hams, have a Silent Key Assistance Program and are active in public service through ARES and the Red Cross plus much more.

Tektronix Employes Radio Amateur Club. By the nature of the membership, TERAC over the years has pushed the envelope of technical achievements from QRP to microwave to laser. They have also maintained emergency

service readiness for Washington County.

Portland Amateur Radio Club. They've concluded an agreement with Portland to allow amateurs to provide tower engineering data, fielded a team to Khabarovsk Radiosport Games and are hosting international teams in 1991. They also are avid supporters of emergency communications for Portland.

Olympia Amateur Radio Society. This club conducts novice and tech classes twice a year, supplies "Elmers" for those who need assistance, operates repeaters, is active in public service, encourages QRP operation and hosted international teams for the Goodwill Games.

Susan Benson, N7EPE

Oregon Tualatin Valley Amateur Radio Club Presents The 1991 Scholarship Winner

JEFFREY ALAN BRYANT, KB7GCQ



OTVARC has chosen Jeff Bryant as the winner of the 1991 Scholarship. Jeff will receive \$1500.00 and has been accepted at Oregon State University.

In Jeff's own words, "I started out like many hams, on the C.B... I met a friend who was studying for his license and he got me very interested in amateur radio. After about four months of hard studying, I picked up my novice ticket and three weeks later my technician license.

"I've tried a little bit of everything in ama-

teur radio, from contesting and homebrewing to public service like Artquake, though my favorite part is the technical aspect of amateur radio. I'm a very analytical person and like to know how things work.

"There's an infinite future for me in ham radio. Possibly this summer I'd like to go for my advanced class license and someday my extra class. I plan on joining the Oregon State Amateur Radio Club and

participating in all their activities.

"I'm very active in school and have maintained a 3.40 GPA. A few of my achievements are: taking third in electronics from the Clackamas County Skills Contest, independent research in science projects, advancement in two science courses and academic achievement in yearbook for three years.

"Iplan on attending Oregon State University this fall and majoring in Engineering. After receiving a degree, I intend to be employed with the best engineers of he state and help with the development of

Oregon's future electronic companies."

Good luck, Jeff, from all of us on the scholarship committee: Pat Griffiths, KA7UFG; Bob Orr, WF7Q; Don Branda, N7DDK; Wally Boleen, KC7TB.

If you are interested in finding out more about the 1992 OTVARC Scholarship come to the OTVARC Booth or write to: OTVARC Scholarship, PO Box 5132, Beaverton, OR 97006.

Pat Griffiths, KA7UFG

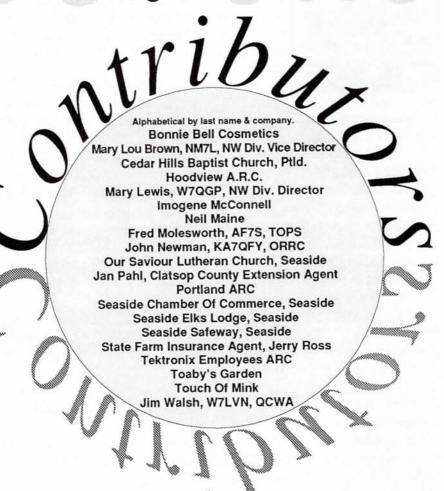
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MFJ
Multi-Band Antennas
OEM Services
Portland Radio Supply
Reno Radio
RF Parts
Smiley Antennas
Standard Radio
The DX Bulletin
Yaesu USA

Due to publication deadlines we apologize for any omissions.

Note: All registrants, including convention sponsors, are eligible for prize drawings and/or contest awards.

SEA PAC THANKS YOU!!!



Prize Drawing Information Grand Awards

Need Not Be Present To Win

KenwoodTS 850S HF Transceiver ICOMIC 229A 2m Mobile YaesuFT 212RH 2m Mobile StandardC168 Mini 2m HT AlincoDR 110T 2m Mobile

Must Be Present

KenwoodTM 731A 2 Bander VHFUHF
KenwoodTH 26AT 2m HT
MFJ949D HF Tuner
RF PartsX500NA Diamond Antenna
Falcon100 Watt 2m Amplifier
Multi-Band Ant. ..Spider HF Antenna
Ham Pro Antennas ..3 Element 10m Beam

Need not be present prizes will be shipped to winners. The drawing time will be limited to one hour between 1–2PM 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 AWARDS

Posted in the lobby and on stage for 2 hours.

Those unclaimed will be re-issued.

SPECIAL

Early Bird Award
ICOM
IC2 SAT 2m HT



Co-Chairmen: Wes Allen, K7WWG; Al Berg, WB7SIC Jim Schaeffer, KB7ADH; Randy Stimson, KZ7T Committee Chairmen

In Alphabetical Order:

Awards	Susan Benson, N7EPE
Casino Night	Ray Deeth, K7VDQ
Exhibit Setup	Neil McKie, WA6KLA
Exhibitor Hospitality	Bobbi Antons
Exhibitors	Al Berg, WB7SIC
Flea Market	Rick Doescher, KB7JF
Kids Korner	Portland A.R.C.
Ladies Program	Betty Mickley
Printing/Advertising	Brad Beach, N7NVC
Prizes	Bud Butterfield, KC7PS
Registration	Brad Beach, N7NVC
Security	Doug Brown, N7KEJ
Seminars	Gene Single, K7IUN
Talk-In Booth	John Klein, KA7ICV
Treasurer	Susan Benson, N7EPE
VE Testing	H. Lea T. Ball, AL7W

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

Due to publication deadlines we apologize for any omissions.

In alphabetical order:

Casino Night

Bobbi Antons Tony Antons, KA7ZDE Mary Berg

Larry Cronenwett, KA7WXN
Pat Griffiths, KA7UFG

Exhibit Set-Up:

Wes Allen, K7WWG Arnie Chase, WA7CRI Doc McClendon, W7GWC David Nelson, WB7REC Iack Root

Brian Stevens

Exhibitors:

Wes Allen, K7WWG Pat Griffiths, KA7UFG Randy Stimson, KZ7T

Exhibitor Hospitality:

Glenda McClure Marvel Noyes, KA7IZT Roger Noyes, KA7RNN

Flea Market

Jeff Durr, KA7AKU Roger Noyes, K7RNN Jack Smithson, KA7HOJ Bill Vesser

Ladies Program:

Sharon Coan, KA7NAN Katy Lapay, N7GCL Val Roel, KA7QEV Debbie Smith, N7KAE Cheryl Stimson

Prizes:

Wally Boleen, KC7TB
Dale Planer, KA7TZU
Floyd Ragmer, W7ONQ
Ron Remsen, W7YOW
Rick Schouweiler, KA5OLH

Registration:

Bobbi Antons
Barbara Bailey, KA7WIF
Lorna Campbell, KA7RFD
Aaron Freedman, N7TBS
Jeff Freedman, K7JF
Randi Graffey
Jim Schaeffer, KB7ADH

Security:

Hoodview ARC Thank you all.

Seminars:

Tektronix Employes RAC Dick Pooley, W7HUY

Talk-In Booth:

Bob Burgert, K0PB
Rex Danton, KA7YKR
Carl Hokanan, KA7CRN
Martha Hokanan, KA7CRO
John Johnson, N7OGM
Marque Marriott, N7LWQ
David Olson, N7IBI
Handford Van Ness, KE7BB
Roland West, K7MCK

VE Testing:

Portland ARC
Mike Arevaios, KV7Z
Gil Brentley, N7DCS
Rob Butt, N7MZR
Alan Churchill, AA7CV
Pat Donahue, W7UMZ
John Fallon, N7EDP
Frank Moorhead, W7DWW
Rollie Nielsen, NE7S
Ron Pitney, N7HZR
Jim Yohe, KF7KY

Iadies Programs

Saturday, June 1

9:30AM-4:30PM, Huntley Inn-Room #125

Ladies hospitality suite. Coffee-treats-friends-old and new.

10:00 - 11:00 AM, Huntley Inn-Room #125

"Climbing Your Family Tree" presented by Imogene McConnell.

11:30-2:00PM, Ladies Luncheon & Pgm.-Shilo Inn-Dolphin #2&3

'Travel Today In The USSR, Presented By Mary Lou Brown, NM7N.

3:30-4:30PM, Huntley Inn-Room #125

"Balancing Act For Busy People" presented by Jan Pahl,

Clatsop County Extension Agent.

All Day Saturday

"Ladies Treasure Hunt" presented by Seaside Chamber Of Commerce.

Free-Must Be 21 Years or Older.

Sunday, June 2

9:30AM-1:00PM, Huntley Inn-Room #125

Ladies hospitality suite. Coffee-treats-friends-old and new.

10:00 - 11:00 AM, Huntley Inn-Room #125

"Ribbon Of Life: The North Oregon Coast" presented by Neil Maine.

Noon-1:pm, Huntley Inn-Room #125

"Issues Of Patriotism" presented by Capt. Dennis Dutton.

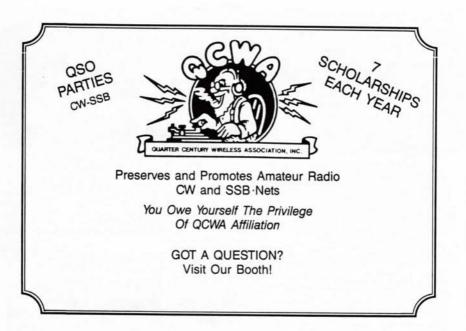
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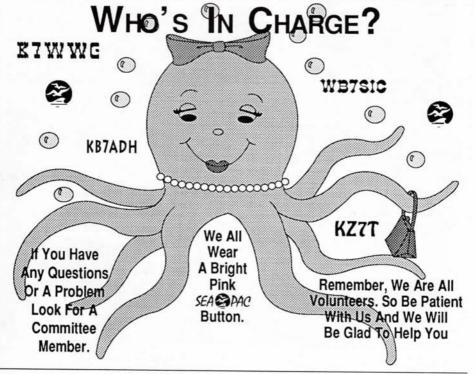
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Bonnie Bell Cosmetics

State Farm Insurance Agent, Jerry Ross

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HENRY RADIO IS THE PLACE ...THE BEST PLACE to fill all your data communications needs



The TEMPO MPP1 TNC/printer. . . \$249

A unique new mobile data printer. It incorporates a packet controller with a 40 column thermal printer that operates on 13.6 VDC and interfaces with any mobile radio. In a recent user test it proved to have about twice as much audio level range tolerance as other TNCs. It is also an ideal unit for emergency work and a commercial version is perfect for dispatching service, emergency and police vehicles.

The FSTV-430A, AEA's newest

The exciting FSTV-430 fast scan television transceiver makes getting on ATV easy and inexpensive...live or taped. Almost any video camera can be used. Simply plug it into the FSTV-430, connect to your 70 cm antenna and you're on the air. Use a standard TV for receiving signals and, of course, an amplifier will extend your range. It's reliable, portable and light weight and can be used in-station or mobile from any 12 VDC source. The only license required is a technician or higher.





The PK232/MBX by AEA ...the only controller offering Morse Code, Baudot, ASCII, AMTOR, Packet, and facsimile Transmission & Reception plus the ability to monitor the new Navtex marine weather and navigational system...7 modes in one controller. The PK-232 makes any RS-232 compatible computer or terminal the complete amateur digital operating position. All decoding, signal processing and protocol software is on ROM. Only a simple terminal program (like those used with telephone modems) is required to interface the PK-232 with your computer.



Here's a value you can't beat. . . the basic 8088

- 101 Keyboard
- Monochrome monitor
- 640K of RAM
- 360K floppy
- 2 serial & 1 parallel port

An excellent starter for both packet and business at the incredibly low price of \$595. Or for anyone requiring an extremely high speed unit at a comparibly low price ask us about the models 80286 and 80386. They are perfect for business or data communications and we can configure them to your requirements. And, of course, these systems are covered by a one year warranty.

If you have any questions concerning these units, or would like to discuss your requirements with a knowledgeable specialist, please call and ask for Fred, N6SFD. We also carry a large selection of excellent commercial products for data communications and emergency systems as well as a complete inventory of amateur equipment and linear power amplifiers.

> Try our new 24 hour "Bulletin Board Service" ...(213) 826-4954

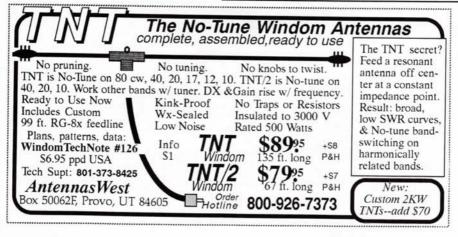


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AntennasWest

Bring the ad below to the booth for \$5 saving on any *AntennasWest* antenna.

- Build it yourself with Ramsey Kits from AntennasWest
- Enhance your 2 meter signal with TigerTails* and Collinears
- Go InstantMobile* with Whips, Mag mounts & Quick Interconnects*.



Shuttle Bus

For your convenience a shuttle bus will run from 7AM until 5:30PM Saturday, June 1. This is provided as a service free of charge to attendees to help alleviate the parking congestion. Please wear your badge.

It will run between the following locations:

Buds Campground & Grocery
Venice Trailer Park
Circle Creek RV Park & Campground
Riverside Lake Resort Trailer Park
Shilo Inn

Convention Center And Selected Motels (Inquire At Registration Desk)

RAGs Test Bench

As a service to flea market buyers the Radio Amateurs of the Gorge (RAGs) will have a test bench in the upstairs flea market. Test equipment available 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.

Of course, neither RAGs nor AND can accept any responsibility for the condition or operability of any equipment, nor can we be held culpable for any equipment damage as a result of the use of this

equipment.

H. STEWART DESIGNS HAS CHANGED!

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For example, LAST YEAR our ads said:

"The II-DX is not for everyone" - That was right Last Year!

THIS YEAR - There's a whole New II-DX Antenna

The new II-DX looks the same. It performs better.

AND it's user friendly!



THE NEW II-DX IS FOR EVERYONE!

See our booth for details or write to: H. STEWART DESIGNS, P.O. BOX 643 OREGON CITY, OR 97045

Registration Badges

Since all committee members are required to register, we also ask that everyone in attendance be registered. Please wear your registration badge at all times while in the convention center.

Thank you very much for your Cooperation!!!

MAIL ORDER

Save Money



1-800-882-1343





KENWOOD

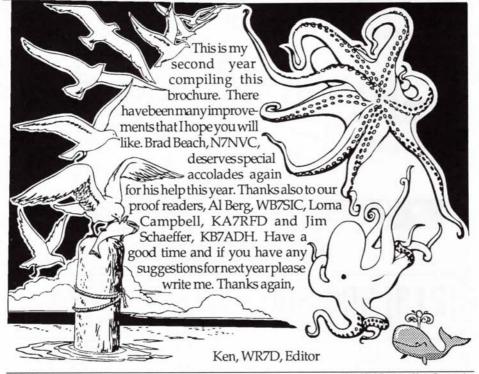
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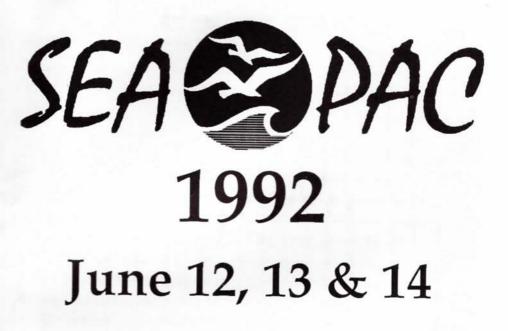
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The convention sponsors try to make certain all information in this brochure is accurate, however, we must be held harmless for any inaccuracies that may occur. Thank you.





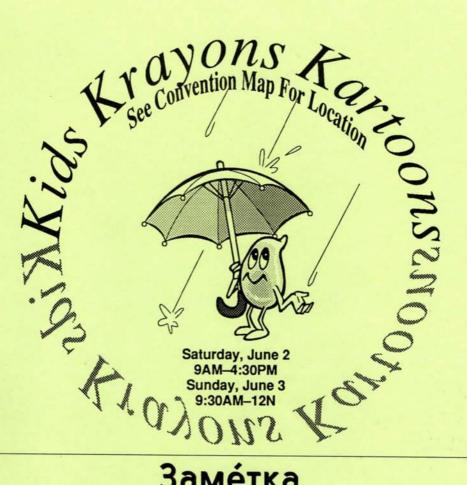
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REGISTER TODAY FOR 1992 AT 1991 PRICES.

Fill Out The Form On The Back Of This Page
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Of The Convention Center.
Thank You.

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ı Ma	Flea Market Tables at \$10 per table per day or \$17 per table for 2 days\$		N	٧
rket .	Friday Social Casino Night at \$10.00 (300 person limit)		May	alic
Parti	Saturday QCWA Lunch at \$7.50 (150 person limit)		t R	10
cipa	Saturday Ladies Luncheon at \$7.00 (80 person limit)		eģi	nly
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NOTE: Flea Market Participants must be registered for the convention.



Заметка

СОМ

IC-24AT IC-32AT

WE CHALLENGE YOU TO A DUAL.

ICOM'S I WAL BAND HAN HELDS

IC-24AT

IC-32AT 5 1/2 watts

ICOM's IC-24AT and IC-32AT call you to action with the most feature packed, power packed dual band handhelds available. Whether you prefer the convenience of a mini-handheld or the grasp of a full-see handheld, ICOM has the dual-bander fit for you.

fit for you.

The IC-24AT mini-handheld and the IC-32AT give you full operation on the 2-meter and 440MHz amateur bands.

Outstanding Performance!

POWER PACKED HANDHELDS.

The IC-24AT provides up to 5 watts on 2-meters and 440MHz with a 12V battery while the IC-32AT is 5 1/2 watts on 2-meters and 5 watts on 440MHz.

PLENTY OF MEMORIES. Store any frequency, Tx offset and subaudible tone in any memory. Total flexibility to meet your needs.

PROGRAMMABLE SCANNING. Both units scan band and memories plus offer easy memory lockout and instant memory recall.

PRIORITY WATCH. Monitor the call channel, a memory channel or all memory channels every five seconds while operating!

ADDITIONAL FEATURES INCLUDE: Battery saver, multi-function LCD readout, dial selectability and

DTMF pad for memory channel autopatching. The compact light-weight IC-24AT also features a 24 hour clock with timer, and an autoflaler. Access to multi-digit phone numbers at the touch of a button.

or a conton.

ACCESSORIES: The IC-24AT uses accessories from the 'S' Series hand-helds while the IC-32AT is compatible with all IC-2AT/02AT accessories. An optional UT-50 provional UT-40 beeper slently monitors a busy channel for your When the represergament subaudible

suchuy monitors a tossy channet for your calls. When the preprogrammed substudible tone is received, the unit beeps and the LCD flashes. The dual is over, ICOM's IC-24AT mini-dual bander and IC-32AT full-size dual bander give you maximum performance in the package best sureft for your needs. Check your local ICOM dealer for the finest dual banders available today. The ICOM IC-24AT and IC-32AT.

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