



# PVRC Newsletter

## October

Newsletter Editor: John K3TN [jpescatore@aol.com](mailto:jpescatore@aol.com)

Website: <http://www.pvrc.org>

Meeting Info: <http://www.pvrc.org/chapters.htm>

Facebook: <https://www.facebook.com/groups/PotomacValleyRadioClub/>

### President's Letter – Doug AA3S

#### Special Recognition and Thanks to Multi-Op Hosts

Over the years, I have operated at three (maybe four) multi-operator stations hosted by PVRC members and I operated multiple times at one or two of those stations. While operating at those multi-op stations I was *contributing contest points to help PVRC win, learning new station technical skills, developing some new operating skills, sharing (but mostly receiving) knowledge with the operators, and developing camaraderie with my fellow ops.* My experience at the multi-op is the norm for operators participating at a multiple op station.

Look at our [PVRC.org](http://www.pvrc.org) web page at the top and you will see that the *experiences* I listed above are essentially all of our Mission goals as a radio contest club. *Our multi-op stations embody the core mission of our club, all in one place, all at the same time.*

In my examination of the PVRC 5M results for the past year or so for multiple-operator entries (of any variation), I found that at least 26 PVRC members have *hosted* 5M contest operations at least once from their station. They are listed below and **all of them deserve much thanks, recognition and encouragement from all of us for advancing the state of Amateur Radio in general and benefiting PVRC in particular** (my profuse apologies in advance if my tedious, manual search of the data inadvertently omitted anyone):

Mike Barts	N4GU as AG4TT
Steve Bookout	NR4M
Nick Clevenger	KK4ODQ
Frank Donovan	W3LPL
Jack O'mara	W4NF
Bill O'mara	W4RM
Bert Michaud	N4CW
Ben Hutchinson	N3UM as K3CCR
Jim Jordan	K4QPL@VP5M
Susan Hoffmaster	N3DPB

Alan Hoffmaster	WA3EKL
Rob Katz	K4OV
Terry Price	W8ZN
Rick Miller	N1RM
Rob Katz	K4OV
Ken Ramirez	KP4AA
Mark Killmon	K4SO
Mike Kowalsky	AC8Y
Brian McGinness	N3OC
Jim Nitzberg	WX3B

Jack	Reichert Jr	N4RV
Dave	Sarault	N3XF @AG3I
Tim	Shoppa	N3QE

Frank	Stein	W4TG
Mike	Trowbridge	KA4RRU
Tom	Valenti	K3AJ

Multi-op stations have the potential for, and usually do, score many more points than if the operators had operated that contest only from their home. The multi-op stations typically have better antenna systems than we do at home and more multipliers are logged against more QSOs.

A Highly Motivated Operator (HMO) will work shifts at the multi-op and then operate again from home! Consider that, too, if you have the stamina. Your multi-op apportion of points plus your home QTH points will go toward your 5M totals for that contest.

Go PVRC!

### **Club Competition - Doug AA3S**

October is a BIG month for 5M contests:

- **California QSOP** -5M INAUGURAL! -250 mile circle with some exceptions - begins 2025-10-04
- **Makrothen RTTY** -PVRC Members Worldwide -begins Friday OCT 10, 8PM EDT
- **Worked All Germany** -PVRC Members Worldwide -begins Saturday OCT 18, 11AM EDT
- **CQWW SSB** -ARRL/CQ 250-Mile Circle -begins Friday OCT 24, 8PM EDT

But November is even bigger with the important Sweepstakes plus other 5M contests!

See Reflector for important related announcements like 'double 5M points'!

**If you have tips for scoring big in these contests, please post on our Reflector!**

#### **PVRC Officers:**

President:	AA3S	Doug Hart
Vice President:	N0YY	Rick Heinrich
Vice President:	K8LF	Jerome Svinicki
Secretary:	K3WA	Bill Axelrod
Treasurer:	WA3AER	Ted Bauer

#### **Trustees:**

K3MM, N3OC, K2AV, N1RM, W3LPL, N3KN, N8II, W3LL, N3QE

#### **PVRC Charter Members (all SK):**

W3GRF, W4AAV, W4KFC, N0FFZ, W4LUE, W7YS, VP2VI/W0DX, W3IKN, W4KFT, W4RQR, W4MKM, W4BFO, W4CC, W4IA

Newsletter Editor: John K3TN [jpescatore@aol.com](mailto:jpescatore@aol.com)

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## PVRC Scholarship Fund Awardees – Ted WA3AER

It's that time of year again: we're entering the 4<sup>th</sup> quarter of the year and starting to consider year-end tax deductions. One place I ask you to consider making a tax-deductible donation is the PVRC Scholarship Fund managed by the ARRL Foundation (note that the Foundation is a separate entity from the League). There are several ways to make your contribution, and these are described on the PVRC Website. See <https://www.pvrc.org/file/donations-explained/pvrc-scholarship-donations/>.

This year we funded two \$3000 scholarships; and with your generous support we will do so again for the coming year. This year's recipients are Caroline Kuebert, KM4VCO and Jonathan Patton, KC3PQC. Both sent us Thank You letters, which follow. Both are active Hams from families of Hams, and we hope they will join PVRC as avid testers once they complete their academic studies.

### Caroline, KM4VCO wrote:

Dear Potomac Valley Radio Club (PVRC) Scholarship,

My name is Caroline Kuebert, and I am honored that I have been awarded the PVRC scholarship for the 2025-2026 school year. I am attending Wake Forest University in Winston-Salem, North Carolina. I am double majoring in Mathematical Economics and Music, with a concentration in organ performance, as well as minor in Accountancy. I eventually plan to apply to graduate school pursuing a MSA, the Master of Science in Accounting degree, and my CPA certification.



I love music and math! When I'm not in class, I enjoy all things music related. I am a member of Wake Forest's premiere women's Christian acapella group called Minor Variation. We rehearsed, recorded, and released a studio album last year and it can be found on most streaming platforms under the group's name. The title of the album is "In Every Season," and my favorite songs on the album are "Dreams" and "I Will Carry You."

My studies of the organ are fascinating, given the density and diversity of wonderful instruments in Winston-Salem. Thanks to scholarships like yours, I was able to study abroad in the spring semester. I spent 3.5 months in Venice, Italy. While I was there, I was able to study the organ with a local organist and fully immerse myself in the arts of Venice. It was an incredible experience that would not be possible without your generosity. Additionally, I enjoy reading, writing, crafting, and being creative in general. My family plays tennis, so when I'm able to step away from the schoolwork, music, and crafts, I enjoy getting out and playing tennis with family and friends.

As a third-generation ham, I found a love for Ham Radio through my family. My father, Brian Kuebert, NZ4N (formerly N4UEZ), and my grandfather, Edward Kuebert, K5EK, have shown me the way. I appreciate feeling like I am a part of something that is bigger than myself. This comes from participation in activities such as YOTA contests, field day activations (both with my dad and with my club: W4NC), NPOTA activations, and participating in SEQPs.

Seeing my impact on the world through Ham Radio has inspired me to keep participating in the community. I am excited to keep doing so and strive to bring new people to amateur radio for their betterment and the betterment of the community.

Many thanks to you for the generous donation which has made this scholarship possible.

Sincerely,  
Caroline Kuebert  
KM4VCO

**Jonathan, KC3PQC wrote:**

Dear Potomac Valley Radio Club –

My name is Jonathan Patton, KC3PQC, and I am writing this letter to express my deepest thanks for the extremely generous scholarship you awarded me. As a fourth generation ham, I have grown up around ham radio basically my whole life. My grandfather, Bill Patton (WY3A) is a ham as well as my father Chris (W3LGX) and brother Joseph (WU3N). My late great-grandfather (the original W3LGX) was the first of all the ham radio operators in the family. Over the years I have greatly enjoyed digital modes FT8 and FT4, as well as a bit of RTTY contesting and trying to learn CW. Along with my Dad and brother, I am a current member of the Westminster Area Amateur Radio Club.



While I am still trying to determine my long-term course of study, next year I plan to attend West Chester University as an Accounting major. My goal has been to graduate college debt-free, and this scholarship is playing a key role in helping me get off to a good start with that!

Amateur Radio has played a valuable role in my life. I have learned a great deal about technology and how technology connects to real world utility. I plan to continue to be involved in ham radio in the years ahead and look forward to continuing to grow in my abilities to operate in various modes. Thanks again for the extremely generous scholarship!

Sincerely,  
Jonathan Patton

So, your contributions to PVRC's Scholarship Fund does go to good use supporting young Hams pursuing their higher education goals. Again, Thank You to all of you who have contributed during the past year. I encourage you to keep up the good work and keep PVRC's name in the minds of young Hams who will one day be our successors.

73  
Ted Bauer  
PVRC Treasurer



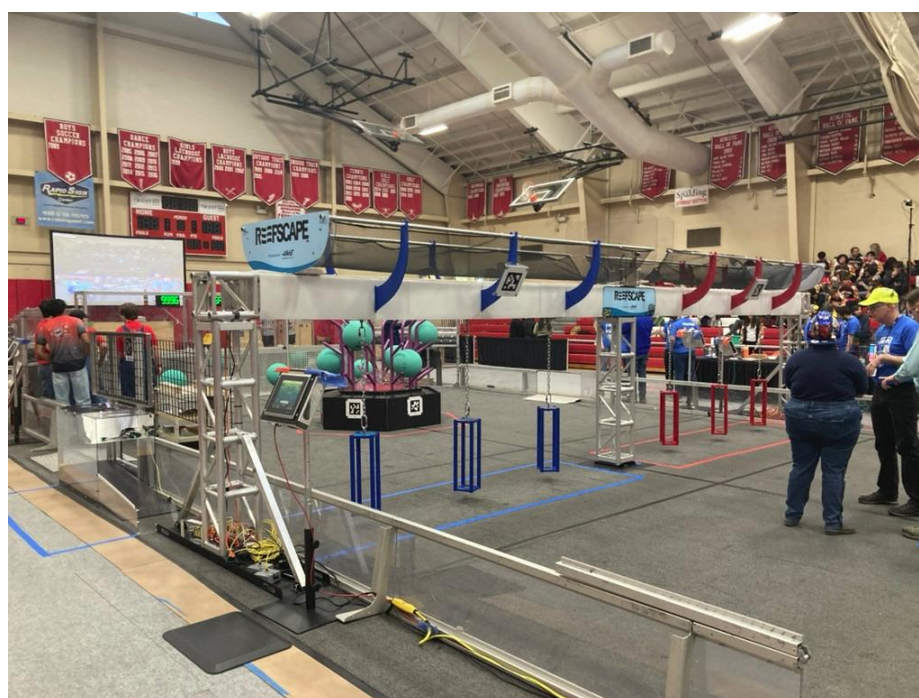
## Robotics Competition - Sean N3RTW

If you asked the average teenager about their favorite football player, you'd probably get an in-depth answer. Ask them about their favorite scientist and you'd probably get a blank stare. An inventor by the name of Dean Kamen decided to address this by combining the competition and spectacle of professional sports with robotics. In 1992 the FIRST Robotics Competition (FRC) was held. 28 teams in Massachusetts competed and by 2025 there were thousands of teams around the world participating.

FRC isn't your average STEM activity. It's competitive. It's collaborative. It's big. It has a play-by-play announcer and a DJ.

High school aged teams are given the rules of a game in early January and need to build a functioning robot to compete in the game in March. This is not a small challenge, both literally and figuratively. The robots themselves can weigh up to 125 pounds and play on a field that's 25'x60', with robots needing to be able to manipulate playing pieces to heights up to 8'. There are around 130 active teams in the DC/Maryland/Virginia area, each will play in two weekend long tournaments against 30 other teams. The top 40 or 50 teams will compete in a larger, district wide event, and the top 10 teams from our district will go to the World championships in Houston.

Below is a picture of the 2025 playing field, Reefscape, with some humans for scale. The green balls in the background either get rolled into an opening on the side of the field or placed in the netting in the center. There's also a 4" piece of PVC that needs to get placed on the purple "reef" that's currently holding the green balls. At the end of the game the robots also need to climb on the hanging cages to get more points.



The team needs to build the robot from scratch every year, including writing all the software and fabricating pieces. Certain pieces can be re-used but, as the game changes every year, it's impossible to reuse entire mechanisms. The compressed schedule forces the team to make tradeoffs and to learn quickly.

Unlike other competitions, all FRC matches are 3 on 3 – it's the Red Alliance vs the Blue Alliance. The competitions take an entire weekend and most of the time is taken up with qualification matches where the alliances are randomly selected. A team might be in an alliance with one team in the morning and play against them in the afternoon. The students need to quickly strategize with their temporary alliance to make use of the best skills of each team, all while repairing damage to their robot from the last match or making improvements.

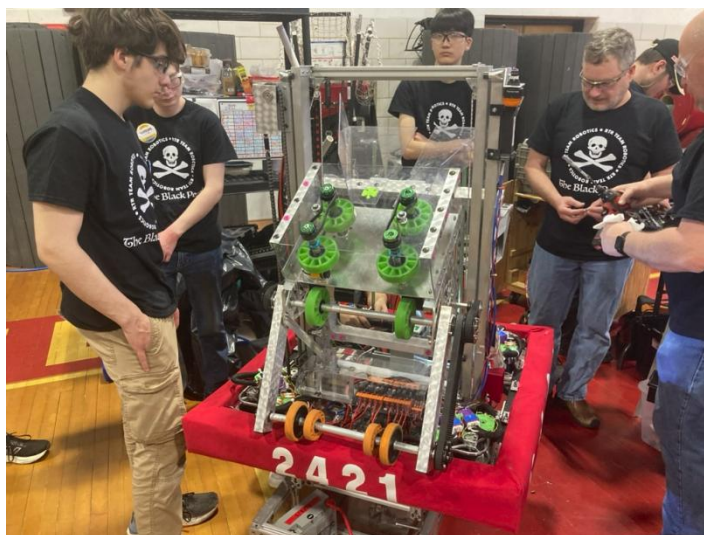
After the qualification matches are done, the top 8 teams participate in a draft to pick their alliance for the finals. There are also other awards that the teams can win by participating in interviews with judges and explaining various aspects of their team and robot.

My middle child joined our local team, 2421 RTR Team Robotics, in 2018 and in 2019 I started helping teach software to the programmers. My youngest later joined the team, and they've both thoroughly enjoyed their time in FRC. Now that my kids have graduated, I'm excited to stick around and keep helping. One aspect of FRC that's different from other activities is that the adults are mentors, not teachers, and it's more of a working relationship than a teacher-student relationship. I learn as much from the students as they learn from me.

Our 2025 entry, *The Black Pearl*, is the result of months of hard work, late nights, and more than a few energy drinks. While we did OK during our two competitions, we did not do well enough to proceed to the DC-Maryland-Virginia District competition so our season ended at the end of March. Between now and next January we are meeting infrequently and working on some small projects to improve for next year.

While many FRC teams are sponsored by a school, 2421 is a community team made of students from different schools and homeschooled students, as none of our local schools have FRC teams. We average around 15 students and a few mentors and lately have been renting a room from a local church to meet and build during the season.

There is much that Ham Radio can learn from FRC, such as how to make STEM more appealing, and how adults and youth can work together in a more collaborative fashion.



<https://www.rtr2421.org/> - Team Website

<https://www.firstinspires.org/robotics/frc> - FIRST Robotics Competition

### If You Remember When Transistors Glowed – Cliff W3CB

*(all items on this page came via the PVRC email reflector)*

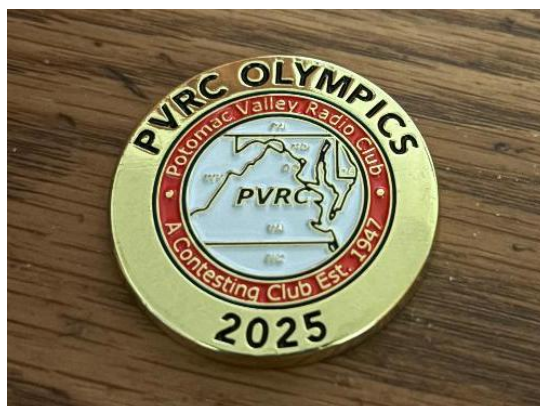
Greenville has a big festival celebrating their Danish heritage every year and as a part of that they have a 5K race that I have run since we moved back here. As a part of the race, you are assigned a number (generally issued in order of signing up) and the attached picture shows my number for the race.



It was totally random, but I think most older hams will recognize the number. It came in hot and cold ones depending on the reference you were interested in. :)

Cliff W3CB

### PVRC Bling – Mark KB3Z



### Homemade Bling – via Mark N2QT

If the Olympic medals and 5M awards weren't enough, Central VA Chapter member Andy KR4FS came up with this plaque to award to one of the deserving (with the lucky winner's call) Via a drawing of chapter members attending in person or via Zoom. It will be awarded in November.



### PVRC 6 Meter DXCC Standings – Frank W3LPL

Below are the 6M DXCC totals for PVRC members, transcribed from the ARRL [DXCC data](#) as of the 20<sup>th</sup> of each month or so. Thanks to Frank for the data each month to make this a regular feature. Please report any omissions or errors to [Frank](#).

CALL	DXCC	CALL	DXCC	CALL	DXCC	CALL	DXCC
N4BAA	187	N2QT	150	N4PY	123	K5ESW	111
K1HTV	181	K4CIA	150	N3NT	122	K3AJ	110
W3UR	173	K3SX	147	N4JQQ	122	W4PK	109
W4DR	173	WX4G	140	W3DF	121	K6ND	107
W3BTX	172	K5EK	140	AK3E	120	W2YE	106
AE3T	172	N4TL	134	N3MK	117	N4VA	106
W3LPL	169	KG7H	133	K3WC	117	N3DB	103
AB3CV	159	K4SN	131	ZP6CW	116	W3OR	103
W3IP	157	W3XY	126	KM3T	114	K3ZO	103
K4SO	157	W0VTT	126	K1GG	113	W4FQT	102
W3KX	154	N3OC	125	N4DB	113	W3XO	100
W3LL	152	K3XA	125	W3EKT	111	W4TJ	100
N4MM	152	K5VIP	124	W4VIC	111		

### Membership News – Bill K3WA

Please welcome new member Ron Horrell W3UNX from Lincoln University PA. He is in the Laurel Chapter.

Chapter leaders please remember to complete the [Meeting Attendance Report](#). Members can check and update their roster details via the [Roster Lookup](#).

### Upcoming Contests – from [WA7BNM](#)

#### October 2025

+ <a href="#">California QSO Party</a>	<a href="#">1600Z, Oct 4 to 2200Z, Oct 5</a>
+ <a href="#">Arizona QSO Party</a>	<a href="#">1500Z, Oct 11 to 0500Z, Oct 12</a>
+ <a href="#">Worked All Germany Contest</a>	<a href="#">1500Z, Oct 18 to 1459Z, Oct 19</a>
+ <a href="#">CQ Worldwide DX Contest, SSB</a>	<a href="#">0000Z, Oct 25 to 2359Z, Oct 26</a>

-

**RED – scores count towards PVRC 5M Awards or Challenge Program**



### Editor's Last Word – John K3TN

Thanks to WA3AER, N3RTW, W3CB, KB3Z, N2QT and W3LPL for contributions to this issue of the PVRC newsletter.

The quality and usefulness of the PVRC newsletter depends on contributions from members. If you have photos from club meetings, screenshots of new contest software, or writeups on station improvements or contest war stories, send them in any format to [jpescatore at aol dot com](mailto:jpescatore@aol.com).





### From the PVRC Treasurer – Ted WA3AER

PVRC has chosen not to implement an annual dues requirement. We depend on the generosity of all our club members to finance our annual budget. In addition, active PVRC members are expected to participate and submit logs for at least two PVRC Club Competition contests per year.

When contemplating your donation to PVRC, each member should consider the benefit you are receiving from PVRC and its many opportunities for your personal growth in our wonderful hobby, then donate accordingly.

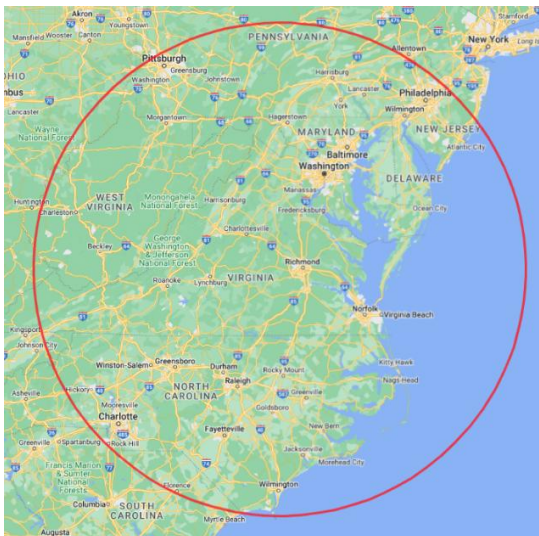
Direct donations to PVRC via Credit Card or PayPal may be made by clicking this "Donate" button and clicking the next Donate button that appears on your screen:



**Donations to PVRC are not tax deductible**

### Eyeball QSO Directions

The latest info on local club meetings and get togethers will always be sent out on the [PVRC reflector](#) and posted on the PVRC [web site](#).



## Now a Word From Our Sponsors

*PVRC doesn't ask for dues, but the Club does have expenses. You can also support the Club by buying from the firms listed who advertise in the newsletter!*



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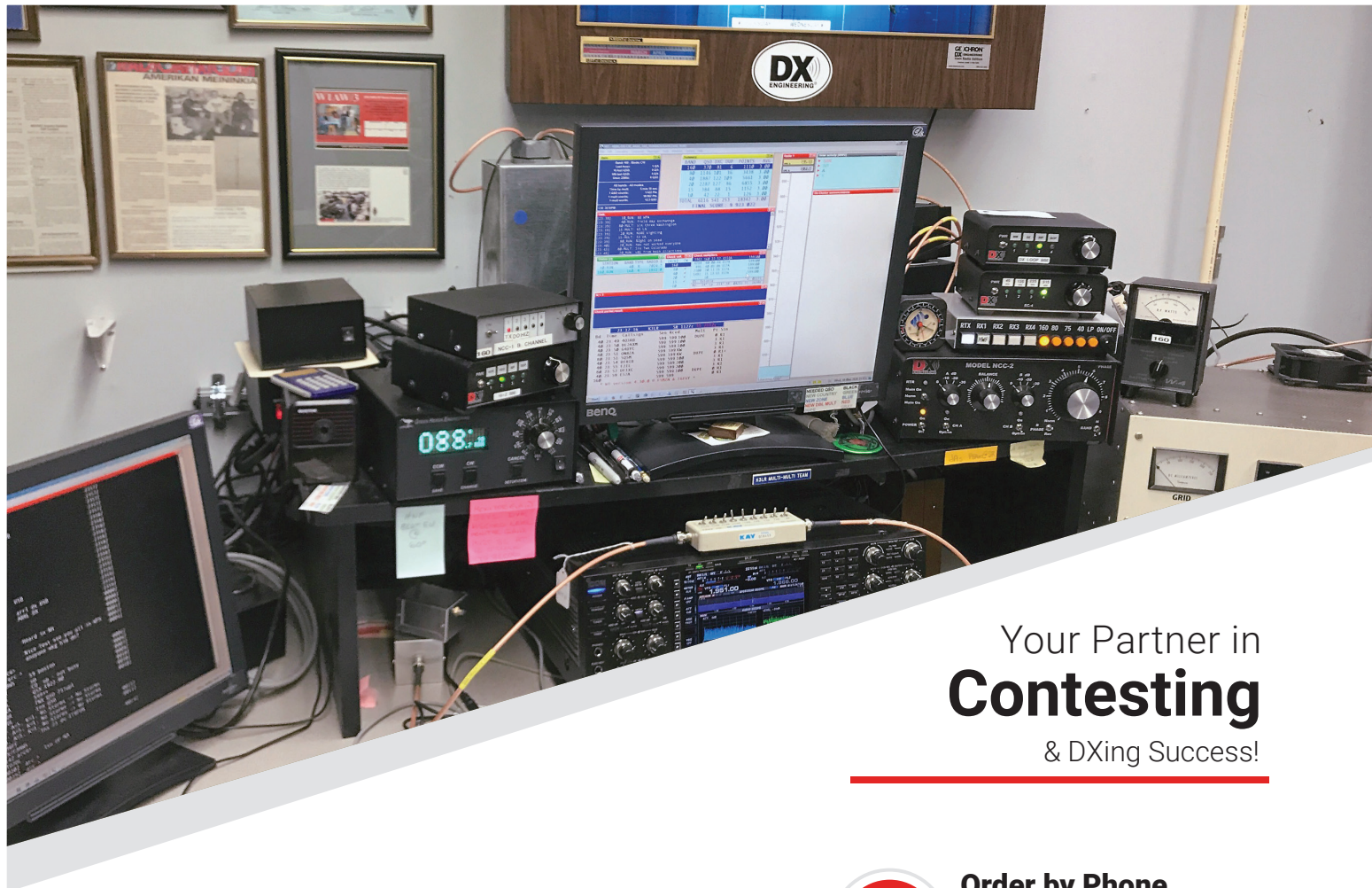
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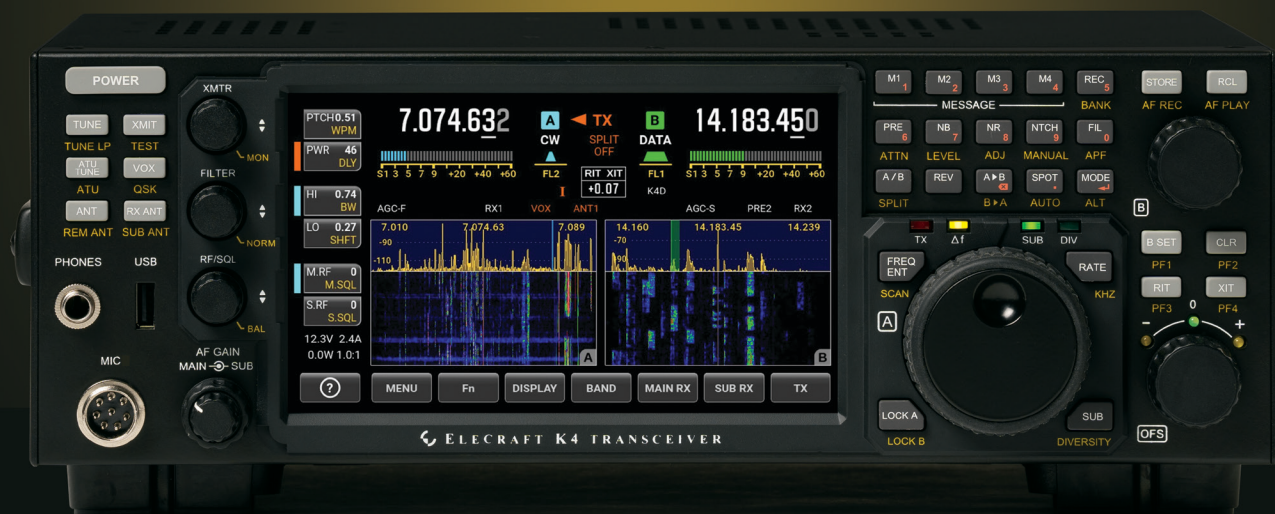


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### Modular, hybrid architecture adapts to your needs

The basic K4 covers 160-6 m, with dual receive on the same or different bands. The K4D adds diversity receive, with a full set of band-pass filters for the second receiver. (Thanks to direct RF sampling, there's no need for crystal filters in either the K4 or K4D.) The K4HD adds a dual superhet module for extreme-signal environments. Any K4 model can be upgraded to the next level, and future enhancements—such as a planned internal VHF/UHF module—can be added as needed.

### Single or dual panadapter, plus a high-resolution tuning aid

The main panadapter can be set up as single or dual. Separate from the main panadapter is our per-receiver *mini-pan* tuning aid, with a resampled bandwidth as narrow as  $\pm 1$  kHz. You can turn it on by tapping either receiver's S-meter or by tapping on a signal of interest, then easily auto-spot or fine tune to the signal.

### Comprehensive I/O, plus full remote control

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## FTDX10 | HF/50MHz 100 W SDR Transceiver

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## FTDX101D | HF + 6M Transceiver

- Narrow Band SDR & Direct Sampling SDR • Crystal Roofing Filters Phenomenal Multi-Signal Receiving Characteristics • Unparalleled - 70dB Maximum Attenuation VC-Tune • 15 Separate (HAM 10 + GEN 5) Powerful Band Pass Filters • New Generation Scope Displays 3-Dimensional Spectrum Stream

**FT-710 Field version also available!**



## FT-710 Aess | HF/50MHz 100W SDR Transceiver

- Unmatched SDR Receiving Performance • Band Pass Filters Dedicated for the Amateur Bands • High Res 4.3-inch TFT Color Touch Display • AESS: Acoustic Enhanced Speaker System with SP-40 For High-Fidelity Audio • Built-in High Speed Auto Antenna Tuner



## FT-891 | HF+50 MHz All Mode Mobile Transceiver

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## FT-3185RASP | Heavy-Duty 85W 2M FM Transceiver

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## FTM-150RASP | 2M/430MHz FM True Dual Band Xcvr

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## FTM-510DRASP C4FM/FM 144/430MHz Dual Band Xcvr

- New Super-DX & ASP (Audio Digital Signal Processor Unit) • True Dual Bank Receive (V+V/U+U/V+U+V) • C4FM/C4FM Digital D-D Dual Receive • 2.4" High-Res Full-Color Touch-Panel Display • Wireless Operation Capability with Optional Bluetooth® Headset



## FTX-1 Optima | HF/50/144/430MHz All Mode SDR Xcvr

- Detachable Field head For QRP SOTA/POTA Adventures • Attach Field Head to SPA-1 For 100 Watts (Base Operations) • SPA-1 Includes Internal HF Antenna Tuner • SSB, CW, AM, FM and C4FM Digital



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## FT-5DR

### C4FM/FM 144/430 MHz Dual Band

- High-Res Full-Color Touch Screen TFT LCD Display • Easy Hands-Free Operation w/Built-In Bluetooth® Unit • Built-In High Precision GPS Antenna • 1200/9600bps APRS Data Communications • Supports Simultaneous C4FM Digital • Micro SD Card Slot



## VX-6R | VHF/UHF Dual Band Hand-Held

- Big-Radio Features in a Compact Package • Wide-band Receiver Coverage for Catching All the Action! • 900-Channel, 24-Banks Memory System • Outdoor-Ready Features including Waterproof Rating • Smart Search Automatic 31-Channel Scanning/Loading System



**5 Ways to Shop!**

• RETAIL LOCATIONS – Store hours 10:00AM - 5:30PM - Closed Sunday

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\*On most orders over \$100 in the continental US. (Rural locations excluded.) Contact HRO for promotion details. Toll-free including Hawaii, Alaska and Canada. All HRO 800-lines can assist you. If the first line you call is busy, you may call another. Prices, specifications and descriptions subject to change without notice.

# HAM RADIO OUTLET®

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**Family owned and operated since 1971**



## IC-9700 | All Mode Tri-Band Transceiver

• VHF/UHF/1.2GHz • Direct Sampling Now Enters the VHF/UHF Arena • 4.3" Touch Screen Color TFT LCD • Real-Time, High-Speed Spectrum Scope & Waterfall Display • Smooth Satellite Operation



## IC-PW2 | HF-50 MHz 1kW Linear Amplifier

• 1kW Output Full Duty Single Operator Two Radios (SO2R) • Built-in Automatic Antenna Tuner • Detachable Controller with Touch Screen Display • 2x6 Automatic Antenna Selector - 2 Radio Inputs & 6 Antenna Connections



## IC-V3500 | 144MHz FM Mobile

• 65W of Power for Long Range Communications • 4.5 Watts Loud & Clear Audio • Modern White Display & Simple Operation • Weather Channel Receive & Alert Function



**LE version available!**

## IC-7760 | HF150MHz All Mode Transceiver

• New Design-Remote Control Head & Separate RF Deck • Dual Independent Receivers, Spectrum Scope & Waterfall • 200 Watts Output 100% Duty Cycle • Flexible Remote Operation Capabilities



## IC-705 | HF/50/144/430 MHz All Mode Transceiver

• RF Direct Sampling • Real-Time Spectrum Scope and Waterfall Display • Large Color Touch Screen • Supports QRP/QRPP • Bluetooth® and Wireless LAN Built-in



## ID-50A | VHF/UHF D-STAR Portable

• High Visible LCD with Backlight Function • Find Nearby Repeaters with the Built-In GPS • Easy D-STAR Settings for Beginners • Voice Recorder Function • Share Pictures in DV Mode



## IC-7300 | HF/50MHz Transceiver

• RF Direct Sampling System • New "IP+" Function • Class Leading RMDR and Phase Noise Characteristics • 15 Discrete Band-Pass Filters • Built-In Automatic Antenna Tuner



## IC-7100 | All Mode Transceiver

• HF/50/144/430/440 MHz Multi-band, Multi-mode, IF DSP • D-STAR DV Mode (Digital Voice + Data) • Intuitive Touch Screen Interface • Built-in RTTY Functions



## IC-7610 | HF/50 MHz All Mode Transceiver

• Large 7-inch color display with high resolution real-time spectrum scope and waterfall • Independent direct sampling receivers capable of receiving two bands/two modes simultaneously



**IC-2730B version available!**

## IC-2730A | VHF/UHF Dual Band Transceiver

• VHF/VHF, UHF/UHF simultaneous receive • 50 watts of output on VHF and UHF • Optional VS-3 Bluetooth® headset • Easy-to-See large white backlight LCD • Controller attachment to the main Unit

## IC-V86 | VHF 7W HT

• 7W Output Power Plus New Antenna Provides 1.5 Times More Coverage • More Audio, 1500 mW Audio Output • IP54 & MIL-STD 810G-Rugged Design Against Dust & Water • 19 Hours of Long Lasting Battery Life • 200 Memory Channels, 1 Call Channel & 6 Scan Edges



## IC-R8600 | Wideband SDR Receiver

10 kHz to 3 GHz Super Wideband Coverage • Real-time Spectrum Scope w/Waterfall Function • Remote Control Function through IP Network or USB Cable • Decodes Digital Incl P25, NXDN™, D-STAR • SD Card Slot for Receiver Recorder



## ID-5100 AD

### VHF/UHF Dual Band Digital Transceiver

• Analog FM/D-Star DV Mode • SD Card Slot for Voice & Data Storage • 50W Output on VHF/UHF Bands • Integrated GPS Receiver • AM Airband Dualwatch



## IC-T10 | Rugged 144/430 MHz Dual Band

• Disaster Ready - Excellent Fit for Your Emergency Bag • Loud Audio - New Speaker Design • Long Battery Life - Up to 11 Hours • FM Broadcast & Weather Channels

**ID-52A Plus version available!**

## ID-52A | VHF/UHF D-STAR Portable

• Bluetooth® Communication • Simultaneous Reception in V/V, U/U, V/U and DV/DV • Enriched D-STAR® Features Including the Terminal Mode/Access Point Mode • UHF (225~374.995MHz) Air Band Reception



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