# Same Friends, New Home

# Welcome!

# Dayton Hamvention®

# to GREENE COUNTY

The Greene County Convention & Visitors Bureau would like to welcome Dayton Hamvention to Greene County and wish them the best success.
To find out more about Greene County stop by our booth and pick up a FREE Visitors Guide or visit our web site at www.greenecountyohio.org

CONVENTION & VISITORS BUREAU
GREENE COUNTY OHIO
greenecountyohio.org
COLOR OUTSIDE THE LINES

greenecountyohio.org
1221 Meadow Bridge Drive, Beavercreek, OH 45434 • 937.429.9100

# Welcome to the 2017 Dayton Hamvention®

## Same Friends, New Home

On behalf of our sponsor, The Dayton Amateur Radio Association and all the volunteers making up the Dayton Hamvention 2017 team, we want to welcome you to our first year at the Greene County Fairgrounds and Expo Center.
"Same Friends, New Home" says the whole story this year. This is your time to visit with old friends, make new friends and have a chance to visit our new home.

Planning for the next show normally starts at the end of the last show. All was going well until we lost our show site with the closing of Hara Arena after 52 years. We made the decision to move to Greene County in August and started the process of creating a whole new show, literally from the ground up. It has been a real test for our 70 committee chairmen and 650 volunteers recreating all the services to be offered at the new site. We believe we have succeeded in making our new home a place you will want to come to year after year. I cannot thank our volunteers enough for all the long hours and effort they have spent to make this event everything that you have come to expect from us.

We appreciate your patience as we overcame our growing pains. We had to be creative in reconfiguring our show for this new location. We believe that both the increased numbers of forums and the expanded food options will be big hits. Be sure to visit the Special Events / DX Station and operate any of the five top end radios from all the major vendors. Carole Perry will be presenting her 30th Youth Forum at Hamvention on Saturday morning. Review this program for the many other events taking place during the weekend.

Assistant General Chair Jack Gerbs (WB8SCT) and I (KD8ENJ) thank you for making the trip to Greene County to help celebrate the beginning of a new era of Hamvention. We hope you have as good a time as we had in preparing the show for you. Please take time to thank our many volunteers.
Please enjoy and see you again next year!

Ron Cramer KD8ENJ
Hamvention 2017 General Chair

Ron Cramer, KD8ENJ
General Chairman

Jack Gerbs WB8SCT
Assistant General Chairman

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The Dayton Hamvention Program is published by the Hamvention Committee. Permission is granted for reprinting articles, provided credit is given to the original author and the Hamvention Program.


## Design and Layout

Program was created by Chuck Wright, K8MDB

## Souvenir Program Committee

Chair ..... Charles Wright, K8MDB
Asst. Chair ..... Jerry Miller, WD8QAI
Map Artist ..... Brian Markland, N8UDQ
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Linda Kalter, W8AAV
Jim Shaw, AL7BA

The Dayton Amateur Radio Association (DARA) and Hamvention fully support and are committed to the objectives of the Americans with Disabilities Act (ADA). We strive to provide equal opportunity to all ADA qualified persons who participate in Hamvention. Our objective is to provide access to the event and we expect nothing less of those who provide building facilities, exhibits and services at our event.

## Future Hamvention Dates

**May 18, 19, & 20, 2018**
**May 17, 18, & 19, 2019**
**May 15, 16, & 17, 2020**

## Hamvention Phone Numbers

Emergency (937) 276-6930
Inside Exhibits (937) 276-6931
Flea Market (937) 276-6932
Prizes (937) 668-5311

## Comments Invited!

Comments on your experiences at the Dayton Hamvention should be addressed to the following:
General Chairman
Dayton Hamvention
P.O. Box 964
Dayton, Ohio 45401-0964

# Activities & Times

## FRIDAY ACTIVITIES

| | |
|---|---|
| 9:00 a.m. - 6:00 p.m. | Flea Market open. Bus service runs 7:00 a.m. - 7:00 p.m. |
| 9:00 a.m. - 6:00 p.m. | Inside Exhibits open, prizes on display. |
| 9:15 a.m. - 5:00 p.m. | Forums and scheduled activities. |
| 10:00 a.m. - 3:00 p.m. | Amateur Radio License Exams. |
| 11:00 a.m. - 11:15 a.m. | Opening Ceremony in Flag Plaza |
| 10:00 a.m. - 5:00 p.m. | Hourly prize drawings. |

## SATURDAY ACTIVITIES

| | |
|---|---|
| 9:00 a.m. - 5:00 p.m. | Flea Market open. Bus service runs 7:00 a.m. - 6:00 p.m. |
| 9:00 a.m. - 5:00 p.m. | Inside Exhibits open. Prizes on display and Exams. |
| 9:15 a.m. - 5:00 p.m. | Forums and scheduled activities. |
| 10:00 a.m. - 3:00 p.m. | Hourly prize drawings. |
| 10:00 a.m. - 3:00 p.m. | Amateur Radio License Exams. |

## SUNDAY ACTIVITIES

| | |
|---|---|
| 9:00 a.m. - 1:00 p.m. | Flea Market open. Bus service runs 7:00 a.m. - 4:30 p.m. |
| 9:00 a.m. - 1:00 p.m. | Inside Exhibits open, prizes on display. |
| 10:00 a.m. - 11:00 a.m. | Hourly prize drawings. |
| 9:15 a.m. - 12:00 p.m. | Forums and scheduled activities. |
| 1:00 p.m. | Award Winners' Presentation in Grandstand. |
| 1:00 p.m. | Prize Drawing in Grandstand (unclaimed hourly prizes, followed by main prizes). Bus Service will be available for a short time after the main prize drawing. |

## 2017 Hamvention Souvenir Lanyard

The DARA Boy Scout Venturing Crew 73 will be offering "DAYTON HAMVENTION 2017" souvenir lanyards in TWO locations this year. We will be in a tent just outside the main gate and just inside the main gate on the right.

**All lanyards include laminating your HAMVENTION admission ticket.**

2017 Souvenir Lanyards ..... $4.00 ea.

Red-White-Blue striped or Royal Blue lanyards $3.00 ea.

We will also laminate other items for you for a nominal fee.

| Hours | Outside Tent | Inside |
|---|---|---|
| Friday & Saturday | 7:30 am - noon | 8:30 am - 4 pm |
| Sunday | Closed | 8:30 am - noon |

Stop by with your children and have them get a surprise that will make them feel they are "little hams."

***While Supplies Last***

Thank you for your support of DARA's Amateur Radio Youth Scouting group.

# Services

## DARA BOOTH/MEMBERSHIP

The DARA Booth is located inside the Main Gate. Programs are available at the Gate. DARA membership is located inside of Marconi's Booth 3002 (See map on Page 22).

## EMERGENCY MEDICAL CARE

Hamvention will have a doctor on site during show hours. Emergency care is also available from the following:

Greene Memorial Hospital
1141 N Monroe Dr, Xenia, OH 45385

## LOST & FOUND

The DARA Booth, will accept lost items. Items can be retrieved at this location the day the item was lost.

## MESSAGE CENTER

Leave a message for your friends by submitting their call sign and message at the DARA Booth. Prize monitors throughout the arena complex will periodically list "message holding" by call sign.

## LICENSE EXAMS

Have you been thinking of about upgrading your license? Take a short ride across the street and visit the Hamvention License Exams. We are ready to assist you in taking that big step to a new license.

Free license exams will be given across the street from Hamvention at Memorial United Presbyterian Church, 343 West Ankeney Mill Rd.

Testing for all amateur license classes will be available on Friday, May 19th and on Saturday, May 20th. Hours for testing both days will be 10:00 a.m. until 3:00 p.m. There will be no testing on Sunday.

Free shuttle vans are provided from the Hamvention site to the testing location and back. Shuttles will pick up and drop off near the Hamvention Gate 3.

Exams will be given on a first-come, first-served basis. There is no pre-registration.

Large print exams will be available at all test sessions as will assistance for those who may have special needs. All are encouraged to come and take a test since there is no fee for these exams.

Each applicant must have the following:

1) An FCC Registration number (FRN). An FRN may be obtained by visiting the FCC at https://apps.fcc.gov/coresWeb/publicHome.do

From this page click on the REGISTER button and follow the instructions to apply for a FRN. You can also use this page to check and see if you already have a FRN. Be sure to copy down the FRN number you are issued and bring it with you to the testing location.

**Applicants must have an FRN as we no longer accept SSNs

2) A copy of their current license (original copy, Reference Copy or Official Copy, if applicable).

3) The original of any CSCE or other paperwork which will be submitted for element credit.

4) Identification (can be any of the following).

- a government-issued photo ID (e.g. driver's license, passport, CAC),
- a non-government issued photo ID (e.g. student ID),
- a non-photo ID (e. g. birth certificate).

Applicants may wish to bring a basic calculator for use during the exam. Cell phone calculators may not be used during the exam. There will be a limited number of basic calculators available to borrow.

## SHIPPING SERVICE

The UPS Store offers freight service from the Watt Booths 6311 and 6312. Hours are as follows:

| | |
|---|---|
| Friday | 9:00 a.m. - 6:00 p.m. |
| Saturday | 9:00 a.m. - 5:00 p.m. |
| Sunday | 9:00 a.m. - 1:00 p.m. |

## SPECIAL EVENT STATION

Keeping with the tradition of a Special Events station at Dayton Hamvention, we take pleasure in announcing the station is again planned for 2017 with many improvements.

The Station will be located in Building #2 in spaces 2706 & 2707.

The first of two stations will consist of:

Flex Radio with their Flex 6700 and Maestro Remote connected to their Power Genius (AO3A) amplifier. ( Pending FCC Certification for the Amp )

Elecraft with their K3S radio connected to their KPA500 Amplifier.

Kenwood with their 990S connected to an OM200A+ Amplifier.

The Icom 7851 connected to an SPE 2K-FA Expert Amplifier.

The Yaaesu FTDX5000MP radio also connected through the SPE 2K-FA Expert Amplifier.

The OM2000A+ Amplifier, interconnection between the radios and amplifiers, featuring power metering, band pass filtering, and antenna switching through arrangements by Array Solutions.

RadioSports is supplying headsets that can connect to any of the five radios in the station. The sets will be set up for the main operator of the station and a monitoring set for a logging.

The antennas will be the RadioWavZ Sentinel Barrett Hex beam for Station One, and the RadioWavZ DX80 OCF wire antenna for Station Two.

The antennas will be set up on the P&R Communications Mobile Antenna Trailer located directly outside of Building #2 near the Special Events Station spaces.

Bengali Keys are scheduled to supply keys for the stations as needed.Many of these vendors and suppliers will be around the Special Events Station location in Tesla Booths 2706 and

# Transportation & Parking

2707 and will be willing to discuss their equipment operating in the station.
Operating hours will be during regular show hours on 40M, 20M, 17M, and possibly 10M. All depending on band conditions.
Special Event Station Chairman Jerry Bodey(N8OWV) , and Assistant Chairman Marvin Force (KB8MU) and their volunteers, invite all to come by this all new station to see the premier equipment operating at this year's station.

## TALK-IN FREQUENCIES

For directions and assistance in the Dayton area during your visit to Hamvention, contact "Talk-In" on the DARA Repeater 146.94 (-) with a backup frequency of 146.985 (-) pl 123.0
Dayton hams also monitor 223.94 (-) and 442.1 (+).

## TRUCK & TRAILER PARKING

Semi-Trucks (except Vendor Semi-Trucks with pass and other parking instructions) and/or other oversized vehicles will park in the impound/tour bus /taxi lot. Use Gate 4 entrance and be directed to parking spot. If that becomes full, you will be redirected to a nearby lot within shuttle distance. Monitor Talk-In for early notice if lot is full. No overnight parking or camping is permitted. All vehicles must be removed by 9:00pm. The Greene County Sheriff and Greene County Parks Ranger will enforce the No Overnight Parking Rule.

## PARKING

On site no cost parking is available to customers, ADA and volunteers. People Movers will shuttle you to/from the Main Gate. Also no cost parking is available at four remote sites (see page 8) with Xenia School Buses providing transportation to Hamvention. People Movers will take you to/from the bus drop off point. Buses run continuous from 7:00 a.m. until one (1) hour after closing.

## CAMPER PARKING

On-site camping is managed by Greene County Fairgrounds office at 937-372-8621. No tent camping is permitted and no overnight camping is permitted in the flea market. Contact Greene County CVB (937-429-9100) or Montgomery County CVB (800-221-8235) for available locations.

## TEMPORARY LOADING PASS

A temporary loading pass may only be obtained from the guard at Gate 2 during the show. This restricted loading pass will be valid for 20 minutes and will allow you to use a designated area to load and unload equipment, or to pick up your exhibitor packet at the Exhibits Office. These passes will be time stamped and must be given to the guard at the exit when you leave.

## Golf Cart Services

The Golf Cart Committee continues to provide no-cost shuttle rides and golf cart rides for customers to/from the ADA parking area and the general parking areas from 7:00 a.m. - 6:00 p.m. The Golf Carts can take you to the Flea Market Entrance. For safety reasons, we do not take passengers in and out of the flea market area. However, if you are in the flea market and you purchase a large or heavy item we do provide hauling service based on availability. To ask for such assistance, please visit the flea market office and we will assist you ASAP. Please understand there may be a delay as we are sometimes assisting other customers.

Scootaround
Mobility Product Rentals

## SCOOTERS

Are you planning on attending? An electric scooter or wheelchair will ensure that you are able to see as much of the convention as possible.

While ScootAround will make every effort to accommodate all needs, you are encouraged to reserve in advance! To reserve your equipment call toll free 1 888 441 7575 or complete the information form at the link listed below. We are happy to accept Visa and MasterCard for all rentals!

Website Rental Form:
http://locations.scootaround.com/DaytonHamvention

The Dayton Convention & Visitors Bureau Welcomes

# HAMVENTION

Be sure to enjoy the Greater Dayton area restaurants, attractions, and shops while you're here! For more information contact us today at 800-221-8235 or daytoncvb.com.

#DaytonHamvention @daytoncvb @daytoncvb

DAYTON
CONVENTION & VISITORS BUREAU

Ellie's
Restaurant & Bakery

**Bring this program for 10% off your meal (drinks excluded).**

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321 Xenia Ave., Yellow Springs
MillsParkHotel.com/Ellies
Breakfast & Lunch Daily • Dinner Wed.–Sat.

**Located in the beautiful new Mills Park Hotel in Yellow Springs**

## ADVERTISING

Hamvention always welcomes new advertisers. If you are interested in advertising with us in future years please contact program@hamvention.org

Dayton Hamvention Hosted By

# Mesh Networks

## The Miami Valley Mesh Alliance

And Supported By The AREDN Core Technical Team

AMATEUR RADIO EMERGENCY DATA NETWORK

**On Air:** Channel -2 at 10 MHz SSID: AREDN-10-v3

**Forum:** Andre Hansen K6AH - Sat 1:30 PM, Room 2

**Booth:** Building 1, #1001

**AREDN Classes At Booth – See Booth for Schedules**

- Introduction to Mesh Technology
- Mesh Implementation Techniques
- Network Planning and Link Performance Estimation
- VOIP Applications for Rapid Deployment
- Mesh Network Applications for EmComm
- Network Performance Metrics and Tools
- How to "Un-Brick" a Mesh Node
- WinLink integration with Mesh
- Live streaming video cameras
- Using MeshChat
- How to Setup Node Location Data

www.miamivalleymesh.org www.aredn.org

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- Lodging
- Tokyo Hamfair Tickets

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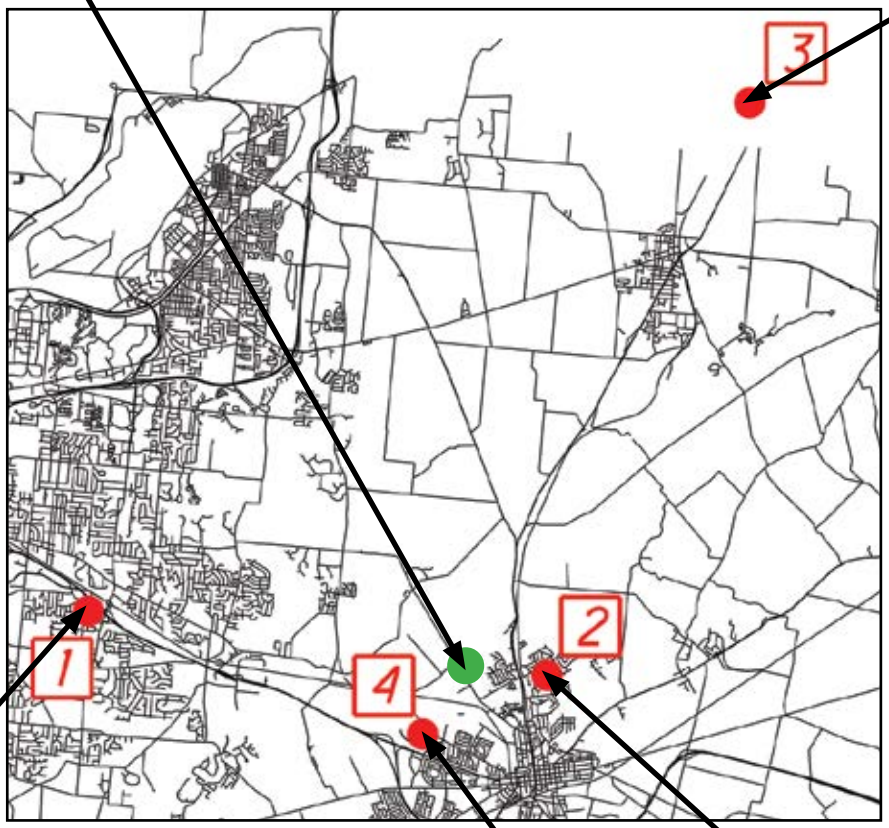
# Parking

**Hamvention On Site Parking**

**3-Young's Jersey Dairy Field**
**West Side of 68**
**10.8 Miles**




**1-Closed Car Dealership**
**Seejay Dr. at US 35 &**
**Fairfield Road**
**8.9 Miles**

**2-Xenia High School**
**Kinsey Road East of 68**
**Turn at McDonald's**
**Go past the High School**
**to the 4-Way Stop**
**Turn right on Yellowstone Rd**
**1.6 Miles**

**4-Greene County Campus**
**Progress & Dayton-Xenia Rd.**
**3.0 Miles**

***Note: Multiple Xenia School Busses will Shuttle between Remote Parking and Hamvention on a continuous route from 7 a.m. until one (1) hour after closing. People Movers will shuttle guests from on site bus drop-off to the Main Gate.***

# Welcome

In the name and by the Authority of
THE STATE OF OHIO

THE OFFICE OF THE
OHIO ATTORNEY GENERAL

*A Proclamation Recognizing*
*The Annual Hamvention Event at the*
*Greene County Fairgrounds and Expo Center*

*WHEREAS, Hamvention has been sponsored by the Dayton Amateur Radio Association (DARA) since 1952 when the Southwestern Ohio Ham-vention was born; and*

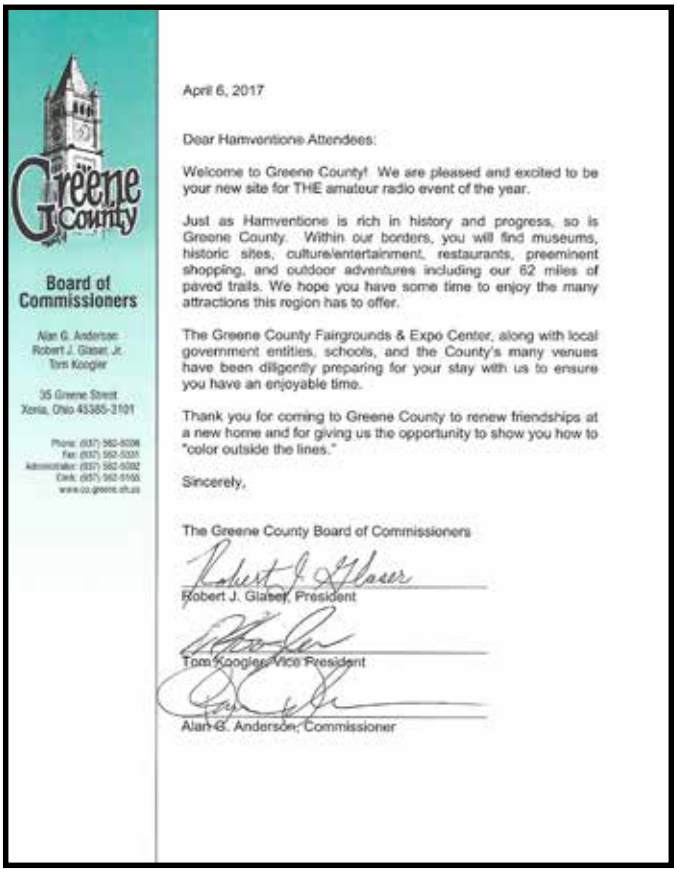
*WHEREAS, The Hamvention grew into the world's largest amateur radio gathering with attendees from around the world, moved to Dayton's Hara Arena in 1964, became a two-day event in 1973, and added Sundays in 1974; and*

*WHEREAS, in 2017 the Hamvention moved to the Greene County Fairgrounds & Expo Center, features over 500 indoor and over 2,500 outdoor exhibits, showcases the latest in amateur radio equipment technology as well as hard-to-find radio and computer accessories and equipment;*

*THEREFORE, as Attorney General of the State of Ohio, it is my honor to recognize the annual Hamvention event taking place at the Greene County Fairgrounds and Expo Center on May 19-21, 2017.*

May 19, 2017
Date

Mike DeWine, Ohio Attorney General



Greene County

Board of Commissioners

Alan G. Anderson
Robert J. Glaser, Jr.
Tom Koogler

35 Greene Street
Xenia, Ohio 45385-3101

April 6, 2017

Dear Hamventione Attendees:

Welcome to Greene County! We are pleased and excited to be your new site for THE amateur radio event of the year.

Just as Hamventione is rich in history and progress, so is Greene County. Within our borders, you will find museums, historic sites, culture/entertainment, restaurants, preeminent shopping, and outdoor adventures including our 62 miles of paved trails. We hope you have some time to enjoy the many attractions this region has to offer.

The Greene County Fairgrounds & Expo Center, along with local government entities, schools, and the County's many venues have been diligently preparing for your stay with us to ensure you have an enjoyable time.

Thank you for coming to Greene County to renew friendships at a new home and for giving us the opportunity to show you how to "color outside the lines."

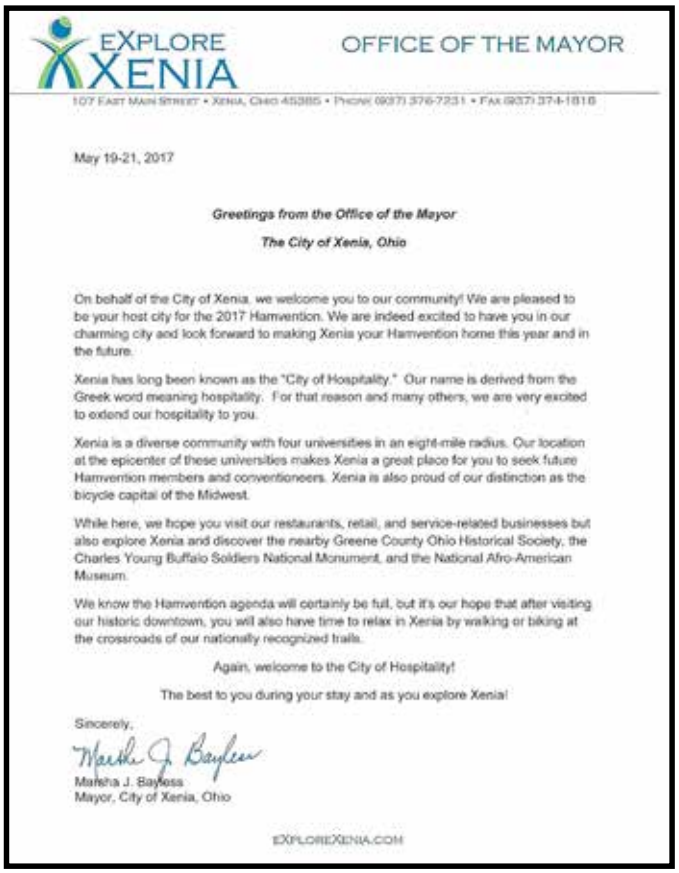
Sincerely,

The Greene County Board of Commissioners

Robert J. Glaser, President

Tom Koogler, Vice President

Alan G. Anderson, Commissioner



EXPLORE XENIA

OFFICE OF THE MAYOR

107 East Main Street • Xenia, Ohio 45385 • Phone (937) 376-7231 • Fax (937) 374-1818

May 19-21, 2017

***Greetings from the Office of the Mayor***

***The City of Xenia, Ohio***

On behalf of the City of Xenia, we welcome you to our community! We are pleased to be your host city for the 2017 Hamvention. We are indeed excited to have you in our charming city and look forward to making Xenia your Hamvention home this year and in the future.

Xenia has long been known as the "City of Hospitality." Our name is derived from the Greek word meaning hospitality. For that reason and many others, we are very excited to extend our hospitality to you.

Xenia is a diverse community with four universities in an eight-mile radius. Our location at the epicenter of these universities makes Xenia a great place for you to seek future Hamvention members and conventioneers. Xenia is also proud of our distinction as the bicycle capital of the Midwest.

While here, we hope you visit our restaurants, retail, and service-related businesses but also explore Xenia and discover the nearby Greene County Ohio Historical Society, the Charles Young Buffalo Soldiers National Monument, and the National Afro-American Museum.

We know the Hamvention agenda will certainly be full, but it's our hope that after visiting our historic downtown, you will also have time to relax in Xenia by walking or biking at the crossroads of our nationally recognized trails.

Again, welcome to the City of Hospitality!

The best to you during your stay and as you explore Xenia!

Sincerely,

Martha J. Bayless
Mayor, City of Xenia, Ohio

EXPLOREXENIA.COM

GREENE COUNTY
FAIRGROUNDS & EXPO CENTER

April 10, 2017

To our Hamvention Friends:

Welcome to our Fairgrounds and Exposition Center. We have been anticipating your arrival for many months now.

Between the time the announcement was made in August 2016 regarding the site for the new home for the Dayton Hamvention®, to this very moment as you read this, lots of communication, planning, and considerations have been going on between many people.

Moving from Hara Arena has been quite a change for the Hamvention Committee; choosing a new site was stressing for those involved in choosing an area suitable for this event; after much prayer and consideration, the decision was made. Here you are with us!

We are HONORED to be the home of the 2017 Dayton Hamvention®! Many THANKS go to the TEAM of Hamvention personnel who have worked so many hours to make this event happen! To our Greene County Committee—you have been so wonderful to merge your expertise into the needs to the Dayton Hamvention® requests. There are no other words to describe this event but: Together, we make an AWESOME TEAM! Thank you to each one who has given so unselfishly of time, knowledge, and enthusiasm to make the First Annual Dayton Hamvention® one which has produced many lasting friendships as we carry on this tradition for lots of year to come.

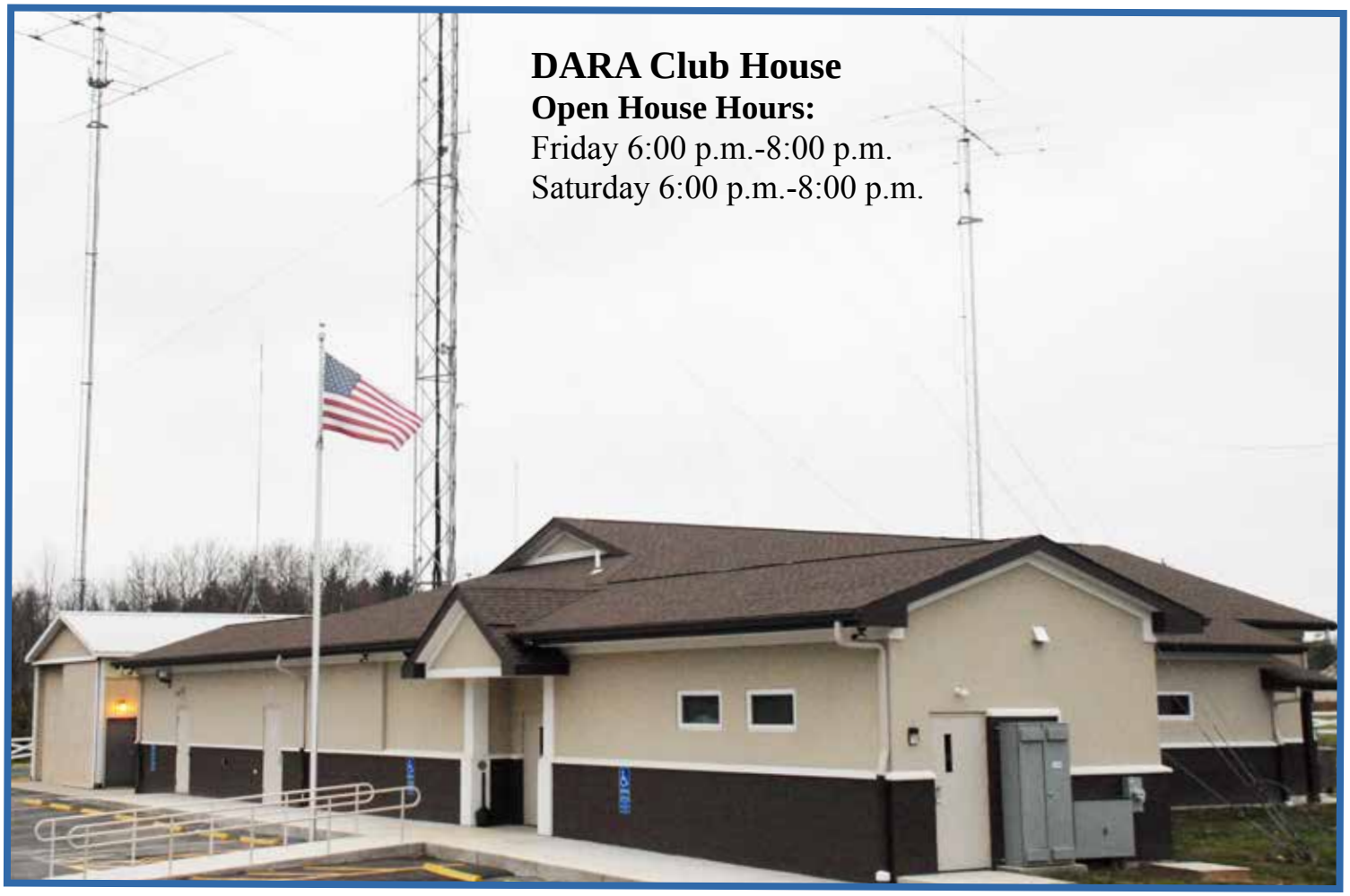
For those of you, who have traveled many miles to be with us, please know how excited we are that you have joined us at the Fairgrounds and Exposition Center for these few days. So, enjoy your time at the Dayton Hamvention® and know that we welcome you to our facility with gratefulness you have arrived safely, that you will enjoy some good food, fellowship and fun!

With many extended blessing to each of you!

Esther Pierson

Esther Pierson, Secretary/Rental Agent
Greene County Fairgrounds and Exposition Center

# DARA Club House and Communication Truck



**DARA Club House**
**Open House Hours:**
Friday 6:00 p.m.-8:00 p.m.
Saturday 6:00 p.m.-8:00 p.m.

# Hamvention Represented Around the World

In 2016, DARA again sent teams to Ham Radio International, Friedrichshafen, Germany and the Tokyo Ham Fest, Tokyo Big Sight, Tokyo, Japan. We take information about Dayton Hamvention and about DARA. The big question at both shows was the change of venue for the 2017 Hamvention. We wish to thank the Greene County Convention Visitors Bureau for sending information on Greene County that we could handout to interested visitors, and there were many.

In 2017, DARA will continue to send teams to Germany, Japan, Orlando, FL, Huntsville, AL. and make our first visit to SeaPac in Seaside, OR.

# Affiliated Events

## Multi-Day Events

**Mesh Networks**

The Miami Valley Mesh Alliance (MVMA) has joined with the Amateur Radio Emergency Data Network (AREDN) core technical team to provide a Mesh Network presence at Hamvention.

On Air: The local Mesh network will be found on Channel -2 at 10 MHz bandwidth. The SSID is AREDN-10-v3.

Mesh Networks Forum: AREDN's Andre Hansen K6AH, will address AREDN capabilities, deployment and application Saturday at 1:30 PM in Forum Room 2.

Mesh Booth: MVMA and the AREDN Core Team will host visitors at Booth #1001, located in the extreme south-west corner of Building 1.

Mesh Classes: The AREDN Core Team will present mini-classes at the booth. Topics include:

- Introduction to Mesh Technology
- Mesh Implementation Techniques
- Network Planning and Link Performance Estimation
- VOIP Applications for Rapid Deployment
- Mesh Network Applications for EmComm
- Network Performance Metrics and Tools
- How to "Un-Brick" a Mesh Node
- WinLink integration with Mesh
- Live streaming video cameras
- Using MeshChat
- How to Setup Node Location Data

See booth for class schedule details.

Additional Information may be found at www.aredn.org and www.miamivalleymesh.org.

**Winlink RMS eMail Server**

The Ohio ARES District 3 Winlink Radio Message Server (RMS) Gateway, W8GCA is available to Hamvention Participants on 445.01 MHz.

Background: Winlink is an amateur radio email service that allows hams to originate and receive global email messages via HF, VHF, and UFH radio stations. Winlink is currently promoted by the ARRL and ARES organizations as a primary EmComm support tool.

**Amateur Satellite Demonstrations**

Friday 9am-6pm, Saturday 9am-5pm, Sunday 9am-1pm. Amateur Satellite operation demonstrations will be held outside the Exhibit Building E1. AMSAT will be demonstrating actual contacts with the operational amateur satellites every day. We especially want to invite youth to make a contact via an amateur satellite. All are invited to observe, participate and ask questions. Satellite pass times will be posted at the AMSAT booth (1007 -1010 -1110) and in the demo area.

## Friday Affiliated Events

**AMSAT Dinner**

Thursday, 18 May 2017, 6pm-8pm

The seventh annual AMSAT (Radio Amateur Satellite Corp.) "Dinner at Tickets" party will be held Thursday at 6 pm at Tickets Pub & Eatery at 7 W. Main St, Fairborn, OH. Great selection of Greek and American food and great company! No program or speaker, just good conversation. Food can be ordered from the menu; drinks (beer, wine, sodas and iced tea) are available at the bar. Leave room for dessert; there's an in-house ice cream shop! Come as you are. Bring some friends and have a great time the night before Hamvention.

**Contest University**

Thu, May 18, 7am – 5pm

Crown Plaza Hotel, Dayton OH

This is the day before the Dayton Hamvention officially opens. Don't miss this rare opportunity to gain knowledge that may take you years of practice, trial and error or lost time to learn otherwise. Get the edge to improve your scores and put your station in the winners circle today! Advance registration is needed. http://contestuniversity.com

**AMSAT/TAPR Banquet**

Friday, 20 May 2017, 6:30pm-9pm

The tenth annual AMSAT/TAPR Banquet will be held on Friday at 6:30 pm. This dinner is always a highlight of the AMSAT (Radio Amateur Satellite Corp.) and TAPR (Tucson Amateur Packet Radio) activities during the Dayton Hamvention.

Michelle Thompson, W5NYV, will present "It's just software, right?" She will survey the AMSAT Ground Terminal: Who, what, when, where, why, and how we're designing open source radio solutions for the next generation of AMSAT payloads.

Michelle is AMSAT's Team Leader for the design and execution of the AMSAT Ground Terminal. The goal is to create a "5 and Dime" (5 and 10 GHz) digital SDR transceiver that will support both voice and data modes, for both general QSOs and emergency communication, for the Phase 4B satellite and for future AMSAT projects. This is an effort to design an inexpensive ground terminal for amateurs that would cost tens of thousands of dollars commercially, for as much under $1,000 as we can get it.

A true renaissance woman, in addition to being an engineer and a licensed amateur radio operator, Michelle has worked for Qualcomm, attends Burning Man, and is a longtime DEFCON participant. She is also the lead for Organ Donor (an AI pipe organ). Her Phase 4B Weekly Ground Engineering Reports are fascinating reading.
Tickets ($35 each) must be purchased online in advance on the AMSAT website at www.amsat.org through the AMSAT Store tab. Tickets will not be sold at the Hamvention or at the door. The Banquet will take place at the Kohler Presidential Banquet Center, 4572 Presidential Way, Kettering, OH 45429 (just south of Dayton). The cash bar will open at 6:30 pm, with the dinner commencing around 7 pm.

**Top Band Dinner – 27th Annual event**
Crowne Plaza Hotel downtown Dayton
Presidential Ballroom (2nd Floor)
Friday evening, May 20, 2016
6 pm social hour
7 pm Dinner
Dinner Speaker: Larry 'Tree' Tyree, N6TR
Reservations in advance – limited seating
Please go to http://topbanddinner.com for tickets and information

**Collegiate Ham Radio Dinner**
Fri, May 20, 6:30pm – 9pm
Little York Tavern & Pizza, 4120 Little York Road, Dayton, OH 45414
What: Collegiate Ham Radio Dinner
When: Friday, May 20, 6:30pm
Where: Little York Tavern & Pizza, 4120 Little York Rd, Vandalia, OH 45414
Organizer: Magda Moses KM4EGE, on behalf of the Virginia Tech Amateur Radio Association
Contact: magda14@vt.edu – 571-355-8582

The Collegiate Ham Radio Dinner is a get-together of current and past collegiate ham radio operators, and anyone who shares an interest in college ham radio clubs and activities. Come meet members and alumni from clubs across the country, share your college ham radio experiences, and discuss the projects and activities you've done! High school students looking at colleges are encouraged to attend as this is an excellent opportunity to get an idea of what a college ham radio club has to offer.

This event is being organized by Magda Moses, KM4EGE, on behalf of the Virginia Tech Amateur Radio Association. Everyone is welcome! Feel free to contact Magda with any questions at magda14@vt.edu. RSVPs are appreciated but not required.

**24th Annual Dayton Contest Dinner**
Sat, May 20
Crowne Plaza Dayton, 33 East 5th Street, Dayton, OH 45402, United States
Cash bar opens at 5:30 p.m.
Dinner starts at 6:30 p.m.

Tickets are only available on http://www.contestdinner.com Many contest operators from around the world attend this event. If you enjoy radio contesting, you do not want to miss this Contest Dinner in Dayton, Ohio. There are no tickets available at the door.

**ATV Friday Night dinner.**
The ATV Friday Night Dinner will be at China Garden Buffet restaurant starting at 6:30PM on 112 Woodman Drive in Dayton, Ohio 45431 (Airway Shopping Center). Buffet Dinner $11.99 (937-781-9999). We have dinner then presentations about various ATV topics with door prizes concluding about 9:30PM. All are invited.

**SWODXA Dinner**
Friday, May 20th, 2016 at
The Dayton Marriott – 1414 S. Patterson Blvd., Dayton, OH 45409

## Saturday Affiliated Events

**Annual CW Pileup Competition**
Kansas City DX Club Hospitality Suite
Dayton Crowne Plaza Hotel - Suite 525
Saturday nights beginning at 8pm.

Competition History and Details:

The Kansas City DX Club has hosted its hospitality suite at the Dayton Crowne Plaza Hotel on Hamvention weekend every year since 1980. That same year, the club introduced its popular CW Pileup Competition, which was an instant hit, and quickly became a "must-do" for contesters and DXers from all over the world.

The format is straightforward. Participants are seated at a table in an adjoining room, and are given a set of headphones and a laptop. They are charged with copying as many calls as possible from a pileup of about 100 calls. The pileup file (created anew each year by Russ, KØVXU) simulates a possible "on the air" experience, with some calls sent once, some twice, at varying speeds and pitches. Some calls are "in the clear", but many are on top each other. After about five minutes, the test is over, and the current participants are ushered out one door while six more enter from another.

The entries are scored automatically, and the scores are quickly transcribed to a results chart on the wall in the main hospitality suite.

Beginning with the 2011 competition, those visiting the hospitality suite are able to view a live "Morse Race" on the suite's big-screen TV! The display shows a live graph of the current participants as they actually copy calls, and the rankings are updated almost instantaneously as well. This exciting new aspect of the contest was created by Chuck, NO5W, whose software engine drives our entire system.

The last test is offered about midnight, and then great prizes, provided by generous donors from the amateur radio equipment industry, are presented to the winners.

If you make it to the Dayton Hamvention, don't miss this event...Saturday nights beginning at 8:00 p.m. You'll have a great time, and may take home a great prize!

**Front Row Kneeling (L to R)** Dave Tritch N8YFQ, William Serrato W8CAN, Jim Shaw AL7BA, Jim Storms AB8YK, Randy Midkiff WB8ART, Jeff Ullery KD8SHF, Keith Yarger KD8UYT, Jerry Miller WD8QAI, Gary Mullins K8UW, Bob Baker N8ADO, Jim Frey W8ISZ, Jim Simpson WB8QZZ

**Row 2 (L to R)** Jeff Everetts N8IBW, Rob Gauder WD8CXV, Susan Jebens KD8AFP, Melissa Markland KD8LZH, Brian Markland N8UDQ, Ed Collins N8NUY, Janey Ruminski KB8PMF, Mike Buehler N8XGA, Frank Beafore WS8B, Hazel Everetts N8PTL, George Ewing WD8NHI

**Row 3 (L to R)** Ron Cramer KD8ENJ, Tom Gross KD8VLS, Larry Sack N8QMN, Gary Sammons W9SAM, Gary DesCombes N8EMO, Ron Moorefield W8ILC, Steve Coy K8UD, Jim Tiderman N8IDS, Charles Kaiser KD8JZR, Dave Hendricks N8HSO, Jim Nies WX8F, Hidden – Henry Ruminski W8HJR, Joe Sheline KD8AQH,

**Row 4 (L to R)** Mark Tessneer KB8ZR, Joe Muchnij N8QOD, Don Parker KB8PSL, Chris Jebens KZ8XU, Charles Wright K8MDB, Jeff DeVoe K8JTD, Hidden - Stan Leeds KC7EHJ, Terry Scott NV8E, Mike Carter W8BSI, Mike Crawford KC8GLE, Dan Minnix KD8YNG

# 2017 Dayton Hamvention Committee

| | | | |
|---|---|---|---|
| Administration | General Chair | Cramer | Ron KD8ENJ |
| Administration | Assistant General Chair | Gerbs | Jack WB8SCT |
| Administration | Special Asst.To Gen. Chair | Shaw | Jim AL7BA |
| Administration | Phone Line / Info | Roberts | Shirley N8LX |
| Administration | Phone Line / Info | Roberts | Lynn N8LXK |
| Administration | Ambassador at Large Chair | Moorefield | Ron W8ILC |
| Administration | Ambassador at Large A Chair | Collins | Ed N8NUY |
| Administration | Mail | Yarger | Keith KD8UYT |

## COMMITTEES

| | | | |
|---|---|---|---|
| Advance Registration | Chair | Storms | Jim AB8YK |
| Advance Registration | Assistant Chair | Midkiff | Randy WB8ART |
| ARRL | Liaison Chair | Tessneer | Mark KB8ZR |
| ARRL | Liaison Assistant Chair | Binkley | Joe KD8YPY |
| Awards | Chair | Beafore | Frank WS8B |
| Awards | Assistant Chair | Kalter | Michael W8CI |
| Balloon Launch | Chair | Muchnij | Joe N8QOD |
| Booth Tracker | Chair | Coy | Steve K8UD |
| Booth Tracker | Assistant Chair | Ullery | Jeff KD8SHF |
| Committee & Volunteer Services | Co-Chair | Everetts | Hazel N8PTL |
| Committee & Volunteer Services | Co-Chair | Everetts | Jeff N8IBW |
| Communications | Chair | Crawford | Mike KC8GLE |
| Communications | Assistant Chair | Baker | Bob N8ADO |
| DARA Booth | Chair | Thuermer | Jon KB8SRQ |
| DARA Booth | Assistant Chair | Jebens | Susan KD8AFP |
| Finance | Chair | Kalter | Michael W8CI |
| Finance | Assistant Chair | Beafore | Frank WS8B |
| Flea Market | Chair | Tritch | Dave N8YFQ |
| Flea Market | Assistant Chair | Coy | Steve K8UD |
| Forums | Chair | Hendricks | Dave N8HSO |
| Forums | Assistant Chair | Scott | Terry NV8E |
| Golf Carts | Chair | Sheline | Joe KD8AQH |
| Golf Carts | Assistant Chair | Buehler | Mike N8XGA |
| Inside Exhibits | Chair | Markland | Brian N8UDQ |
| Inside Exhibits | Assistant Chair | Leeds | Stan KC7EHJ |
| Inside Exhibits | Inside Manager | Gauder | Rob WD8CXV |
| International Relations | Chair | DesCombes | Gary N8EMO |
| International Relations | Assistant Chair | Hoskins | Cathi N8ZCO |
| License Exams | Chair | Jebens | Chris KZ8XU |
| License Exams | Assistant Chair | Puckett | Dan WD8AAU |
| Live Streaming | Chair | Simpson | Jim WB8QZZ |
| Live Streaming | Assistant Chair | Anderson | Sam N8VES |
| Mailing | Chair | Kaiser | Charles KD8JZR |
| Mailing | Assistant Chair | Frey | Jim W8ISZ |
| Marketing | Chair | Wright | Chuck K8MDB |
| Marketing | Assistant Chair | Myers | Scott AC8DE |
| Media | Chair | Ruminski | Henry W8HJR |
| Media / Info | Assistant Chair | Ruminski | Janey KB8PMF |
| Media | Assistant Chair | Minnix | Dan KD8YNG |
| IT | Assistant Chair | Ewing | George WD8NHI |
| Open House | Chair | Lunsford | Rob KB8UEY |
| Prizes | Chair | Nies | Jim WX8F |
| Prizes | Co-Assistant Chair | Serra | Bill N8NRT |
| Programs & Publications | Chair | Wright | Chuck K8MDB |
| Programs & Publications | Assistant Chair | Miller | Jerry WD8QAI |
| Security | Chair | Parker | Don KB8PSL |
| Security | Assistant Chair | Carter | Mike W8BSI |
| Security - Signs | | Apple | Larry N8MYQ |
| Special Event Station | Chair | Bodey | Jerry N8OWV |
| Special Event Station | Assistant Chair | Force | Marvin KB8MUV |
| DX Station | Advisor | Tiderman | James N8IDS |
| DX Station | Advisor | Shaw | Jim AL7BA |
| Talk-In | Chair | Mullins | Gary K8UW |
| Talk-In | Assistant Chair | Sammons | Sam W9SAM |
| Traffic Planning | Chair | Sack | Larry N8QMN |
| Traffic Planning | Assistant Chair | Gross | Tom KD8VLS |
| Visual Information | Chair | Koogler | Steve K8DZ |
| Visual Information | Assistant Chair | Forbes | Dave KD8FO |
| Webmaster | Interim | Ruminski | Henry W8HJR |
| Webmaster | Interim | Markland | Brian N8UDQ |
| Youth Tech | Chair | Ullery | Jeff KD8SHF |
| Membership (DARA) | Chair | DeVoe | Jeff K8JTD |
| Membership (DARA) | Assistant Chair | Serrato | William W8CAN |

# 2017 DARA Local Scholarship

In the fall of 2011 the Dayton Amateur Radio Association (DARA) saw a need to help young local radio amateurs attend college. They created a scholarship program for local students and a committee was created to supervise the local scholarship program. Thus far we have awarded 12 scholarships. The $1500.00 scholarships are to be used for tuition, books or other related expenses. The student is required to be an active DARA member with a minimum of one year membership history and must hold an FCC Amateur Radio License. The scholarship must be used for continuing education in a math or science related field in an accredited two or four year university program.

## Jeremy Hong, KD8UTO

Jeremy Hong, KD8TUO, was in his fourth year of undergraduate studies at Wright State University in Electrical Engineering with an emphasis in electronic systems when he won the DARA Local Scholarship in 2016. His plan is to complete his undergraduate degree in Electrical Engineering, and pursue a career as an electronic warfare engineer. He also intends on pursuing a master's in electrical engineering at AFIT, UD, or WSU.

Jeremy was first licensed in January of 2013 and upgraded to Extra Class the following year. He has been doing hobby electronics since his sophomore year of high school, and it was one of the primary reasons why he eventually got his amateur radio license. His professional experience started in his senior year of high school, with his first internship at The Ohio State University. Since then he has worked continuously at various jobs within his field at Wright State, AFRL, Sierra Nevada Corporation, and D'Angelo Technologies. In addition, he owns Hong's Electronics; an online electronics business that specializes in electrical test equipment refurbishment and provides services/consultation in circuit board layout and design. Hobby electronics and amateur radio were the primary reasons why he decided to pursue electrical engineering as a career. Amateur radio has become an integral part of his life; when he joined DARA in May of 2015, he started going to the Thursday Night Group meetings and found his perfect place in the club. From working on do-it-yourself electronics projects to mentorship from professional electrical engineers, it is an experience that has furthered his hobby, studies, and career. He has been a Hamvention and DARA volunteer since 2014.

Ron Cramer KD8ENJ
Local DARA Scholarship Coordinator

## Future Scholarships

Applications for the DARA Local Scholarship may be submitted at any time and must follow the guidelines set forth in the application. Information and Application Form for the DARA Local Scholarship may be found on the Dayton Amateur Radio Association Website - W8BI.org in the member's area. Please address any questions or submit applications to the committee at – localscholarship@w8bi.org

# Food Vendors

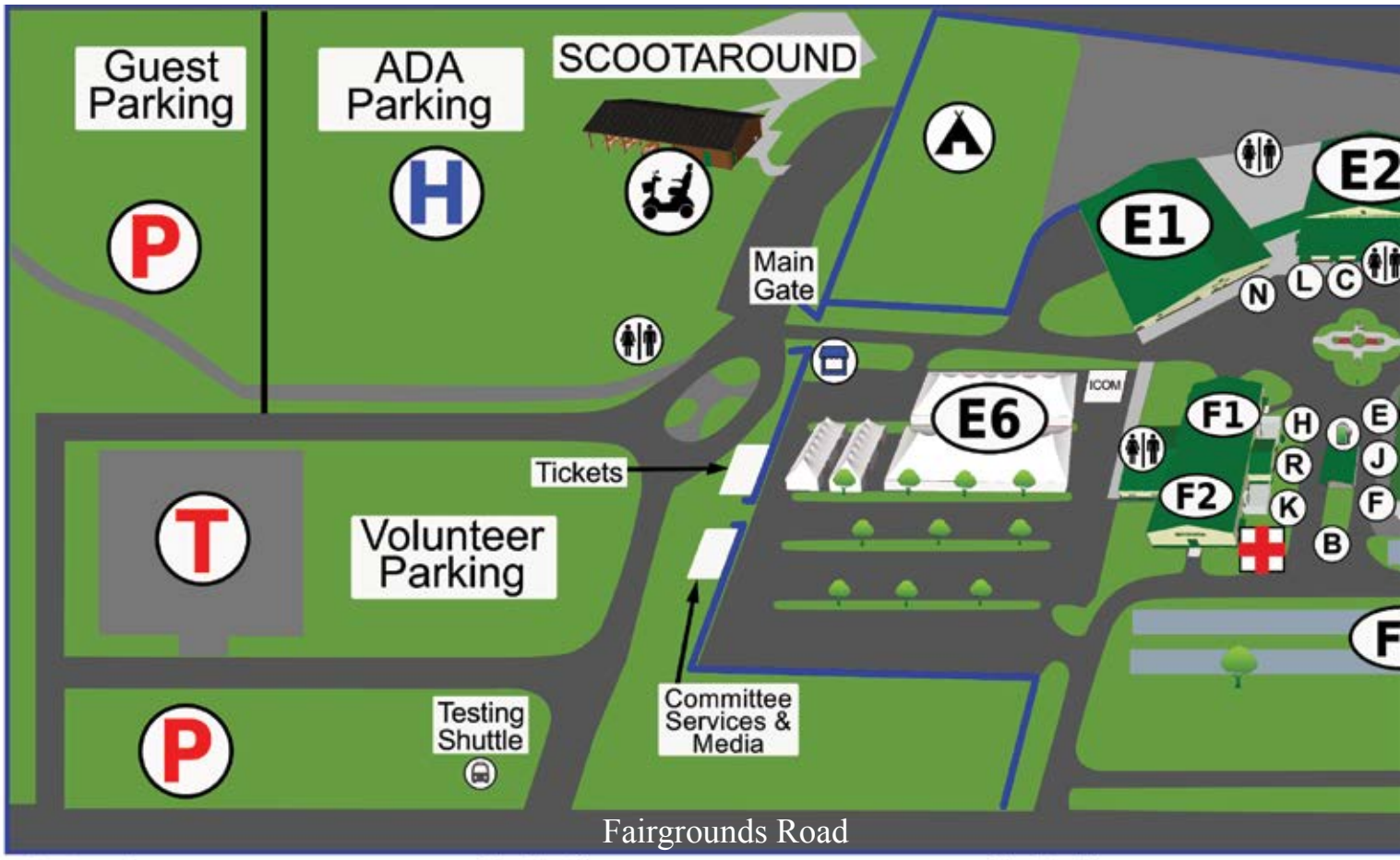
See Over Lay Map on Pages 20 & 21 For Location

| | | | |
|---|---|---|---|
| C | Bullen's Food | In front of Bldg. 2 | Pizza; Stromboli, wraps, Lemonade, |
| D | Bullen's Food | In front of Bldg. 2 | Italian & Polish Sausage |
| E | Greene Co. Cattlemen | Next to Dining Hall | Rib eye Steak, Walking Tacos Hamburgers, Beef hot dogs |
| F | Hawkins Family BBQ | Next to Dining Hall | Butterfly Pork Chop, Pulled Pork, Squealing Potatoes |
| G | Irvin Concessions | Back side of Dining Hall | Pizza, Hamburgers, Brats, Polish Sausage; Chicken Breast, Sloppy Joes' Soft Pretzels, Breakfast, etc. |
| A | Kohler catering | Next to Bldg.. 3 | Sit-down meals: Home cooking |
| B | Gr. Co. Fair | Next to Bldg. 3 | Beer |
| H | Louisiana Grill | Next to Assembly | Bourbon Chicken, etc. |
| J | RB Foods | Next to Dining Hall | Portabella Mushroom caps, Specialty burgers, shake ups, Shredded chicken |
| K | Raders Ice Cream | Assembly Building | Ice Cream, Floats, etc |
| L | Granny Farmers | Next to Bldg. 2 | Noodles of all kinds |
| M | Jean's Home Cooking | Back of Dining Hall | Homemade cabbage rolls, Meatloaf |
| N | Cork and Bottle | Near Bldg. 2 | Bone in Pork Chips, Pork Tenderloin, Chicken, etc. |
| R | Jr. Fair Board | Next to Assembly | Water, chips, candy bars |

# Infield

| | | |
|---|---|---|
| S | Lyons Club | Pop, Water, Gatorade |
| T | Gr. Co. Fair | Beer tent. |
| U | Rib-N-It | Ribs, Pulled Pork, Chicken, etc |
| V | Young's Dairy | Cheese Curds; Panini sandwich. ice cream |
| W | Good Golly Miss Molly | Chicken salad, fresh fruit, Biscuits and Gravy, Home Made desserts, etc. |

# Overview Map of Grounds




Gate 4
Guest Parking
Tour Bus

Gate 3
ADA Parking
Volunteer Parking

Gate 2
Flea Market Entrance
Reserved Parking

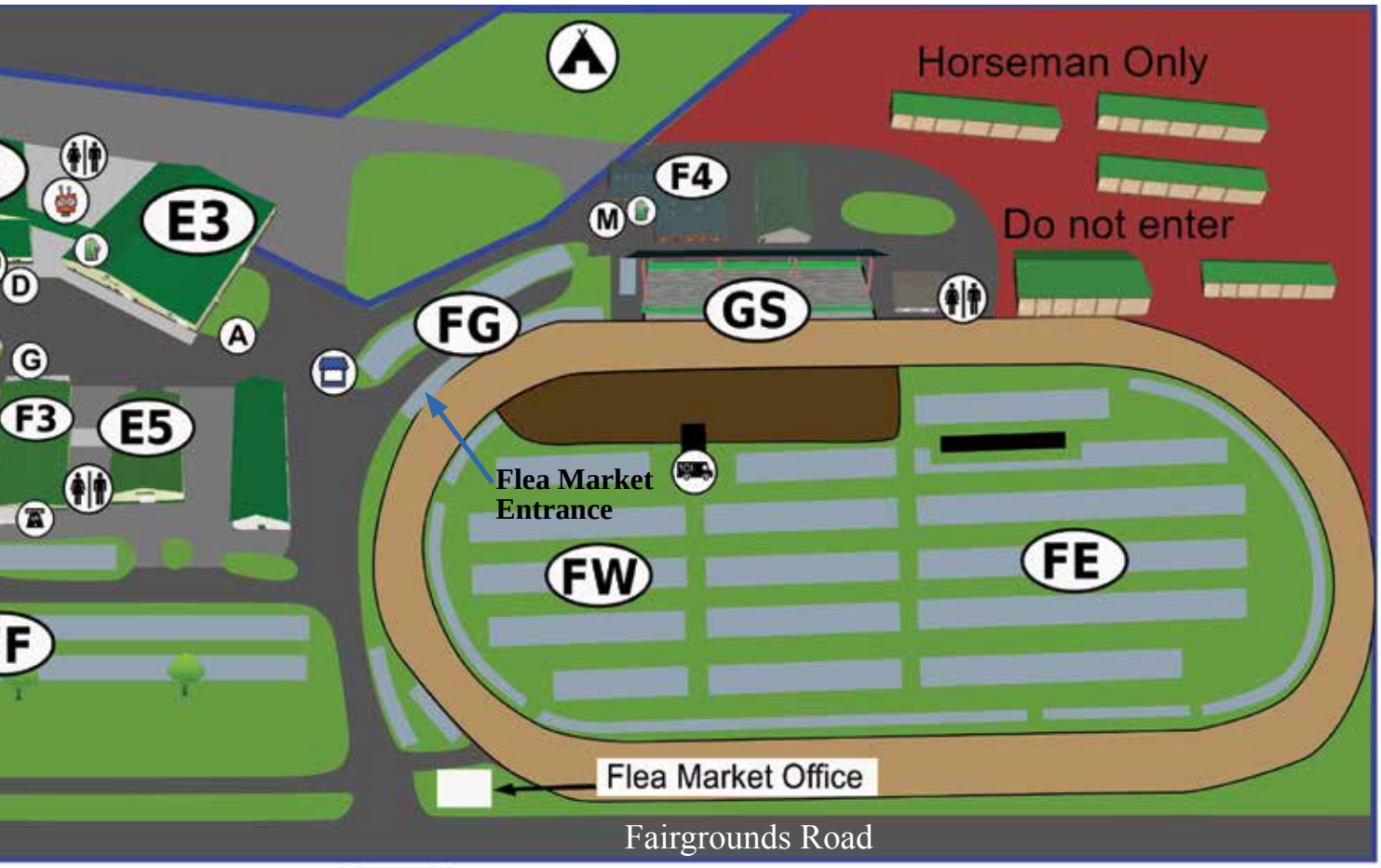
## Food & Refreshment Vendors

- (A) Kohler's Catering
- (B) GCFEC - Beer Garden
- (C) Bullen's
- (D) Bullen's
- (E) GC Cattlemen
- (F) Hawkins Family BBQ
- (G) Irvin Concessions
- (H) Louisiana Grill
- (J) RB Foods
- (K) Raders Ice Cream
- (L) Granny Noodles
- (M) Jean's Home Cooking
- (N) Cork and Bottle
- (R) Jr. Fair Board

### Locations in Flea Market

- (S) Lyons Club
- (T) GCFEC Beer Garden
- (U) Rib-N-It
- (V) Young's Dairy
- (W) Good Golly Miss Molly

# Overview Map of Grounds




Gate 1
Flea Market
EXIT ONLY

**General Info**

- Tickets/Info
- Restrooms
- Scootaround
- Testing Shuttle
- Camping
- ATM
- Charging
- Robot Arena
- First Aid

**Inside Exhibits**

- E1 Maxim - 1000's
- E2 Tesla - 2000's
- E3 Marconi - 3000's
- E5 Hertz - 5000's
- E6 Watt - 6000's

**Parking**

- P General
- H Handicap
- T Taxi / Tour Bus
- GS Grandstand Seating

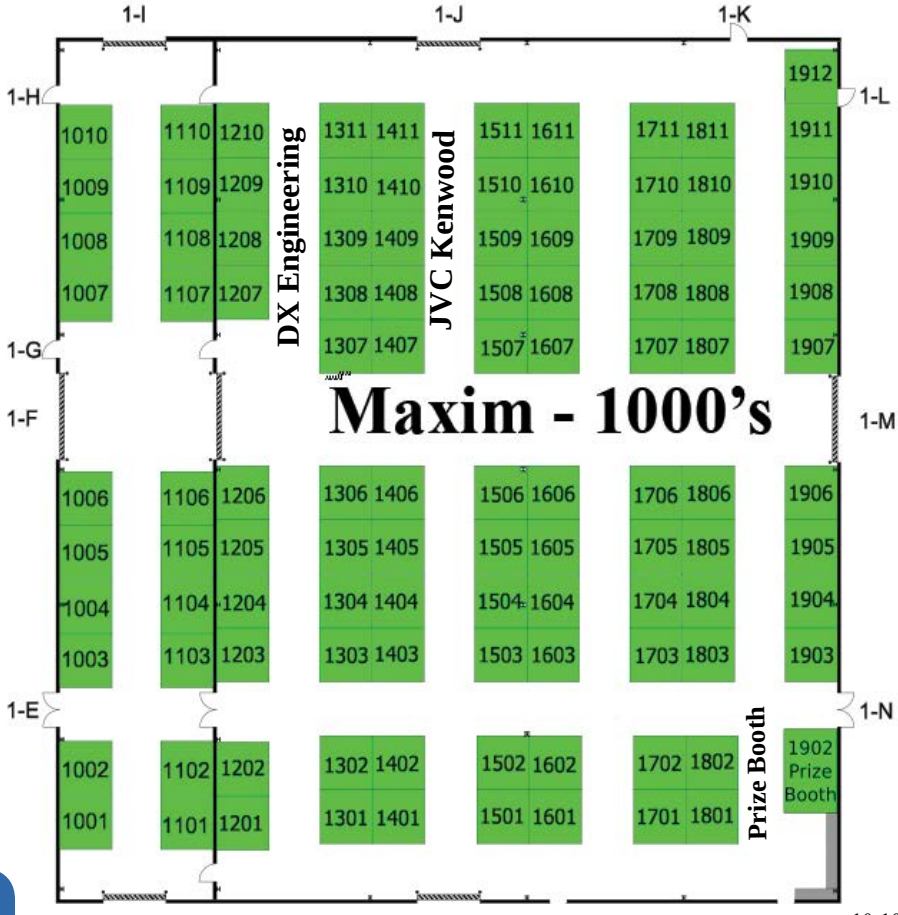
**Flea Market**

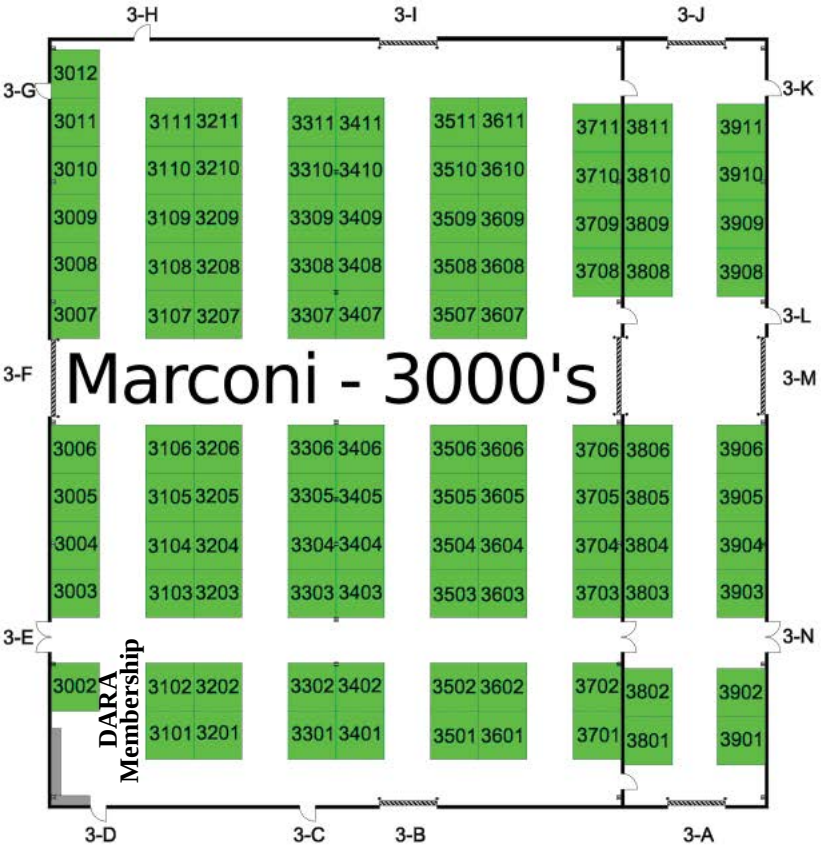
- FF Front Lot
- FW West Infield
- FE East Infield
- FG Grandstand

**Forums**

- F1 Forum 1
- F2 Forum 2
- F3 Forum 3
- F4 Forum 4

# Inside Exhibits Map



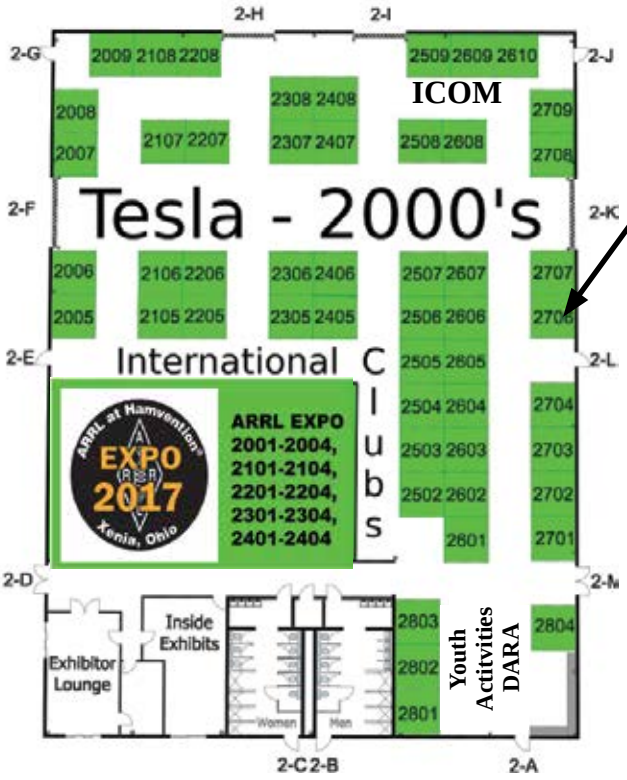




Maps

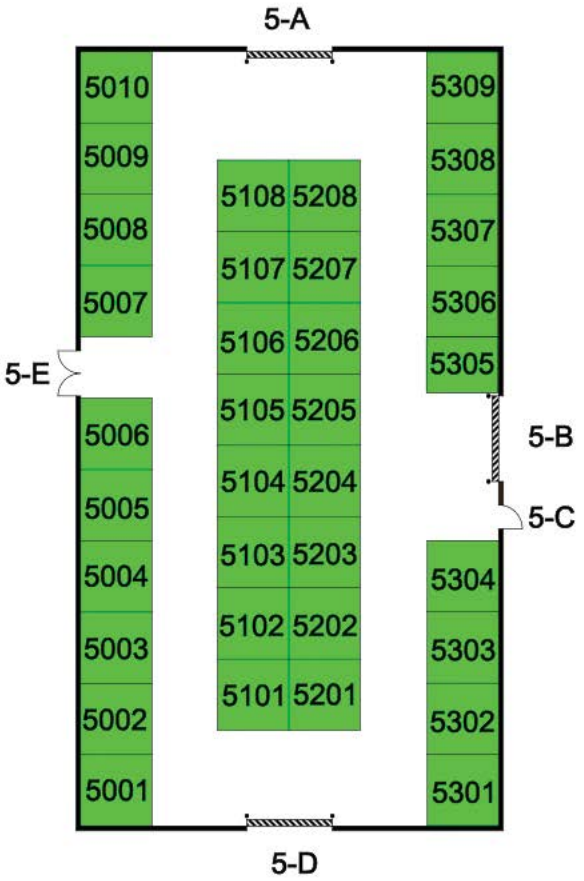
| | |
|---|---|
| Airspy.US | 1201,1202 |
| Ameritron | 1703,1803 |
| AMSAT | 1007 -1010 -1110 |
| Arrow Antenna | 1106 |
| BHI Ltd | 1911 |
| BRIDGECOM SYSTEMS, INC. | 1103,1104 |
| Collins Collectors Association | 1003,1004 |
| Debco Electronics | 1301,1302,1401,1402 |
| **DX Engineering** | **1207 - 1210,1307 - 1311** |
| Elecraft, Inc. | 1707 - 1711 |
| ESRC1 Corp | 1101,1102 |
| Gifts 4 HAMS /Kelly Laser Works | 1205,1206 |
| Global TSCM Group, Inc. | 1005 |
| **Hamvention Prize Booth** | **1902** |
| HobbyPCB | 1912 |
| Hustler / New-Tronics | 1505,1506 |
| Hy-Gain | 1605,1606 |
| **JVC Kenwood** | **1407-1411,1507-1511** |
| Libre Space Foundation | 1006 |
| MCM Electronics, Inc. | 1807 - 1811 |
| MFJ Enterprises Inc | 1603-1606,1703-1706,1803-1806,1903-1906 |
| Miami Valley Mesh Alliance | 1001 |
| Momobeam | 1801,1802 |
| N3ZN Keys, LLC | 1203,1204 |
| National Voice of America Museum of Broadcasting | 1910 |
| NW Digital Radio | 1105 |
| Pro Audio Engineering | 1610 |
| QRP Works | 1611 |
| R & L Electronics | 1303-1306,1403-1406 |
| Rohn Products, LLC | 1701,1702 |
| SteppIR Antennas Systems | 1501,1502,1601,1602 |
| The Whistler Group | 1503,1504 |
| Total Mast Solutions | 1907,1908,1909,1910 |
| Vibroplex | 1607,1608,1609 |
| Wolf River Coils LLC | 1002 |

| | |
|---|---|
| 10-10 International Net, Inc. | 3810 |
| ABR Industries | 3211 |
| ALEXLOOP | 3109 |
| ALINCO / REMTronix. Inc. | 3007-3009 |
| Alpha Antenna, Amateur Radio Store | 3207 |
| Apache Labs | 3607-3611,3708-3711 |
| Aventrade | 3006 |
| Batteries America | 3808,3809 |
| Buddipole | 3004,3005,3003 |
| Comet Antenna / Daiwa Meters | 3304,3305,3306 |
| **DARA Membership** | **3002** |
| DARC 2 | 3811 |
| Diamond Antenna | 3401-3406 |
| ELAD USA INC | 3010-3012 |
| National Voice of America Museum of Broadcasting | 1910 |
| Green Heron Engineering | 3103,3203 |
| Ham Radio Outlet | 3307-3311,2506,2507 |
| Hamsource | 3903-3906 |
| Hilberling USA | 3901,3902 |
| Import Communications | 3803,3804 |
| JK Antennas | 3101,3102,3201,3202,3301,3302 |
| JT Communications | 3703 |
| LUSO Super-Techno | 3105,3106,3205,3206 |
| M2 Antenna Systems, Inc. | 3107,3108 |
| Portable Rotation | 3104 |
| Quicksilver Radio Products | 3503-3506,3603-3606 |
| RT Systems | 3805,3806 |
| Scanner Master Corp. | 3303 |
| Sign Man of Baton Rouge | 3701,3702 |
| The Wireman | 3908,3909,3910,3911 |
| Tower Electronics | 3501,3502,3601,3602 |
| Transel Corporation | 3801,3802 |
| Uncommon USA Inc. | 3204 |
| US Tower Corp. | 3110,3111 |
| WB0W Tarheel Antennas | 3704,3705,3706 |
| West Mountain Radio | 3208,3209,3210 |
| Yaesu USA | 3407-3411,3507-3511 |

# Inside Exhibits Map



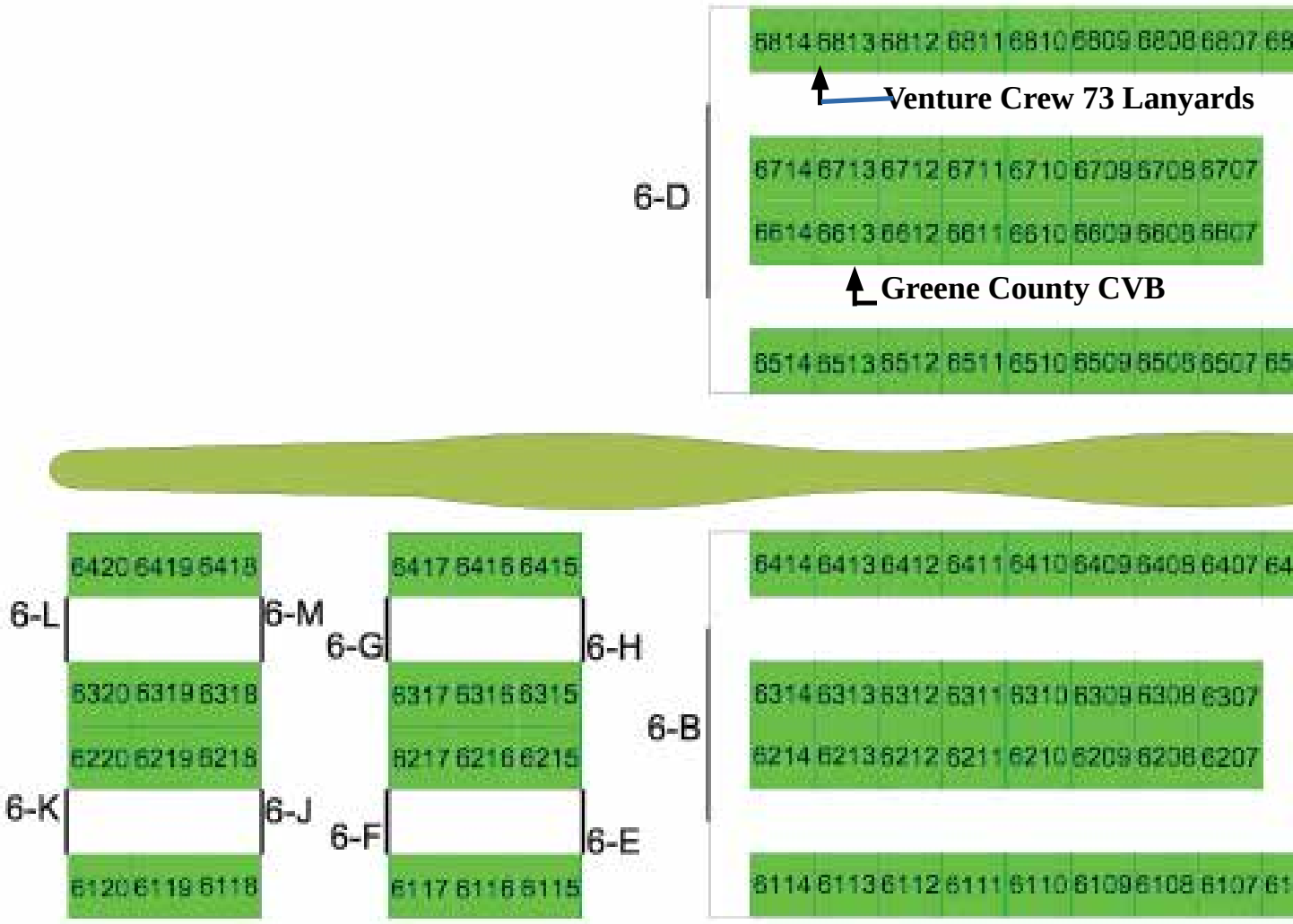

| | |
|---|---|
| Alfa Radio Ltd | 2106,2206 |
| Array Solutions | 2701-2704 |
| **ARRL,** | **2001-2004,2101-2104,2201-2204, 2301-2304,2401-2404** |
| Begali Keys | 2307,2308,2407,2408 |
| **DARA - Internation Relations** | **2601** |
| **DARA Special Event Stations** | **2706,2707** |
| **DARC- Deutscher Amateur Radio Club** | **2503** |
| Expert Linears America, LLC. | 2603,2604,2605 |
| FIRST Robotics | 2804 |
| Flexradio Systems | 2007-2009,2107,2108,2207,2208 |
| **ICOM America, Inc.** | **2508,2509,2608-2610,2708,2709,6001** |
| Japan Amateur Radio League, Inc (JARL) | 2502 |
| K2BSA - ARA & Radio Scouting | 2205 |
| National Federation of the Blind & The Unseen Bean | 2602 |
| Qatar Amateur Radio Society | 2504,2505 |
| Radio Society of Great Britain | 2305,2405 |
| RadioWavz | 2607,2606 |
| Universal Radio, Inc. | 2005,2006 |
| W5YI Group-Gordon West Radio School | 2306,2406 |
| WRTC 2018 e.V. | 2105 |
| **Youth Activities - DARA** | **2801,2802,2803** |
| **Youth DX Adventure** | **2602** |




## Hertz - 5000's

| | |
|---|---|
| Great Scott Gadgets | 5004 |
| Ham Nation | 5305 |
| Heil Sound Ltd. | 5306-5309 |
| Heritech Larm Partner AB | 5106 |
| iPortable | 5205 |
| Linux in the Ham Shack | 5007 |
| MicroLog by WA0H | 5005 |
| Nuts & Volts / Servo Magazine | 5008 |
| Palstar Inc. | 5107,5108 |
| Peet Bros. Company, Inc. | 5206-5208 |
| QRP - ARCI | 5104,5105 |
| Rig Expert | 5103 |
| Siglent Technologies USA, Inc | 5203,5204 |
| Sinbad Glue | 5304 |
| TAPR | 5001-5003 |
| The R.F. Connection | 5101,5102,5201,5202 |
| W2IHY Technologies | 5009,5010 |
| W5KUB | 5006 |
| WiredCO | 5301,5302,5303 |

# Inside Exhibits Map




| | |
|---|---|
| Air Chair | 6601,6701 |
| Alpha Amplifier \ Dishtronix \ Emtron \ Ten-Tec | 6111,6112,6113 |
| Amateur Television Network | 6101 |
| AOR USA, Inc. | 6504 |
| Arlan Communications | 6405,6406 |
| Bad Dog Tools | 6513,6514 |
| Bird Technologies Group / TX RX Systems | 6105,6106 |
| Buckmaster Publishing | 6210 |
| Cable X-Perts Inc. | 6102 |
| Capitol Electronics, Inc | 6320 |
| CG Antenna | 6611 |
| CommsToGo | 6304 |
| Connect Systems Inc. | 6309 |
| Courage Kenny Handiham Program | 6602 |
| CQ Communications, Inc. | 6315 |
| CW Operator`s Club | 6610 |
| Davis Instruments | 6713,6714 |
| DIY Electric Grids | 6503 |
| Ears To Our World | 6508 |
| EB104.RU | 6702 |
| Electronic Associates | 6511 |
| Escitec | 6212 |
| EZNEC Antenna Software | 6104 |
| EZ-Products | 6109 |
| Fists CW Club | 6415,6416 |
| Forbidden Knowledge | 6118 |
| Foundation for Amateur Intl Radio Service (FAIRS) | 6117 |
| GAM Electronics | 6703 |
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| **Greene County Conv. & Visitors Bur.** | **6613** |
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| HamRadio360 | 6501,6502 |

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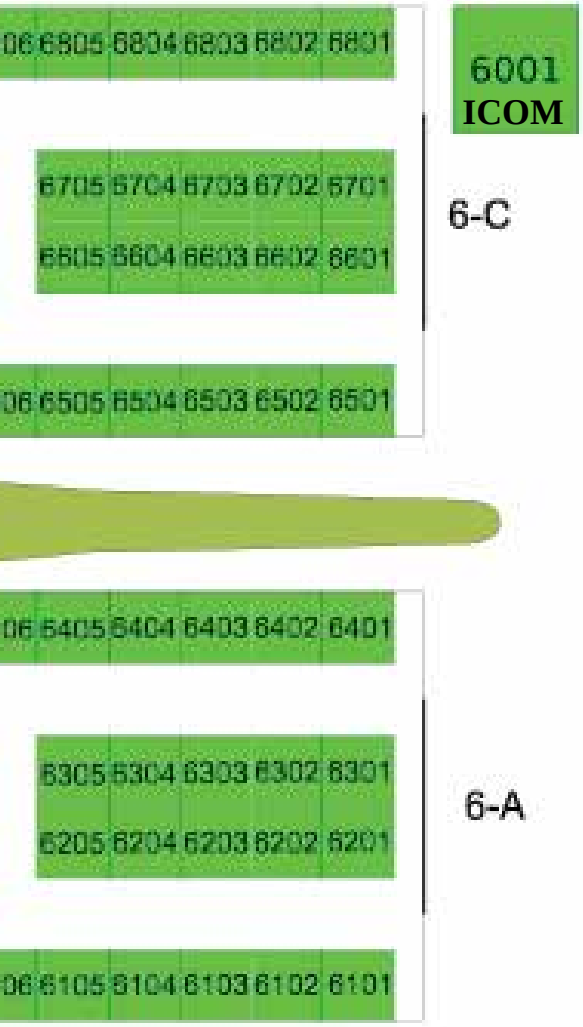


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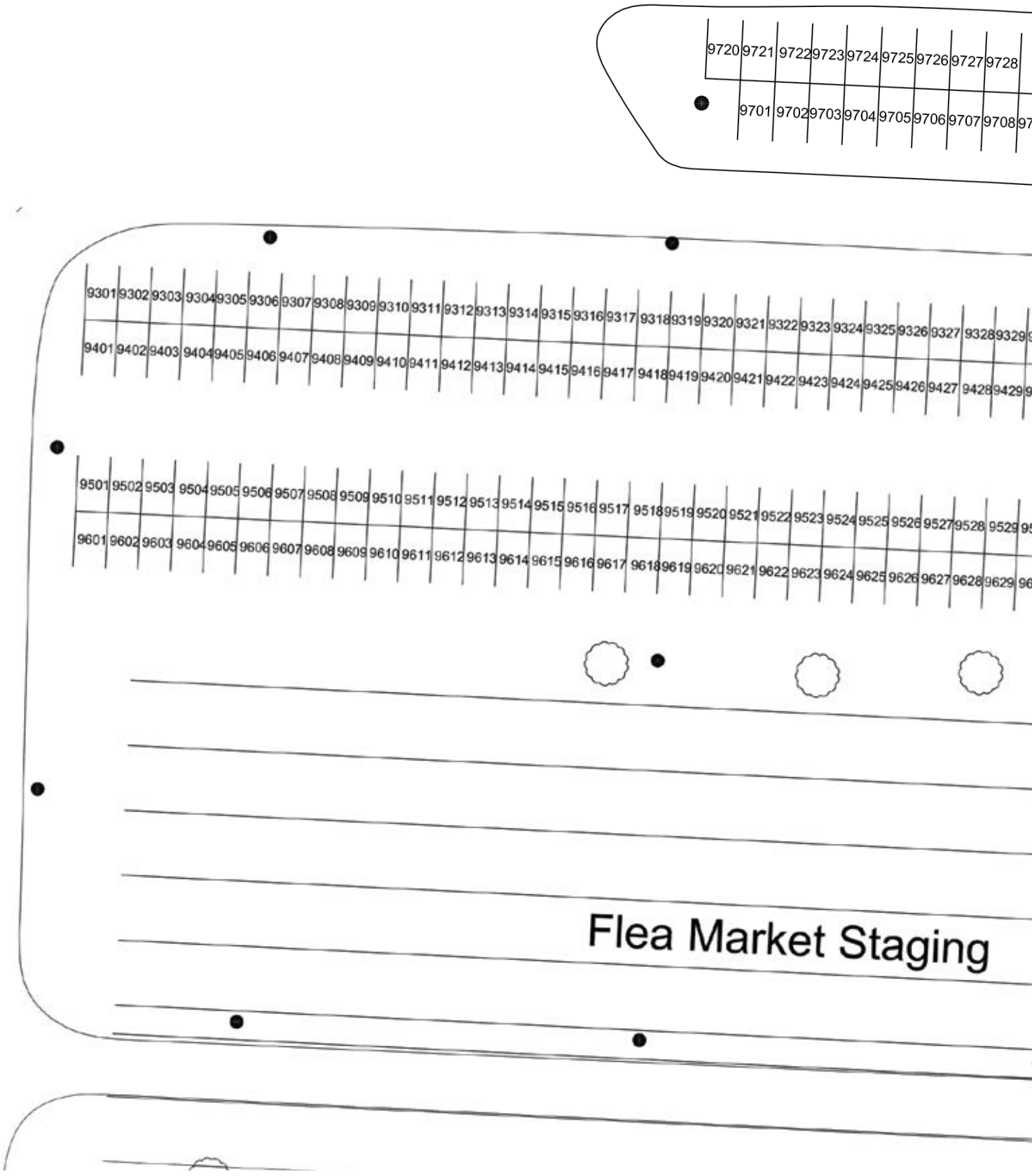
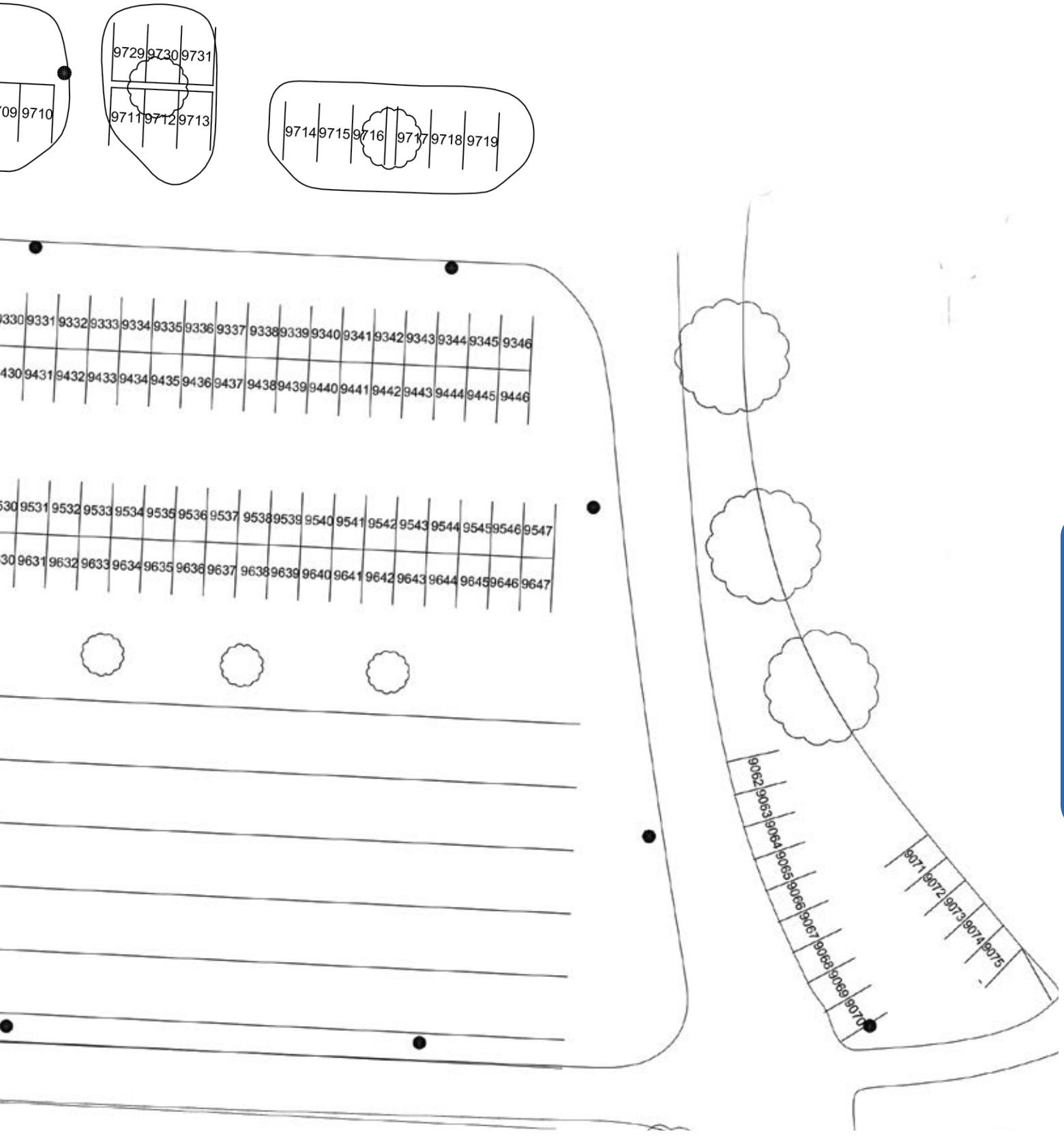
Maps

# Flea Market Front

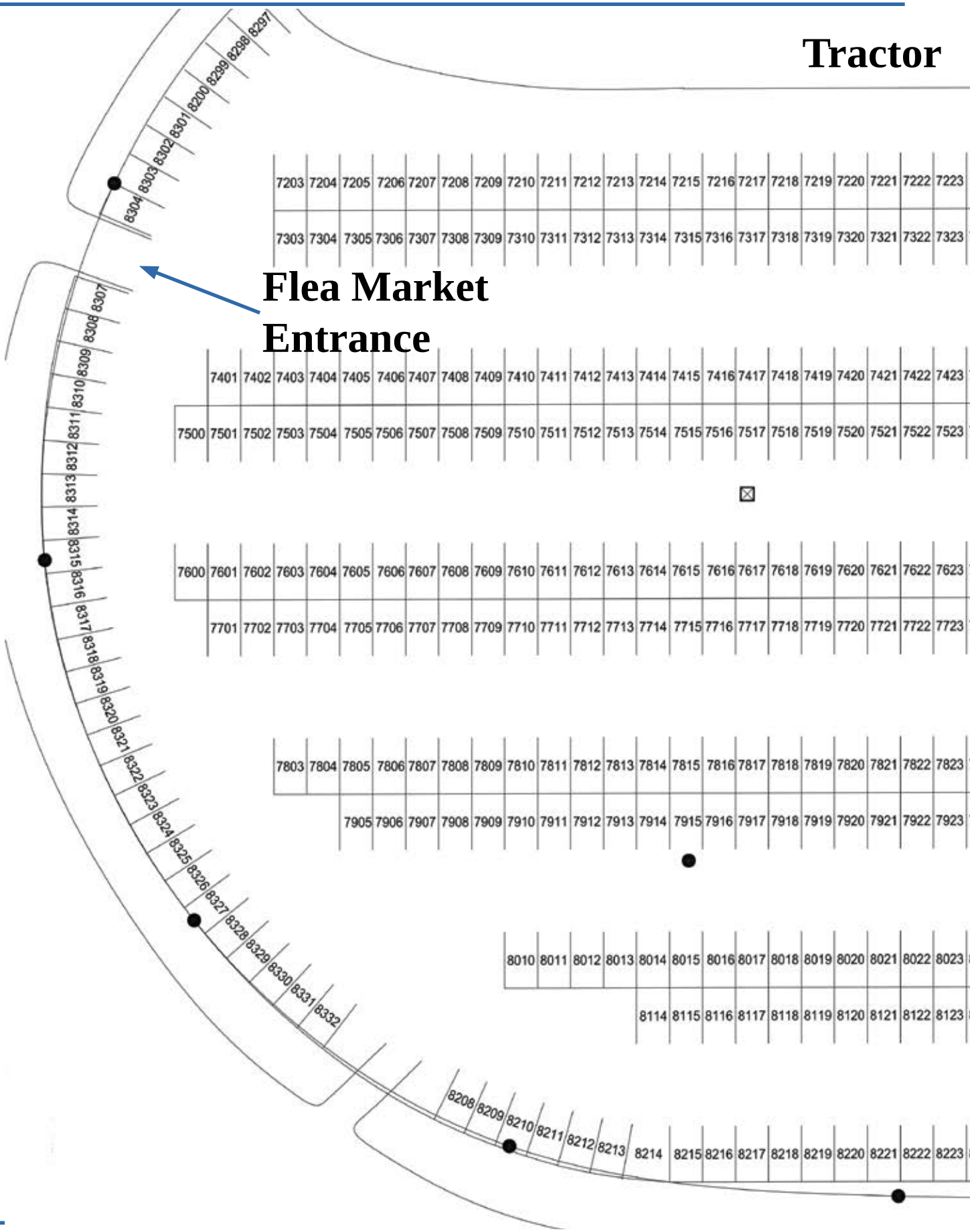


# Flea Market Front

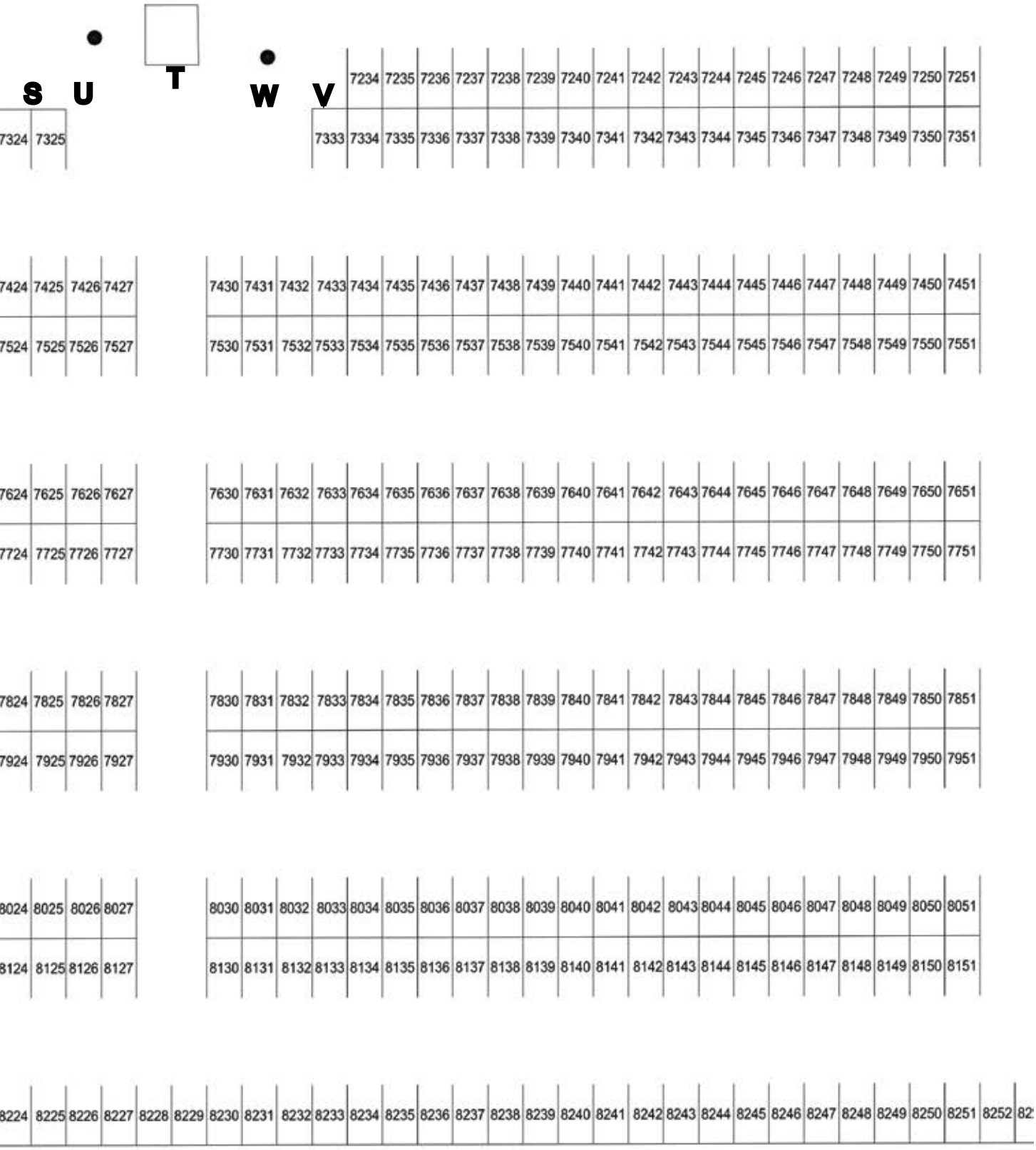



Maps

# Flea Market West



# Pull Track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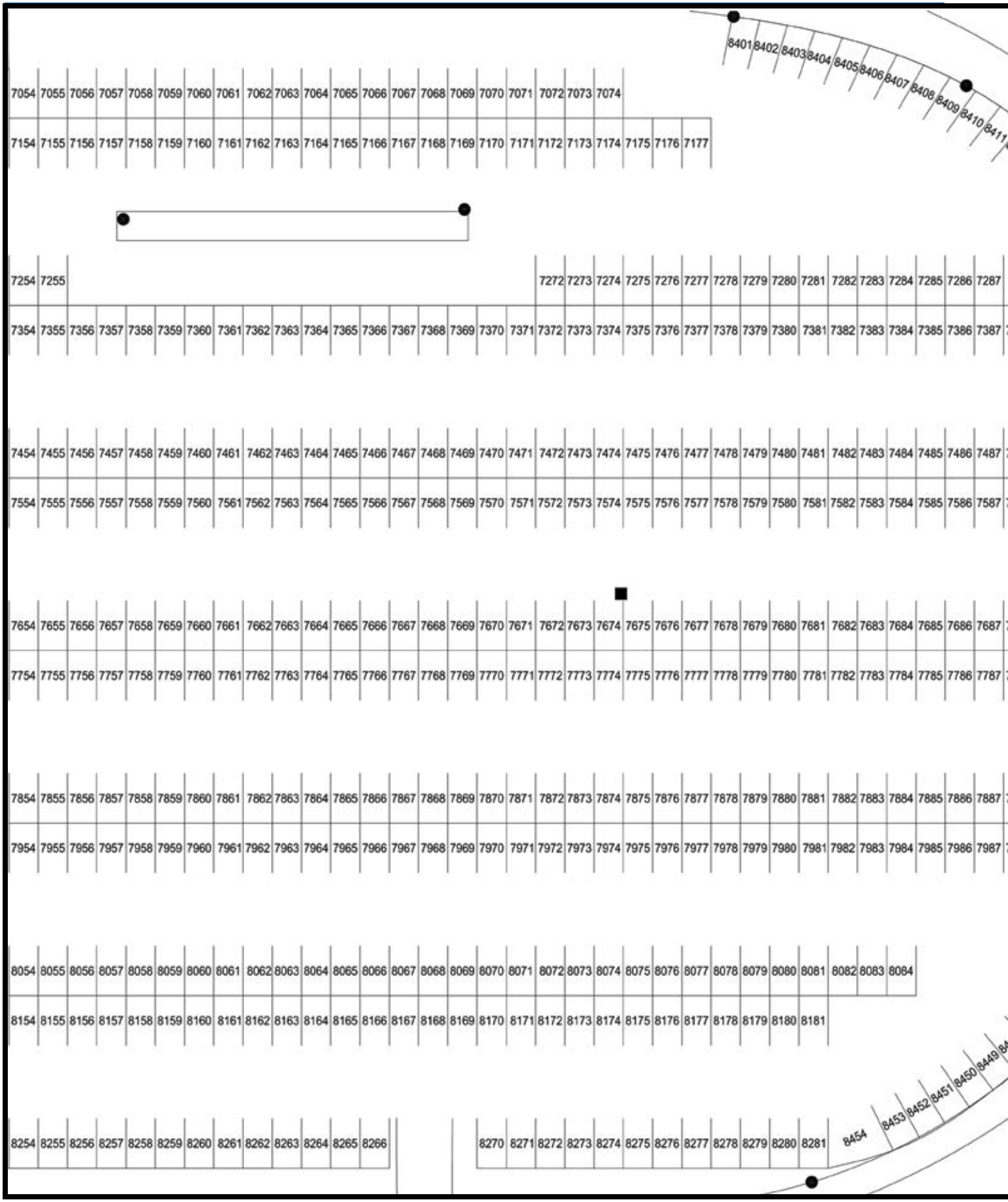
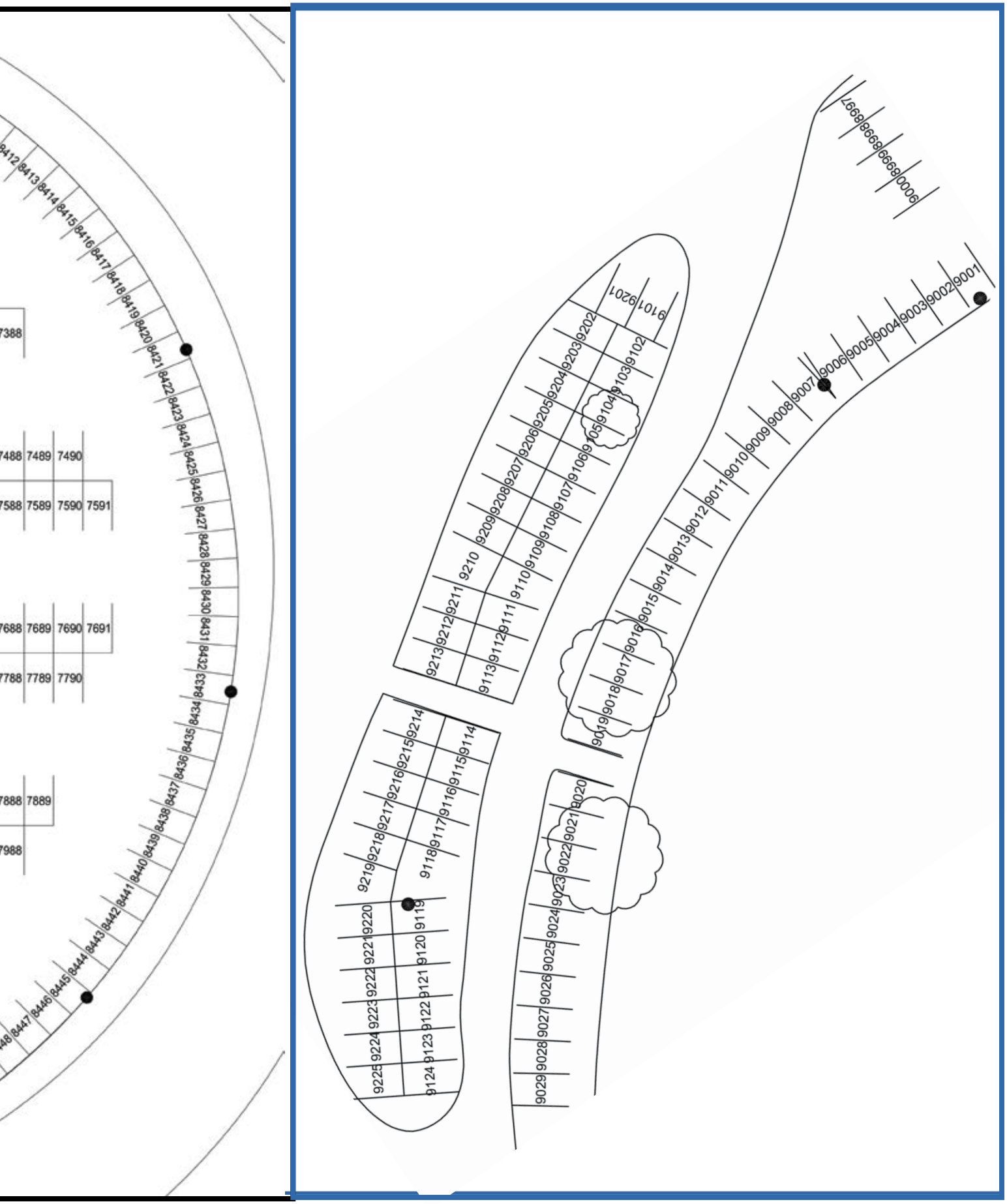
# Flea Market East



# Flea Market Grandstand



# ARRL Exhibit & Activities Guide
# May 19-21, 2017

## ARRL EXPO – Welcome!

**ARRL, the national association for Amateur Radio®, welcomes all members and friends to Hamvention®. Use this handy guide to find ARRL-sponsored activities, exhibits and program representatives. ARRL EXPO is a large exhibit area located in Building 2.**

Rick Roderick, K5UR – ARRL President
Thomas Delaney, W8WTD – Vice Director
Dale Williams, WA8EFK – Great Lakes Division Director
Scott Yonally, N8SY – Ohio Section Manager

## ARRL Store

**Visit the HUGE ARRL bookstore to join, renew or extend your ARRL membership, and get the latest publications, supplies, and official ARRL merchandise.**

- FREE Gift when you join, renew, or extend your ARRL membership at the show.
- FREE Gift for **ARRL Life Members** when you stop by the ARRL Store.
- FREE ARRL EXPO 2017 Button!
- NEW ARRL Publications:
  - **2017-2018 ARRL Repeater Directory** - the biggest edition EVER
  - **Grounding and Bonding for the Radio Amateur**, by Ward Silver NØAX

**2017 ARRL Field Day Supplies** – ARRL Field Day is June 24-25, 2017. Gear up for the most popular on-the-air operating event in Amateur Radio. Official T-shirts, pins, patches, hats, mugs, and posters are available.

**RFinder - The Worldwide Repeater Directory**. RFinder is the online repeater directory of ARRL. Check out this web service demonstration and online apps, providing subscribers with listings for 50,000+ repeaters in 170+ countries. Only $9.99 for an annual subscription: **Subscribe.RFinder.net**

## ARRL Exhibits...

- **ARRL Laboratory: Get Your Handheld Radio Tested!**
- **ARRL Collegiate Amateur Radio Initiative**
- **Amateur Radio and Education** – Meet ARRL Education & Technology Program Instructors and explore the resources available for introducing radio science and wireless technology into classrooms.
- **Radiosport and DXCC** – DXCC Card Checking; ARRL Contests and Awards; The ARRL Logbook of the World (LoTW); QSL Bureau
- **RFinder - The Worldwide Repeater Directory**
- **ARRL Development and ARRL Foundation**
- **ARRL Public Service**
- **ARRL Field Organization Volunteers** – Visit this gathering area for ARRL Field Organization networking, hosted by the ARRL Ohio Section.
- **HamSCI: The Ham Radio Science Citizen Investigation** (guest exhibit)
- **ARRL Visa® Card** – U.S. Bank

**The International Amateur Radio Union (IARU)** – Meet representatives from the IARU.

## ARRL-sponsored Forums (see forum schedule)

**Friday May 19, 2017**

- **Ham Radio Makers and Hackers**
  **Moderator: Sean Kutzko, KX9X, ARRL Media and Public Relations Manager**
  The ham radio community has always been a part of the DIY (do it yourself) movement. A group of panelists will share experiences about how ham radio is finding kinship with the new generation of creators, makers, hackers and innovators.
- **Ham Radio and the Law: Antenna Permits and Problems**
  **Moderator: Fred Hopengarten, Esq., K1VR, Author "Antenna Zoning for the Radio Amateur"**
  A discussion by Amateur Radio attorneys on legal issues of interest to hams: avoiding restrictive covenants, presenting your case for a tower permit, and information on recent court rulings on PRB-1.

**Saturday May 20, 2017**

- **HamSCI, the Ham Radio Science Citizen Investigation**
  **Moderator: Ward Silver, NØAX**
  A group of panelists will share information about professional research programs supported by radio amateurs.
- **ARRL Member Forum**
  **Moderator: Dale Williams, WA8EFK, ARRL Director – Great Lakes Division**
  Hear from local and national ARRL officials on key areas of membership interest. Find out how ARRL supports dozens of ways to get involved, get active, and get on the air. Members and prospective members are all welcome!
- **ARRL Collegiate Amateur Radio Initiative**
  **Moderator: Andy Milluzzi, KK4LWR**
  A growing number of campus radio clubs and student radio amateurs are (re)inspiring ham radio among our nation's colleges and universities, meeting other students, and developing career connections. Hear from students, alumni, and faculty.

**Sunday May 21, 2017**

- **Learning. Discovery. And FUN!**
  **Moderator: Tommy Gober, N5DUX, ARRL Education & Technology Program Instructor**
  A variety of tools for teachers to take back to their classrooms: intro to basic electronics, the science of radio, space technology and satellite communications, as well as weather science, introduction to micro-controllers and basic robotics.
- **ARRL National Parks on the Air Recap**
  **Moderators: Norm Fusaro, W3IZ, ARRL Radiosport Manager and Sean Kutzko, KX9X, ARRL Media and Public Relations Manager**
  ARRL National Parks on the Air (NPOTA) commemorated the centennial of the US National Park Service in 2016. Activators and Chasers completed over one million radio contacts. Join us to recap of one of the most popular on-air events of all time.

### Meet these ARRL Headquarters Staff

Bob Allison, WB1GCM
Marjorie Bourgoin, KB1DCO
Lauren Clarke, KB1YDD
Michael Corey, KI1U
Jon Faasen, KC1ECT
Norm Fusaro, W3IZ
Tom Gallagher, NY2RF
Regina Galuppi
Tommy Gober, N5DUX (Education & Technology Program Instructor)
Mike Gruber, W1MG
Bob Inderbitzen, NQ1R
Sabrina Jackson
Kendall, Larry, K6NDL (Education & Technology Program Instructor)
Sean Kutzko, KX9X
Kim McNeill, KB1WUX
David Patton, NN1N
Michael Scharr
Becky Schoenfeld, W1BXY
Yvette Vinci, KC1AIM

**THANK YOU!**

ARRL expresses its gratitude to the 2017 Hamvention® Committee, Dayton Amateur Radio Association, and all the volunteers who contributed to the success of ARRL EXPO 2017 in Xenia, Ohio.

ARRL The national association for AMATEUR RADIO®

# Major Prize Donor List for 2017

**ALINCO/REMTronix**
**ARRL**
**Capitol Electronics**
**DX Engineering**
**ICOM**
**KENWOOD**
**Palstar**
**RT Systems**
**Universal Radio**
**US TOWER**
**YAESU – VERTEX**

***The Major Prize Donor list recognizes donors whose aggregate donations exceeded $600. We thank them for their generosity!***

## 2017 Dayton Hamvention Major Prizes

- TOWER TX-438
- FTDX 1200 W/ FFT-1
- IC-7100 02
- IC-7200 02
- FT-450D
- Roll COAX, Tools, Connectors
- GIFT CERTIFICATES
- TH-D74AK
- TH-D74AK
- TH-D74AK
- TH-D74AK
- TH-D74AK
- FTM-400XDR
- FTM-400XDR
- FTM-400XDR
- DXE-TW-2010P 5 Band Antenna
- ID-5100A DELUXE
- ID-51A BLACK 2
- ID-51A BLUE 2
- ID-51A GRAY 2
- ID-51A GREEN 2
- ID-51A RED 2
- BUTTERNUT HF9V Antenna

# Prize Donor List 2017

ABR Industries

Air Chair

Airspy

ALINCO/REMTronix

Am. Radio Relay League

Arrow Antenna

BadDog Tools

Begali Keys

Bird Technologies

Buckmaster Publishing

Capitol Electronics

CQ Communications

DX Engineering

EasyWay HamBooks

EZNEC Antenna Software

EZ-Products

Foundation for Amateur Intl Radio Service (FAIRS)

Great Scott Gadgets

Ham Test Online

ICOM

JT Communications

KB3IFH QSL Cards

KENWOOD

Luso Super Techno

MFJ Enterprises, Inc.

MicroLog by WA0H

N3ZN Keys

Palstar

RT Systems

Sam Adams

Society of Amateur Radio Astronomers

Tucson Amateur Packet Radio

Universal Radio

US TOWER

WA8JBT

West Mountain Radio

YAESU – VERTEX

# QSL Cards

## Did you make contact with W8BI this year?

At DARA (W8BI) we have members who are passionate about utilizing our fantastic club house and keeping our station on the air. If you hear us on the air be sure to make contact. You could see your QSL card printed in the program in future years. Here are just a few of the contacts W8BI made over the past 12 months.

# Friday, May 19th

| Time | Room | Forum |
|---|---|---|
| 9:15-10:30 | Room 1 | TAPR |

Moderator: Scott Cowling
"Scotty was first licensed in 1967 and has been continuously active since that time. He is active while mobile on HF CW and on APRS. Scotty is an advisor for Explorer Post 599, a BSA affiliated ham club for teens in the Phoenix area. He has been involved in the openHPSDR project for the last 10 years, is a TAPR Director and past TAPR Vice President. Scotty is also active in the production of openHPSDR components and other SDR projects. He is a co-founder of iQuadLabs, LLC, a supplier of openHPSDR systems and other Software Defined Radio components. He currently works at Zephyr Engineering, Inc, a computer consulting company that specializes in FPGA design and SDR hardware.

Introduction by Steve Bible, N7HPR, TAPR President
Write for QST/QEX by Kai Siwiak KE4PT, QEX Editor"
"“Low Cost, Open Source Spectrum Monitoring” by Michael Ossmann, AD0NR and Dominic Spill
Over the past few months, we and other open source software developers have devised new tools allowing low cost Software Defined Radio platforms to rapidly sweep across radio frequencies in order to monitor the spectrum around us. Our base platform is HackRF One, and we are able to monitor 1 MHz to 6 GHz every 0.75 seconds, allowing us to build up a near real-time picture of radio usage around us. Now we are looking at new ways to visualize, analyze, and interpret this information. This will be a look at open source hardware and software tools that enable us to monitor, analyze, and track down radio signals.

Michael Ossmann is a wireless security researcher who makes hardware for hackers. He founded Great Scott Gadgets in an effort to put exciting, new tools into the hands of innovative people.
Dominic Spill is senior security researcher for Great Scott Gadgets. The US government recently labeled him as ""extraordinary"". This has gone to his head."
""""Advanced SDR Algorithms for Noise Blanking and Noise Reduction"" by Warren Pratt, NR0V
Wideband noise□blankers and LMS noise□reduction algorithms are commonplace in modern SDRs. With today's CPU power, more advanced algorithms offering superior performance can be made available. In this presentation, Dr. Pratt focuses on two such algorithms implemented in 2015 in the WDSP signal processing library for the openHPSDR program. The Spectral Noise Blanker uses linear predictive coding and often removes impulse noise under conditions where wideband blankers are ineffective. Impulses are detected by comparing the observed waveform with a predicted waveform. Impulses are corrected by recreating an estimate of corrupt portions of the original waveform using spectral information. The Spectral Noise Reduction algorithm operates in the frequency domain and, based upon statistical models of speech and noise,

reduces random noise much more effectively than LMS algorithms. The seminal work for this approach was published by Yariv Ephraim and David Malah in 1984. However, the state of the art has advanced substantially over the past thirty years. "
"To provide needed context, there is also a very limited introduction to wideband noise-blankers and LMS noise□reduction algorithms, both of which are also available in WDSP.
Dr Warren C. Pratt, NR0V Dr. Warren Pratt was first licensed in 1965 and was an avid operator and builder of ham radio equipment in his youth. He received a PhD in Electrical Engineering from the University of Illinois in 1977 and then entered the computer hardware and software industry, beginning as an engineer but then spending most of his career in executive management. He held engineering management positions at Hewlett□Packard, served as COO of Silicon Graphics, and as CEO of Alias, a 3D modeling and animation software company. Dr. Pratt is now retired and, in 2011, he joined the efforts of the openHPSDR program. He has written the WDSP digital signal processing library as well as other parts of the software that openHPSDR uses. He continues to enjoy exploring signal processing algorithms and supporting the openHPSDR program directions."

"“Introduction to RTL-SDR: Ultra cheap software defined radio"" by Carl Laufer
A brief overview of the RTL-SDR, an ultra low cost software defined radio that is opening the radio world up to new people. I will cover what the RTL-SDR is, what it can do, and how to set one up. The talk will also show some common applications and projects that it can be used for such as tracking aircraft and boats, receiving weather satellite images, decoding digital radio and more. The talk will also cover using SDRs together with portable computers such as the Raspberry Pi 3 for remote monitoring.
Carl Laufer is an electronics, software and radio enthusiast from New Zealand. After completing his PhD in machine learning he decided to pursue a new interest in the software defined radio world. He now runs the RTL-SDR.com blog and web store, which specializes in news, projects and products related to ultra low cost software defined radio, and in particular the RTL-SDR dongle."

9:15-10:15 Room 2

SHARES - Interoperable HF Emergency Communications
Moderator: Ross Merlin WA2WDT
"SHARES (SHAred RESources) is a Federal government HF radio program for backup communications and interoperability among Federal agencies and Federally-affiliated entities that have a need to send or receive national security or emergency preparedness communications such as state agencies, county emergency management agencies, and critical infrastructure / key resources providers (telecommunications, energy, healthcare, transportation etc.). This session will include both an introduction to SHARES for potential users and an open forum for audience members to discuss program issues with the SHARES Program Office staff.
Bio:
Ross Merlin, WA2WDT, is the SHARES Program Manager. He holds an Amateur

Extra Class license and the General Radiotelephone Operator's License. His on-the-air interests include emergency communications, contesting, and digital modes. He is the author of the National Interoperability Field Operations Guide (NIFOG), which is widely used by public safety and emergency communications professionals across the country."

9:15-10:15 Room 3

Remote Operating
Moderator: Mark Aaker K6UFO
"Remote Access to your Amateur Radio Station
Moderator: Mark Aaker K6UFO, Owner and operator of a remote station.
Speaker: Stu Phillips K6TU, Developer of K6TU.net Propagation service, high-tech entrepreneur and remote operator.
How to implement remote access to your radio station to allow operating while away from home. We'll review a variety of current successful solutions in hardware and software. We'll look at solutions for radio control, antenna switching, AC power, amplifiers and more.
Remote access is a great project for a club or special event station. We'll help you avoid common problems and advance your remote operation."

9:15-10:15 Room 4

Teaching One-Day Tech Classes
Moderator: Dan Romanchik KB6NU
"In this talk, I will cover the following:
• Why teach a one-day class instead of a more traditional, multi-session class?
• Where can you hold the class?
• How can you publicize the class, i.e. put butts in seats?
• Should you charge for the class or offer it for free?
• What is a good text to use for the class?
• What are some good teaching techniques?
• What are some ways to follow up with students?
BIO:
Dan Romanchik, KB6NU, is the author of the "No Nonsense" series of amateur radio license study guides and teaches one-day Tech classes in Ann Arbor, MI. He is also the author of a popular amateur radio blog (KB6NU.Com). His goal in life is to help people have fun with amateur radio."

10:30-11:30 Room 2

MARS
Moderator: Paul English
"Military Auxiliary Radio System (MARS) is a Department of Defense (DOD) sponsored program implemented by the Army and the Air Force which trains FCC licensed amateur radio operators to provide contingency High Frequency (HF) communications support for DOD. MARS volunteers are trained on unique military messaging formats and use Military Standard digital protocols as well as digital encryption on DOD assigned HF frequencies. This forum will feature presentations from both the Army and Air Force MARS program leaders and may include other technical presentations relevant to this unique DOD support mission. This forum is open to all MARS members as well as amateur radio operators who are interested in supporting the MARS mission.
Presentations will be given by Paul English, Army MARS Program Manager, and Dave Stapchuk, Chief Air Force MARS."

10:30-11:30 Room 3

Instructors Forum
Moderator: Carole Perry WB2MGP
"Introduction to the Instructors' Forum : Moderator: Carole Perry WB2MGP
This is a forum for teachers and instructors to share teaching techniques and new ideas for the classroom or for a radio youth group. There will be excellent networking opportunities along with great prizes and cameo appearances for our 30th Instructors' Forum anniversary.
Speakers:
Joe Spier K6WAO ""AMSAT Education Outreach"" Information about ARISS contacts and much more
Dr Tamitha Skov ""Space Weather Woman: Solar Storms and Ham Radio"""

10:30 - 11:30 Room 4

Ham Radio Makers and Hackers
Moderator: Sean Kutzko, KX9X, ARRL Media and Public Relations Manager"
The ham radio community has always been a part of the DIY (do it yourself) movement. This group of panelists will share experiences about how ham radio is finding kinship with the new generation of creators, makers, hackers and innovators. Learn more about ham radio at Maker Faires®, Hackerspaces, and among Arduino users. The panelists will include ARRL author Glen Popiel, KW5GP (High Speed Multimedia for Amateur Radio and Arduino for Ham Radio), ARRL Education & Technology Program Instructor Tommy Gober, N5DUX, and others. This forum is sponsored by ARRL, the national association for Amateur Radio®"

10:45-11:45 Room 1

APRS
Moderator: Bob Bruninga WB4APR
APRS continues to expand into more areas. Bob Bruninga,WB4APR will give an update on the state of APRS and the opportunities for APRS via the several Amateur Satellites now including worldwide coverage via three geostationary birds receivable with a SDR dongle and Raspberry pi kit. Don Arnold, W6GPS will talk about the new Kenwood TH-D74 combined APRS and Dstar radio and Bryan Hoyer will talk about the APRS digipeater to be installed for the Boy Scout Jamboree. Jason Rausch, KE4NYV will update on his APRS projects and as time permits, other APRS topics from the floor are welcome.

11:45-1:15 Room 2

Balloon Sat
Moderator: Bill Brown WB8ELK
"Send a balloon around the World
- Bill Brown WB8ELK
National Solar Eclipse Project, Ham Radio in the shadow of the Moon
- Jack Crabtree W7JLC
Ballooning has it's ups and downs
- Fritz Bock WD9FMB
National Scout Jamboree balloons
- Keith Kaiser WA0TJT"

11:45-12:45 Room 3 Collins Radio

Moderator: David Knepper W3ST

COLLINS RADIO FORUM - Saturday, May 20, 2017, 11:30 - 12:30 pm

Continuing the legacy of preserving Collins amateur radio equipment for tomorrow's ham.

Come join us in learning the critical elements of purchasing, repairing, and maintaining Collins radios for decades to come.

Moderator and speaker: David Knepper, W3ST, founder of the Collins Radio Association

11:45-12:45 Room 4 Kit Building

Moderator: Joe Eisenberg K0NEB Kit Building Editor, CQ Magazine

Come learn hints and tips to help you become a successful kit builder and hear about how some popular kits were created.

Topic: Kit Building tips for success

Speakers:

Wayne Burdick, N6KR Co-Founder, Elecraft

David Cripe, NM0S - Designer, Four State QRP Group Kits

Bill Sloan, NZ9S – DZKit Sienna and Sienna XL"

12:00-1:00 Room 1 DSTAR

Moderator: Robin Cutshaw AA4RC

New location. New room. New radio. New devices. New software. Join Robin Cutshaw (AA4RC), John Hayes(K7VE), and more for updates on D-STAR.

1:00-2:00 Room 3 Antennas - The Last Frontier

Moderator: Frank Beafore WS8B

One area of amateur radio experimentation that remains a frontier yet today, is antenna design. This Forum will be the second version of a Forum presented at Hamvention in 2010. The subject matter will focus on antenna history, basic antenna fundamentals, testing methods and equipment available today and a short discussion on building your own antennas.

1:00-2:15 Room 4 Techniques of Best Operators

Moderator: Mitch Stern W1SJ

Mitch Stern W1SJ

Tony Pazzola W2BEJ

Why is working new stations such a struggle? Why does everyone else work the juicy DX but I can't? Why is it every time I get into a QSO, it ends up getting swallowed up in a blast of QRM?

Now that you've bought up all that great stuff at Hamvention, how do you set it all up? And then, what do you do after you turn it on? How do you go about easily making contacts with others?

Our forum today will certainly help.

A good station certainly helps, but knowing WHAT to do and what NOT to do when

you get on the air is even more important. We'll start off with some of the basics of good operating, learn how to build a great station for those portable operations, dabble with DX and finally learn how to use contests to become better operators. You won't be same operator by the end the day and will be a force to be reckoned with on the bands!You will be treated to on-the-air war stories, equipment ideas and super suggestions. Don't miss it!"

1:15-2:15 Room 1

Homeland Security

Moderator: John Peterson

"The Department of Homeland Security's (DHS) Office of Emergency Communications (OEC) forum is geared toward auxiliary emergency communicators who volunteer to provide backup emergency radio communications support to public safety and emergency response agencies. Typically they are amateur radio communicators from groups such as MARS, ARES, RACES, SATERN and other amateur radio groups. Volunteer emergency communications operators/groups have been providing back-up emergency communications to the public safety community for nearly a century. They are routinely used by event planners and emergency managers at all levels of government. Today nearly all the States/territories have incorporated some level of participation by amateur radio auxiliary communication operators into their communications interoperability plans.

Come talk with the DHS Communications Unit (COMU) subject matter experts and learn about the nationally recognized, NIMS/ICS compliant, AUXCOMM workshop and senior level emergency communications experts who have incorporated this training in recent national level disasters. This forum will also include:

1. John Peterson, OECs team lead for the development of the AUXCOMM course and the AUXCOMM Field Operations Guide
2. Information on OEC's Interoperable Communications Technical Assistance Program
3. How amateurs are incorporated into the National Emergency Communications Plan (NECP)
4. Information on how you can become qualified to teach the OEC AUXCOMM course for your state.
5. The latest changes expected for Communications Unit (COMU) training, which includes Communications Leader (COML), Communications Technician (COMT), Instructor courses for COML/COMT, AUXCOMM, Incident Communications Manager, Incident Tactical Dispatcher and the RADO courses."

1:30-2:30 Room 2

National Weather Service

Moderator: Brandon Peloquin , Warning Coordination Meteorologist, National Weather Service Wilmington OH

"Working With Amateur Radio ... To Save Lives During Severe Weather

NOAA's Weather–Ready Nation initiative is about building community resilience in the face of increasing vulnerability to extreme weather and water events. To achieve this, the National Weather Service (NWS) strives to develop and strengthen partnerships with those who contribute to this initiative. This presentation will describe the partnership between Amateur Radio operators and the NWS and how they work together to help communities be better prepared for severe weather. "

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| 2:15-3:30 | Room 3 | Fox Hunt / ARDF<br>Moderator: Dick Arnett WB4SUV<br>"Foxhunting (Transmitter Hunting) & Amateur Radio Transmitter Hunting (ARDF)<br>Moderator: Dick Arnett, WB4SUV,"<br>Speakers Bob Frey, WA6EZV and Brian DeYoung , K4BRI<br>Topics include demonstration and discussions on a variety of equipment used for VHF Mobile, on foot and ARDF style transmitter hunts. On Saturday we will be having an on foot foxhunt with multiple transmitters in a local park. " |
| 2:30-5:00 | Room 1 | Antenna Forum<br>Moderator: Tim Duffy K3LR<br>"“Enhanced Stacked Yagi Arrays with Parasitic Elements and BOLPA Log Periodic Development”<br>Justin Johnson, G0KSC<br>“Space Weather and Amateur Radio: Science, Forecasting and Effects”<br>Dr. Tamitha Skov<br>“Using High Performance Multiplexer Technology to Improve Your HF Station Capability”<br>Andrei Fedorishev, RA6LBS<br>“Building and Installing the 3 Element 80 Meter Yagi at W0AIH”<br>Paul Bittner, W0AIH" |
| 2:30-3:30 | Room 4 | Young Ladies Radio League<br>Moderator: Anne Manna WB1ARU<br>Young Ladies' Radio League is sponsoring this Forum for all YLs, licensed or not. Every woman ham is a "Young Lady" no matter what her age. There will be a fascinating presentation on YL history by Kay Eyman, WA0WOF. Other topics will include: what YLs are doing and have done in our shared hobby, reports on new nets and awards, and ways to join in the fun. Bring your questions to the YL Forum and find out more about women in Amateur Radio and hear from Young Ladies of all ages! OMs are also welcome to earn awards and are appreciated for their support. Moderator: Bobbie Donahue. |
| 2:45-3:45 | Room 2 | Ham Radio and the Law: Antenna Permits and Problems<br>Moderator: Fred Hopengarten, Esq., K1VR, Author “Antenna Zoning for the Radio Amateur”<br>A discussion by Amateur Radio attorneys on legal issues of interest to hams: avoiding restrictive covenants, presenting your case for a tower permit, and information on recent court rulings on PRB-1. Updates on proposed legislation to protect hams living under homeowner association restrictions. Sponsored by ARRL, the national association for Amateur Radio. Speakers include Bob Famiglio, Esq., K3RF, ARRL Volunteer Counsel and Vice Director, and others. |
| 3:45-5:00 | Room 3 | Software Defined Radio<br>Moderator: Stephan Hicks<br>Multiple speakers will discuss new advances in the world of Software Defined Radio and will form a panel at the end to discuss questions from the audience. Moderated by Steve Hicks, N5AC, VP Engineering FlexRadio Systems. |

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| 3:45-5:00 | Room 4 | Digital Mobile Radio<br>Moderator: John Burningham W2XAB<br>"Digital Mobile Radio (DMR) 2017<br>By John Burningham, W2XAB<br>The popularity of amateur DMR networks and ham innovation has brought new hot spot technology and the growth of the networks including DMR-MARC, DMRX, Brandmeister, DMR Plus, and regional networks. Learn about the broad overview of what is going on with DMR for both the new and experienced user." |
| 4:00-5:00 | Room 2 | County Hunting<br>Moderator: Tim Eklin W8JJ<br>"Dr. Timothy Eklin, W8JJ - Forum Moderator<br>Tim, W8JJ holds USA-CA #1203 and will serve as moderator for this forum and provide a basic overview of county hunting for attendees. Tim is currently the Great Lakes District Director for the Mobile Amateur Radio Awards Club (MARAC).<br>Timothy Eklin, W8JJ – Speaker # 1<br>Tim, W8JJ holds USA-CA #1203 and will discuss thirteen rule changes that took effect in February 2017 in order to provide further incentives for both mobile and portable stations to activate counties. Tim will present a summary of the impact these recent changes will have on various awards offered by MARAC.<br>Robert Gedemer, KA9JAC – Speaker #2<br>Bob, KA9JAC holds USA-CA #1079 and will discuss operating for the dual purpose of activating and working counties while participating in Parks on the Air (POTA) events. Bob is an avid county hunter and he has worked all 3,077 U.S. counties three times. He also activated many counties while operating as a mobile station." |

# Saturday, May 20th

| | | |
|---|---|---|
| 9:15-10:15 | Room 1 | Drake Equipment<br>Moderator: Mark Gilger WB0IQK<br>"Presenter: Ron Baker – WB4HFN<br>Presenter: Jeff Covelli – WA8SAJ<br>Presenter: Evan Rolek – K9SQG<br>AGENDA:<br>- User Survey - Mark Gilger - WB0IQK<br>- Back to Basic Trouble Shooting - Ron Baker, WB4HFN & Mark Gilger, WB0IQK<br>- Common & Easy Fixes For the Drake 4&7 Line Radios - Ron Baker, WB4HFN<br>- Question & Answer Session - Jeff Covelli, WA8SAJ, Ron Baker, WB4HFN & Evan Rolek, K9SQG" |

9:15- 12:00 Room 2 Youth Forum

Moderator: Carole Perry WB2MGP

Come join the fun and experience the pride by attending our 30th Hamvention Youth Forum. Bring kids with you to inspire them to join the fun of being a youngster in ham radio. This is where young people will get to meet with other youngsters. Stay tuned for special announcements about fabulous opportunities for young adults in ham radio and at Hamvention. There will be lots of prizes for the speakers, the kids in the audience, and the supportive adults in the audience. You must be present to win! Come and show your support for our talented young hams!

"Lucas Schroeder W6LDS age 15 “The SharkRF openSPOT”
Carissa Ferguson KJ4EZA age 17 “Robotics and Ham Radio”
Dakota Krzysik KE8CVK age 17 ""Lowell High School Youth Amateur Radio Club Through the Years!""
Grace Lea KM4TXT age 9 “Solar Power Mania”
Jerome Dinakar KE0BBQ age 16 “Tribute to Ellie Van Winkle”
Evan Markowitz KD2IZW age 18 “Balloon Based Repeater for Emergency Applications”
Ruth Willet KM4LAO age 18 “Plugging into Your Valuable Club Resources”
Chris Brault KD8YVJ age 14 “Getting Started with SDR”
Dhruv Rebba KC9ZJX age 13 “Community Services with Ham Radio Communications”"

9:15-10:15 Room 3 SATERN

Moderator: Bill Feist WB8BZH

SATERN In The 21st Century: The National SATERN Committee will discuss the new Strategic Plan for SATERN approved by The Salvation Army in 2016. This will include a discussion of the goals SATERN is setting for itself over the next several years and the results of the SWOT (Strengths, Weaknesses, Opportunities, Threats) Analysis upon which those goals are based.

9:15-10:30 Room 4 HamSCI, the Ham Radio Science Citizen Investigation

Moderator: Ward Silver N0AX

"A group of panelists will share information about professional research programs supported by radio amateurs. This forum is sponsored by ARRL, the national association for Amateur Radio®. Program:

1. “What is HamSCI?” Nathaniel Frissell, W2NAF
2. ""Introduction to Space Weather and Radio Propagation” by Carl Luetzelschwab, K9LA
3. “Upper Level Lows and Six Meter 50 Mhz Sporadic E” Joe Dzekevich, K1YOW, presented by Phil Erickson, W1PJE
4. “Ionospheric Impacts of the 2017 Total Solar Eclipse” Magda Moses, KM4EGE
5. “VLF/LF and the 2017 Total Solar Eclipse” Bill Liles, NQ6Z
6. “The Solar Eclipse QSO Party: Ionospheric Sounding Using Ham Radio QSOs” Nathaniel Frissell, W2NAF"

10:30-11:30 Room 1 Hamnation

Moderator: Bob Heil K9EID

The hosts and many of the volunteers will be in attendance in a Town Hall type event. Ham Nation will celebrate the 300th show and the 5th year on Leo Laporte's TWIT network. The audience has grown to thens of thousands each Wednesday night and one of the top five shows on the network. Led by Bob Heil he will be joined by Gordon West, George Thomas, Don Wilbanks, Valerie Hotzfeld and Dale Puckett. Many of the net controls operators and our show notes custodian, Dan Vanevenhoven will be in attendance. The forum will open with the Ham Nation theme song written and performed by Joe Walsh, WB6ACU.

10:30-11:30 Room 3 RTTY Contesting

Moderator: Ed Muns W9YK

"Advantages of SDR in RTTY Contesting, Stu Philips K6TU
- Station simplification (eliminating CAT, sound card cables, etc.)
- Built-in SO2R support
- S&P considerations when using a waterfall
- SDR performance advantages
- Using RTTY Skimmer with SDR I/Q

General Q&A on RTTY Contesting, Dennis Egan W1UE
Mark Aaker K6UFO
Hank Garretson W6SX
Stu Philips K6TU"

10:45-12:15 Room 4 AMSAT

Moderator: Joseph Spier, K6WAO

""AMSAT Status Report"" Barry Baines, WD4ASW, AMSAT-NA President, will highlight recent activities within AMSAT and discuss some of our challenges, accomplishments, projects, and any late breaking news.

""AMSAT Engineering Program"" Jerry Buxton, N0JY, AMSAT-NA Vice President Engineering , will talk about the exciting new engineering developments that the ASCENT Program is working on as well as the latest updates on the Fox-1 project CubeSats.

""AMSAT Satellite Operations"" Drew Glasbrenner, KO4MA, AMSAT-NA Vice President Operations , will survey the current operational amateur satellites, as well as those planned for launch in the next year.
""NxtGen Crystal Radio" Joe Spier, K6WAO, AMSAT-NA Vice President Educational Relations , will discuss the development of the NxtGen Crystal Radio, an educational ground station for classrooms to be used to teach Science, Technology, Engineering, and Math (STEM).
""ARISS Report 2017"" Frank Bauer, KA3HDO, AMSAT-NA Vice President for Human Spaceflight, will discuss the 20th Anniversary of ARISS, ARISS engineering developments & operation on the International Space Station. "

11:45-12:45 Room 1

ARRL Member Forum
Moderator: Dale Williams, WA8EFK, ARRL Director – Great Lakes Division
ARRL is the national association for Amateur Radio in the US. ARRL members help advance the art, science, and enjoyment of Amateur Radio. ARRL publishes the popular monthly journal QST, coordinates an extensive all-volunteer field organization, and serves members as Amateur Radio's representative voice in regulatory and legislative matters. Hear from local and national ARRL officials on key areas of membership interest. Find out how ARRL supports dozens of ways to get involved, get active, and get on the air. Members and prospective members are all welcome!

11:45-12:45 Room 3

Quarter Century Wireless Association
Moderator: Ken Oelke VE6AFO
"Speakers: Larry McCalvy, WA9JMO - Vice President
Carole Perry, WB2MGP - Chair, Youth Activities Committee
Our theme "Looking Back to See Ahead"
OUR VISION
Celebrating Amateur Radio operators achieving 25 years in Amateur Radio and developing resources to assist young Amateur Radio operators in furthering their education through the QCWA Scholarship Program.
Plan to attend this exciting forum to learn more about QCWA, learn how QCWA began 70 years ago, and participate in a lively 'Question & Answer" session. This being QCWA's 70th anniversary, we are celebrating with a QCWA 70th Anniversary Charity Cruise leaving on October 18, 2017. Here you can learn more about the cruise. This is your forum, so be prepared to become engaged in QCWA's future!"

12:15-1:15 Room 2

Fast Scan ATV
Moderator: Art Towslee WA8RMC
"The schedule is as follows:

| Time | Presenter | Call | Topics |
|---|---|---|---|
| 12:15 -12:20 | Art Towslee | WA8RMC | Welcome statement and general comments. |
| 12:20 -12:30 | Gordon West | WB6NOA | Lively greeting then focus on MAGAZINES FOR SPREADING THE ATV ACTIVITIES. I will also offer to be the the conduit for CQ Magazine and 6 minute features from our members on HAM NATION . |
| 12:30 -12:50 | Mike Collis | WA6SVT | Introduction to ATV. The ""Basics of analog and digital ATV"" will be covered. What you can do with ATV and how to get your own ATV station on the air. |
| 12:50 - 1:10 | Art Towslee | WA8RMC | DATV DVB-S encoding and how it may be better than DVB-T. |
| 1:10 - 1:15 | Art Towslee | WA8RMC | Wrap up and questions." |

"Mike Collis WA6SVT - Transmitter supervisor for KCBS TV in LA. ATV operation since 1976. Engineer for Amateur Television Network with linked ATV repeater system covering three states. Publisher of Amateur Television Quarterly Magazine.

Gordon West WB6NOA - Gordo celebrates 55 years in ham radio , taking part in ATV for the Rose Parade , along with ATV helicopter portable for his City. emergency preparedness comms .
Art Towslee WA8RMC - Hamvention ATV Forum moderator for 11 years. Retired electrical engineer. Owns DATV-Express LLC which he and 3 other partners designed and produce the DATV-Express digital DATV transmitter board for sale to Hams. He also authors articles in ATVQ Magazine.

12:30-1:30 Room 4

ARRL Collegiate Amateur Radio Initiative
Moderator: Andy Milluzzi KK4LWR
A growing number of campus radio clubs and student radio amateurs have begun to share ideas and suggestions on the ARRL Collegiate Amateur Radio Initiative (CARI) Facebook page, www.facebook.com/groups/ARRLCARI. They're (re) inspiring ham radio among our nation's colleges and universities, meeting other students, and developing career connections. Hear from students, alumni, and faculty. The ARRL Collegiate Amateur Radio Initiative is sponsored in part by the W1YSM Snyder Family Collegiate Amateur Radio Endowment.

12:45:2:30 Room 1

Contesting
Moderators: Doug Grant K1DG & Ward Silver N0AX
""""WRTC2018 Planning Update"" - Christian Janssen, DL1MGB
""The New CQWW Contest Directorate"" - Doug Zwiebel, KR2Q; Bob Naumann, W5OV; Scott Robbins, W4PA
""Single-op Contesting in the 21st Century"" - Tom Georgens, W2SC/8P5A
""25 Years of Multi Multi Contesting at K3LR"" - Tim Duffy, K3LR"

1:00-2:00 Room 3

Kenwood Equipment
Moderator: Jan Servaites N8CBX
"Presenter: Mark Gilger – WB0IQK
Presenter: Terry Wagoner - K9TW
Presenter: Jeff Covelli – WA8SAJ
AGENDA:
–Help with Parts, Documentation & Service - Mark Gilger, WB0IQK
–Hybrid Net Repeat Questions - Mark Gilger, WB0IQK
–Parts & Service - Mark Gilger, WB0IQK
–Basic Trouble shooting - Mark Gilger, WB0IQK, Terry Wagoner, K9TW
–The Early 500 series (TS500/510/511) - Jan Servaites - N8CBX
–Questions and Answers - Jeff Covelli, WA8SAJ, Jan Servaites - N8CBX"

1:30-2:30 Room 2

MESH
Moderator: Bill Curtice W8APB, Miami Valley Mesh Alliance (MVMA)
"Hams around the world are now building radio-based high speed digital mesh networks across their cities using microwave technologies and low cost commercial hardware adapted for Amateur Radio use. Mesh provides flexible, high speed wireless communications that can be adapted to varying terrain types, can be rapidly deployed, are fun to build and use, and are particularly well suited to the EmComm needs of many served agencies.

The MVMA is delighted to host Andre Hansen, K6AH, of the Amateur Radio Emergency Data Network (AREDN) Project, speaking on how to build an effective AuxComm, high-speed data network based on Ubiquiti airMAX products and the AREDN Project's firmware.

Andre will describe a 3-tiered architecture---using illustrations of actual installations---where AREDN implementers in San Diego, Riverside, San Bernardino, Orange, and Los Angeles Counties have combined to cover over 16,000 square miles with a potential of supporting Incident Command System (Memorandum Of Understanding) relationships with EOCs, ARES, RACES, and Red Cross serving over 18 million people.

He will also discuss critical network services that must be established in order to make that network useful to disaster Incident Commanders and responders.

Additional information may be found at the Mesh Networks Booth #1001, at www.aredn.org, and at www.miamivalleymesh.org

1:45-3:00 Room 4

Public Service Communications Panel Discussion
Moderator: Mike Corey, KI1U, ARRL Emergency Preparedness Manager
"A chance to hear from representatives from Amateur Radio's largest organizations active during times of disaster and emergency. Sponsored by ARRL, the national association for Amateur Radio®. Speakers:

1. Rob Macedo, KD1CY, VOIP WX Net and VOIP Hurricane Net
2. Julio Ripoll, WD4R, Amateur Radio at the National Hurricane Center, WX4NHC
3. Paul English, WD8DBY, US Army MARS
4. David Stapchuk, KD9DXM, US Air Force MARS
5. Bobby Graves, KB5HAV, Hurricane Watch Net
6. Bill Feist, WB8BZH, SATERN
7. Ross Merlin, WA2WDT, Department of Homeland Security, SHAred RESources (SHARES)"

2:15-3:30 Room 3

System Fusion
Moderator: Mark Thompson WB9QZB
"The System Fusion Forum will include a presentation & discussion about Yaesu's System Fusion Voice & Data technology designed exclusively for Amateur Radio.

The forum will review the Yaesu System Fusion 2m/70cm FM/C4FM Digital Voice Repeaters and Mobile & Portable radios incorporating both Analog FM & C4FM Digital Voice and the WIRES-X (Wide-coverage Internet Repeater Enhancement System) VoIP internet communications linking system.

Hams experienced in using System Fusion technology and deploying repeaters & WIRES-X will be available to share their experiences and answer your questions about System Fusion. Everyone who is using or interested in System Fusion is encouraged to attend & participate. "

2:45-3:15 Room 1

Kids Training for Ham Radio
Moderator: Gordon West WB6NOA
"Gordo invites kids and teachers to attend this action-packed forum , where the KIDS will likely steal the spotlight on ham radio training ! Learn what it takes to interact with school students , and to get them excited about wireless fun with live demos - that the kids will do ! Learn from our students on what it will take to turn them into active ham radio operators !
Everyone will receive the Instructor Academy diploma ! "

2:45-3:45 Room 2

HamRadio 360 Workbench Podcast - Building Portable HF Gear.
Moderator: George Zafiropoulos KJ6VU
It's never been a better time to be a ham especially if you like to design and build equipment and go out to operate portable. Jeremy, KF7IJZ, and George, KJ6VU, hosts of The Workbench podcast, talk about the growing interest in building and use of portable HF radio gear. In this session we talk about setting up your workbench and build projects including an HF antenna analyzer, low voltage disconnect, portable HF antennas, radio and battery selection. For more info go to www.hamradio360.com

3:15-5:00 Room 4

VHF - UHF
Moderator: Tony Emanuele K8ZR
Microwaves are Easy. Kent Britain WA5VJB Modern VHF transverter considerations. Sam Jewell G4DDK Hardware Sequencing: What they didn't t tell me. Marshall Williams K5QE Construction of portable VHF beams. Zack Widup W9SZ WSJT-X MSK144 meteor scatter and VHF Contesting. Tony Emanuele K8ZR

3:30-5:00 Room 1 DX Forum

Moderator: Jay Slough K4ZLE

"The DX forum is once again sponsored by the SouthWest Ohio DX Association and Yaesu, in coordination with the Hamvention organization. At the conclusion of the forum we will have a drawing for an FT-1200, generously donated by Yaesu. All proceeds from this drawing are used to sponsor future DXpeditions. You do not have to be present to win. SWODXA has been able to make significant donations to many DXpeditions thanks to your participation in this drawing and profits from the DX Dinner, which is also sponsored by SWODXA.

Because of a restructuring of forum times, we will not have the quantity of presentations this year as we have had in the past. However, we do have two presenters that should be well known to those who have been in the game for any length of time.

Randy Rowe, N0TG, will tell us about the CY9C operation from last August. He and Murray, WA4DAN, were co-leaders of this trip which has been dubbed ""The Best Little DXpedition in North America"". Randy lives in TX, so you can guess the subtle allusion to a theatrical production with a similar name! Randy and Murray are veterans of several expeditions, most notably are trips to Sable, CY0, and Navassa in days of yore. St Paul Is. Is an interesting entity and you will certainly be informed and entertained as he reveals ""the rest of the story"".

Our second speaker is Bob Eshleman, W4DR, (ex W4QCW). He will tell us about the first activation of Navassa Is., back in 1954 as KC4AB. Bob's achievements are legendary, within our hobby and outside the hobby. He has too many awards and DX activations to enumerate here, but suffice it to say his position in the CQ Magazine DX Hall of Fame, speaks for itself. Randy, N0TG, has operated from Navassa in the intervening years , but Bob and two other teen age friends beat the big boys out to get there first. We are sure you will enjoy hearing how this happened and you will get a driver's seat feel for how different DXpeditioning was in the early 50s than it is now. Can you imagine the owner of Bacardi Rum providing his yacht for such an activity, especially to 3 teenagers?"

3:45-5:00 Room 3 Digital Modes Now And For The Future

Moderator: Mel Whitten K0PFX

"Introduction to low cost HF monitoring with RTL-SDR

Speaker – Carl Laufer, RTL-SDR.com

Abstract – This talk will be a brief introduction to using the RTL-SDR and other cheap SDRs for HF reception and monitoring. The RTL-SDR is an ultralow cost software defined radio that is opening the radio world up to new people. I will cover what an RTL-SDR is, what it can do, and what options you have to enable HF reception with one. I'll then give some examples of previous work that shows people successfully receiving digital modes with the RTL-SDR.

New Developments in Digital Amateur Radio from the DV4 Team
Speaker – Ulrich Altvater, AG0X
DV4 is a digital voice technology for the VHF/UHF bands with network and RF connectivity for both mobile and fixed station. Uli will describe the Yeasu System Fusion (YSF) reflectors and MyRoom features include messaging, Private/Public rooms, and transcoding. The DV4mobile LTE network will also be described. On the hardware/device side, Uli will provide updates on the DV4mini improvements, DV4home software, and the new DV4mobile's current status, beta test procedure and pricing.

What's New with FreeDV?
Speaker – Mel Whitten, K0PFX
A quick update on the improvements in FreeDV and CODEC 2 including new modes recently released. FreeDV is an open source digital voice mode addressing the propagation and interference challenges that HF radio present. A free GUI application for the Linux, Windows and Apple OSX, FreeDV allows any SSB radio to be used for digital voice in half the bandwidth of SSB."

4:00-5:00 Room 2 "Dealing with Impossible Hams in Your Club or Team."
Moderator: Curt Bartholomew N3GQ
FEDERAL AGENT
Emergency & Continuity Manager
Public Safety and Homeland Security Bureau
Federal Communications Commission

Be the Ham your country needs you to be.

# Sunday May 21st

| Time | Room | Forum |
|---|---|---|
| 9:15-10:15 | Room 1 | West Mountain Radio<br>Moderator: Sholto Fisher K7TMG<br>"Getting started with JT65/JT9 on HF<br>Description: Get up to speed with the JT HF modes and a few tips for seasoned operators!<br>Presenter: Sholto Fisher, West Mountain Radio<br>Bio: Sholto has been interested in digital modes since the 1980s. First licensed in 1995 as G7TMG he holds FCC amateur extra class license K7TMG and the GMDSS full license. For the last 6 years he has been working for West Mountain Radio in a technical support role." |
| 9:15-10:15 | Room 2 | Learning Discovery and Fun<br>Moderator: Tommy Gober N5DUX<br>The next generation of ham radio operators are today's students. As an instructor for ARRL's Teachers Institute on Wireless Technology, Tommy Gober, N5DUX, introduces teachers to a variety of tools and curriculum to take back to their classrooms: intro to basic electronics, the science of radio, space technology and satellite communications, as well as weather science, introduction to micro-controllers and basic robotics. Tommy will share strategies and experiences to help motivate students to learn, and to inspire interest in STEM (science, technology, engineering, and mathematics) fields. This forum is sponsored by ARRL, the national association for Amateur Radio® |
| 9:15-10:15 | Room 3 | Receiving Antennas<br>Moderator: Eric Nichols KL7AJ<br>""""Receiving antennas are DIFFERENT! Almost every amateur radio station can benefit from having a separate receiving antenna. Eric Nichols, KL7AJ will discuss the profound differences between the requirements of transmitting and receiving antennas, and how to optimize antennas for reception. As the overall noise floor in the HF band steadily increases, the deployment of well designed, low-noise receiving antennas will be increasingly important. Exciting new technologies make small, effective receiving antennas possible and practical.""<br><br>""Eric P. Nichols, KL7AJ is a two-time recipient of the William Orr, W6SAI Technical Writing Award, conferred by the ARRL. He is currently technical editor for the W5YI group, working closely with Gordon West. He has written dozens of articles for QST, and is the author of The Opus of Amateur Radio Knowledge and Lore, Radio Science for the Radio Amateur, Propagation and Radio Science, and, Digital Storage Oscilloscopes for Ham Radio. He is currently writing a book on active and passive receiving antennas for ARRL, the topic of this talk." |

9:15-10:15 Room 4

Bicycle Mobile Hams of America (The 27th Annual BMHA forum at Hamvention)
Moderator: Mike Nickolaus NF0N
"Bicycle Mobile Hams of America got its start in1989 when a QST article by Hartley Alley, NA0A asked hams who operate their radios while bicycle-mobile to get together and form a group. BMHA hosts a website along with the BMHA Yahoo Groups forum.

Mike Nickolaus: NF0N : Review of 2017 BMHA Bicycle Trail Ride
Keith Miller: NE9KM
Keith will present the packing, planning, connections, experiences on the trail while riding and working National Parks on the Air. He will have the bike and gear that he used on both the Great Divide and GAP/C&O rides. While he changed the plan he presented last year and did not operate while bike mobile he used the radio for NPOTA during the evening while in camp. This presentation will help others prepare for a several week self supported bike trip.

We plan to have bicycle mobile displays and demonstrations of each will be conducted."

10:30-11:30 Room 1

Robotics in the Classroom
Moderator: Ray Golembiewski KE8EIX
"Speaker: Dave Dunn
The FIRST Robotics Competition (FRC) is a unique varsity sport of the mind designed to help high-school-aged students experience science and technology in a competition that feels more like the NCAA Final Four than a science fair. The competition challenges young people to work with mentors in just six weeks to design and build a 120lb robot to play a pre-defined game. This year's robots voyage back to the age of Jules Vern and H.G. Wells to power airships and at the end the robots climb on board by ascending a 5 foot rope. (They won't actually take flight, but it's the thought that counts!) Sounds a little crazy, right? You've really got to see it to believe it. The competition is designed by world-famous inventor Dean Kamen, MIT professor emeritus Dr. Woodie Flowers, and a committee of creatively minded innovators. Come listen to the BONDS robotics team describe the program and show off this year's robot ""Skyfall""

10:30-11:30 Room 2

ARRL National Parks On The Air Recap
Moderators: Norm Fusaro, W3IZ, ARRL Radiosport Manager and Sean Kutzko, KX9X, ARRL Media and Public Relations Manager
ARRL National Parks on the Air (NPOTA) commemorated the centennial of the US National Park Service in 2016. Activators and Chasers completed over one million radio contacts. Through NPOTA contacts, photographs, and stories...we were whisked away to mountain tops, seasides, monuments, and to some of the most treasured sites of our nation. If you were part of NPOTA in 2016, we want you to join us for this celebration and recap of one of the most popular on-air events of all time. This forum is sponsored by ARRL, the national association for Amateur Radio®.

10:30-11:30 Room 3

Setting Up Disaster Communications In Asia
Moderator: S. Ram Mohan VU2MYH
"Special Achievement: S. Ram Mohan, VU2MYH
S. Ram Mohan is the Executive Vice Chairman & Director National Institute of Amateur Radio, Hyderabad, India. He was Licensed as Radio Amateur Grade-I since 1988, conducted number of experiments on H.F. and V.H.F. communication equipment and carried out propagation tests, organized training programs, DX-pedition's, workshops, General Amateur Radio activities including public service Communication.

As Chief Investigator for Dept. of Information Technology, Govt. of India funded Pilot Projects, he has successfully implemented the programs on Digital connectivity to Urban/Rural/Remote areas through amateur radio, Study on Propagation Conditions in Coastal Areas and Advanced Digital Amateur Radio Communication Network.

He led team members for many emergency communications operations. Examples are: Nepal Earthquake 2015, Cyclone Hud 2014, Uttarakhand Floods 2013, West Bengal 'Ayla' Cyclone 2009, Indian Ocean Tsunami 2004, Gujarat earthquake 2001, and the Orissa Super Cyclone 1999. "

10:30-11:30 Room 4

Tower Safety
Moderator: Mark Allen W6PC
"Mark Allen, W6PC, will once again provide the popular presentation on tower safety, tips and techniques on planning, installation and maintenance of your tower, and answer questions about towers and poles typically used by amateur stations. The presentation will be conducted on PowerPoint and will review, good practices, accidents and regulations which may affect amateurs who have their own tower installations.

Mr. Allen, Vice President, of ROHN Tower, has more than 45 years in the professional communications industry and has been involved in all aspects of towers during his career. This presentation always receives excellent reviews and is very informative. Bring your tower questions and plan to attend."

# Forums Overall Schedule

## Friday

| | Room 1 | Room 2 | Room 3 | Room 4 |
|---|---|---|---|---|
| 9:15 am | TAPR Digital Forum<br>Scott Cowling<br>0915-1030 | SHARES HF Em Comm<br>Ross Merlin<br>0915-1015 | Remote Operating<br>Mark Aaker<br>0915-1015 | Teaching One-Day Tech Classes<br>0915-1015 |
| 9:30 am | | | | |
| 9:45 am | | | | |
| 10:00 am | | | | |
| 10:15 am | | | | |
| 10:30 am | | | | Makers & Hackers<br>Sean Kutzko<br>1030-1130 |
| 10:45 am | APRS<br>Bob Bruninga<br>1045-1145 | MARS<br>Paul English<br>1030-1130 | Instructor's Forum<br>Carole Perry<br>1030-1130 | |
| 11:00 am | | | | |
| 11:15 am | | | | |
| 11:30 am | | | | |
| 11:45 am | | | Collins Radio<br>David Knepper<br>1145-1245 | Kit Building<br>Joe Eisenberg<br>1145-1245 |
| 12:00 pm | D-Star<br>Robin Cutshaw<br>1200-1300 | Balloon Sat<br>Bill Brown<br>1145-1315 | | |
| 12:15 pm | | | | |
| 12:30 pm | | | | |
| 12:45 pm | | | | |
| 1:00 pm | | | | Techniques of Best Operators<br>Mitch Stern<br>1300-1415 |
| 1:15 pm | Homeland Security<br>John Peterson<br>1315-1415 | | Antennas- The Last Frontier<br>Frank Beafore<br>1300-1400 | |
| 1:30 pm | | National Weather Service<br>Brandon Peloquin<br>1330-1430 | | |
| 1:45 pm | | | | |
| 2:00 pm | | | | |
| 2:15 pm | | | | |
| 2:30 pm | | | | Young Ladies Radio League<br>Anne Manna<br>1430-1530 |
| 2:45 pm | | Ham Radio & The Law<br>Fred Hopengarten<br>1445-1545 | Fox Hunt / ARDF<br>Dick Arnett<br>1415-1530 | |
| 3:00 pm | | | | |
| 3:15 pm | Antenna Forum<br>Tim Duffy<br>1430-1700 | | | |
| 3:30 pm | | | | |
| 3:45 pm | | | Software Defined Radio<br>Stephan Hicks<br>1545-1700 | Digital Mobile Radio<br>John Burningham<br>1545-1700 |
| 4:00 pm | | County Hunting<br>Tim Eklin<br>1600-1700 | | |
| 4:15 pm | | | | |
| 4:30 pm | | | | |
| 4:45 pm | | | | |
| 5:00 pm | | | | |

## Saturday

| | Room 1 | Room 2 | Room 3 | Room 4 |
|---|---|---|---|---|
| 9:15 am | Drake Equipment<br>Mark Gilger<br>0915-1015 | | SATERN<br>Bill Feist<br>0915-1015 | HamSCI<br>Ward Silver<br>0915-1030 |
| 9:30 am | | | | |
| 9:45 am | | Youth Forum<br>Carole Perry<br>0915-1200 | | |
| 10:00 am | | | | |
| 10:15 am | | | | |
| 10:30 am | Ham Nation<br>Bob Heil<br>1030-1130 | | RTTY Contesting<br>Ed Muns<br>1030-1130 | |
| 10:45 am | | | | |
| 11:00 am | | | | |
| 11:15 am | | | | AMSAT<br>Joseph Spier<br>1045-1215 |
| 11:30 am | | | | |
| 11:45 am | ARRL<br>Dale Williams<br>1145-1245 | | Quarter Century Wireless<br>Ken Oelke<br>1145-1245 | |
| 12:00 pm | | | | |
| 12:15 pm | | Fast Scan ATV<br>Art Townslee<br>1215-1315 | | ARRL Collegiate<br>Andy Milluzzi<br>1230-1330 |
| 12:30 pm | | | | |
| 12:45 pm | | | | |
| 1:00 pm | | | Kenwood Equipment<br>Jan Servaites<br>1300-1400 | |
| 1:15 pm | Contesting<br>Doug Grant<br>1245-1430 | MESH<br>Bill Curtice<br>1330-1430 | | |
| 1:30 pm | | | | |
| 1:45 pm | | | | |
| 2:00 pm | | | | |
| 2:15 pm | | | System Fusion<br>Mark Thompson<br>1415-1530 | Public Service Panel<br>Mike Corey<br>1345-1600 |
| 2:30 pm | | | | |
| 2:45 pm | Kids Training<br>Gordon West<br>1430-1515 | Ham Radio 360<br>George Zafiropoulos<br>1445-1545 | | |
| 3:00 pm | | | | |
| 3:15 pm | | | | VHF-UHF<br>Tony Emanuele<br>1515-1700 |
| 3:30 pm | | | | |
| 3:45 pm | DX Forum<br>Jay Slough<br>1530-1700 | | Digital Modes<br>Mel Whitten<br>1545-1700 | |
| 4:00 pm | | Dealing with Impossible Hams<br>Curt Bartholomew<br>1600-1700 | | |
| 4:15 pm | | | | |
| 4:30 pm | | | | |
| 4:45 pm | | | | |
| 5:00 pm | | | | |

## Sunday

| | Room 1 | Room 2 | Room 3 | Room 4 |
|---|---|---|---|---|
| 9:15 am | West Mountain Radio<br>0915-1015 | Learning Discovery & Fun<br>0915-1015 | Receiving Antennas<br>0915-1015 | Bicycle Mobile<br>0915-1115 |
| 9:30 am | | | | |
| 9:45 am | | | | |
| 10:00 am | | | | |
| 10:15 am | | | | |
| 10:30 am | Robotics in the Classroom<br>1030-1130 | ARRL National Parks on the air recap<br>1030-1130 | Setting Up Disaster Comm in Asia<br>1030-1130 | Tower Safety<br>1030-1130 |
| 10:45 am | | | | |
| 11:00 am | | | | |
| 11:15 am | | | | |
| 11:30 am | | | | |

# Award Winners

We are pleased to announce the following winners of the Hamvention Awards 2017. These prestigious awards are presented every year to honor radio amateurs who have made major contributions to the art and science of our avocation. The winners are:

## Club of the year: Clark County Amateur Radio Club – W7AIA

The Clark County Amateur Radio Club (CCARC) was established in 1930 and serves Southwest Washington and Northwest Oregon. They have been an ARRL Affiliated Club since 1932 and are an ARRL Special Service Club.

The club is active in community service. Using the club call sign W7AIA, members participated in eight Public Service activities in 2016 and tallied over 1500 hours of volunteer service.CCARC is actively growing a youth program. Activities include supporting the Boy Scouts of America and sponsoring a Jamboree on the Air (JOTA) station in 2016. The club is also working to establish a Communications Explorer Post in Vancouver as well as licensing teens within a local trade school.

In 2016, the CCARC licensed 95 new hams. 'Ham Basics' classes are held periodically for new licensees and the club offers a dynamic Elmer program. The club hosts monthly interest meetings such as the 'Digital Group' which is an open forum to discover and explore the many types of digital modes. This meeting typically draws hams from other areas.

The CCARC created the pioneering EYEWARN® program (www.eyewarn.net) to provide visual situation reports to Emergency Managers. This program encourages all hams in the county to "report what they see, where they are" in a disaster.

# Award Winners

## Special Achievement: S. Ram Mohan, VU2MYH

Ram Mohan is the Executive Vice Chairman & Director National Institute of Amateur Radio, Hyderabad, India. He was Licensed as Radio Amateur Grade-I since 1988, conducted number of experiments on H.F. and V.H.F. communication equipment and carried out propagation tests, organized training programs, DX-pedition's, workshops, General Amateur Radio activities including public service Communication.

As Chief Investigator for Dept. of Information Technology, Govt. of India funded Pilot Projects, he has successfully implemented the programs on Digital connectivity to Urban/Rural/Remote areas through amateur radio, Study on Propagation Conditions in Coastal Areas and Advanced Digital Amateur Radio Communication Network.

He led team members for many emergency communications operations. Examples are: Nepal Earthquake 2015, Cyclone Hud 2014, Uttarakhand Floods 2013, West Bengal 'Ayla' Cyclone 2009, Indian Ocean Tsunami 2004, Gujarat earthquake 2001, and the Orissa Super Cyclone 1999.

## Technical Achievement: Rob Brownstein, K6RB

Rob has been licensed and active for 59 years. He started as a novice, at age 11, in 1958. Like many young novices, Rob could hardly wait to upgrade to his general ticket and get on phone. But, he soon discovered that he enjoyed operating CW much more. So, he put the microphone in a drawer and never looked back. In January 2010, Rob was one of about a dozen hams, on several continents, who founded the CW Operators Club (CWops). In 2012, Rob was elected president of CWops and served two consecutive terms. During that period, he encouraged and participated in all aspects of the club – rag chewing, contesting, and mentoring. The mentoring part – CW Academy – started in earnest in 2012. Since then, it has mentored more than 800 amateurs in its beginner, intermediate and advanced CW courses.

## Amateur of the year: Frank Bauer, KA3HDO

Frank serves as the Amateur Radio on the International Space Station (ARISS) international chairman. In the mid-1990s, Bauer proposed a GPS reception experiment on the AMSAT Phase 3D satellite (AO-40). The experiment was to measure the signal strength of the GPS satellite constellation while Phase 3D was in high-Earth orbit (HEO). The AO-40 experiment subsequently has been cited often in aerospace literature, as it remained the most comprehensive above-the-constellation data source for nearly a decade and led to changes in the system's specifications and applications. The results of the AO-40 experiment jump started a game-changing transformation in navigation at HEO/GEO altitudes, enabling new and exciting missions in these orbits.Bauer holds bachelor's and master's degrees in aeronautics and astronautics from Purdue University. His career in aerospace spans 4 decades within NASA and in private industry Bauer has been licensed since 1974. In 1983, in preparation for the space mission of Owen Garriott, W5LFL, he was responsible for setting up and operating the worldwide retransmission of Space Shuttle air-to-ground communications from Goddard Amateur Radio Club station WA3NAN. This initiative provided a critical conduit of information to hams attempting to contact astronaut-hams in the pre-Internet era.

# Previous Award Winners (continued)

## Amateur of the Year

1955 ..William C. Jenney, W8FYW
Benjamin S. Zieg, W9EHU, K4OQK
1956..Edmund C. Ryan, W8LRR
1957..Ralph Crammer, W8VHO
I958 ..Rev. C. Lynn White, K4CC
1959..Harlow Lucas, W8QQ
1960..Paul Woffe, W8IVE
1961..Ed Bonnet, W8OVG
1962..Dana Cartwright, W8UPB
1963..Chester Funk, K8EUF, K7ZKL
1964 ..H. Ruble, W8PTF
1965..Carl B. Snyder, W8ARW
1966..Robert K Caskey, W9DNQ
1967..Jack Gray, W8JDV
1968..Elmer Schubert, W8ALW
1969..Wayne Walters, W9DOG
1970..Kay Anderson, W8DUV
1971..Al Michel, W8WC
1972 ..Don C. Miller, W9NTP
1973..Ray E. Myers, W6MLZ
1974..Barry Goldwater, K7UGA
1975 ..Richard A. Daniels, WA4DGU
1976..Joseph M. Hertzberg, N3EA
1977..Rafael M. Estevez, WA4ZZG
1978..Frank Schwab, W8OK
1979..George G. Batterson, W2GB
1980..Wayne Overbeck, N6NB
1981..Eric C. Shalkhauser, W9CI
1982..Robert G. Heil, Jr., K9EID
1983..Katashi Nose, KH6IJ
1984..Dave L. Bell, W6AQ
1985..John J. Willig, W8ACE
1986..Roy Neal, K6DUE
1987..Carole Perry, WB2MGP
1988..Bill Bennett, W7PHO
1989..Bill Pasternak, WA6ITF
1990..Stephen Mendelsohn, WA2DHF
1991..John B. Johnston, W3BE
1992..Richard Baldwin, WIRU
1993..Harry Dannals, W2HD
1994..Perry Williams, WlUED
1995..Rosalie White, WA1STO
1996..William A. Tynan, W3XO
1997..Leo I. Myerson, WØGFQ
1998..Andrew J. Feldman, WB2FXN
1999..Kenneth M. Miller, K6IR
2000..Marttie Laine, OH2BH
2001..George Jacobs, W3ASK
2002..Alanson “Hap” Holly, KC9RP
2003..Larry “Tree” Tyree, N6TR
2004..David Kopacz, KY1V
2005..Alan S. Kaul, W6RCL
2006..Gordon West, WB6NOA
2007..Jim Haynie, W5JBP
2008..Ward Silver, NØAX
2009..Wade D. Hampton, K4ITL
2010..Jim Stafford, W4QO
2011..Shirley Roberts, N8LX
2012..S. Suri, VU2MY
2013..None Given
2014..Dr. Larry E Prince, W4RA
2015..Tim Duffy, K3LR
2016..Joe Taylor, K1JT

# Previous Award Winners (continued)

## SPECIAL ACHIEVEMENT AWARD

1977.....South American Moonbounce (EME)
Expedition Team of the Mt. Airy VHF
Radio Club Inc., Philadelphia, PA
Elliott Weisman, K3JJZ
Anthony Sousa, W3HMU
S. William Olsan, W3HQT
Walter Boldman, K3BPP
Daniel Mitten, WA3NFU
Socrates Martinez, WB3AFY
Bohnar Aguilar, WB3AOP
1978.....Ronald Moorefield, W8ILC
1979.....Edward Tilton, W1HDQ
1980.....Joseph Merdler N6AHU
198I .....Bill Pasternak, WA6ITF,
Bill Orenstein, KH6IAF
1982.....Bruce Humphrys, KØHR
1983.....Lenore Jensen, W6NAZ
1984.....Ethel Smith, K4LMB
1985.....Judith Frye, KG8P
1986.....Rev. Michael Mullen, C.M., WB2GQW
1987.....Arthur Gentry, W6MEP
1988.....Fred Hammond, VE3HC
1989.....Phil Karn, KA9Q
1990.....Paul Thomson, KCØVG
1991.....Nate Brightman, K6ØSC
1992.....Ned Raub, W1RAN
1993.....Robert Adams, WA9ZMO
1994.....Russ Kroeker, N7HGE
1995.....Ed Briner, WA3TVG
1996.....John Kraus, W8JK
1997.....Joseph J. Fairclough, WB2JKJ
1998.....John B. Bellows, Jr., KØQB
1999.....Paul D. Lieb, KH6HME
2000.....A. Prose Walker, W4BW
2001.....Frank Bauer, KA3HDO
2002.....Dr. Owen Garriott, W5LFL
2003.....Jonathan Taylor, K1RFD
2004.....George S. Wilson III, W4OYI
2005.....D. Bharathi, VU2RBI
2006.....Riley Hollingsworth, K4ZDH
2007.....Ed Hare, W1RFI
2008.....Emery McClendon, KB9IBW
2009.....Richard Garriott, W5KWQ
2010.....Richard “Dick” Ross
2011.....Fred L. Lloyd, AA7BQ
2012.....Steve Betza, WZ2V
2013.....George a. Thomas, Jr, W5JDX
2014.....David Sumner, K1ZZ
2015.....Thomas C. Medlin, W5KUB
2016.....Stan Horzepa, WA1LOU

## TECHNICAL EXCELLENCE AWARD

1984....Lyle Johnson, WA7GXD
1985 ...Richard Whiting, WØTN
1986....M. E (Doug) DeMaw, W1FB
1987....Henry (Hank) Oredson, WØRLI
1988....Lew McCoy, W1ICP
1989....Byron Goodman, W1DX
1990....Bob McGwier, N4HY
1991....Lou McFadin, W5DID
1992....Gerald Cromer, K4NHN
1993....Dick Jansson, WD4FAB
1994....Dick Newell, AK1A
1995....Philip Ferrell, K7PF
1996....William Orr, W6SAI
1997....Al Ward, W5LUA
1998....Robert E. Bruninga, WB4APR
1999....Alfonso R. Torres, KP4AQI
2000....Dr. H. Paul Shuch, N6TX
2001....Peter Martinez, G3PLX
2002....Allen Waller, K3TKJ
2003....Steve Dimse, K4HG
2004....Barry Sanderson, KB9VAK
2005....Dr. Jerry Sevick, W2FMI
2006....Richard Illman, AH6EZ
2007....David Cameron, VE7LTD
2008....Thomas C. McDermott, N5EG
2009....Copthorne Macdonald, VY2CM
2010....Simon Brown, HB9DRV
2011....Roy W. Lewallen, W7EL
2012....Joel R. Hallas, W1ZR
2013....David Rowe, VK5DGR
2013....David M. Whitten, II, KD0EAG
2014....David Freese Jr, W1HKJ
2015....Reverend George Dobbs, G3RJV
2016....John S. Burningham, D.I.T, W2XAB

# 2017 ARRL/DARA Scholarships

## Aaron R. Alexander, KI4OTH

Aaron R. Alexander, KI4OTH, lives in Lakeland, Tennessee. He began attending the University of Memphis in 2016, and is studying electrical and computer engineering.

Besides Amateur Radio, Aaron is passionate about music. Throughout high school, he played French horn in the Bolton Band, as well as participating in the WTSBOA All-West Tennessee Honor Band and Tennessee All-State Band. He also tutored French horn players at the middle and elementary school level, and sang in multiple choirs at his church.

As an honor roll student in high school, Aaron received the highest AP BC Calculus Average Award during his senior year, and volunteered for many community services through the National Honor Society, including peer tutoring, the Bolton Mid-South Food Bank Pantry, and the Make-A-Wish Foundation.

Aaron was first licensed in 2006, and currently holds a General Class license. He has been an ARRL member since 2013. Aaron was elected as the Assistant Director for Youth for ARRL's Delta Division (2003 to present), and received the Delta Amateur Radio Club's Young Ham of the Year Award in 2006. Other ham activities include helping to lead various Amateur Radio Boy Scout Merit Badge classes for troops in the Memphis area, and leading an emergency preparedness practice net once a month for the Memphis Delta Amateur Radio Club.

Aaron chose a dual major in electrical and computer engineering because he wanted to "have a purposeful career in which I can help and inspire others with technology." He says, "I have been interested in electronics and computers most of my life, and being involved in Amateur Radio has definitely encouraged me in these interests.

## Emma C. Bonham, KK4YFQ

Emma C. Bonham, KK4YFQ, is from Nokomis, Florida. While completing her senior year at Venice High School, she also began classes at the State College of Florida. She is active in her high school's orchestra, receiving the most valuable player award in 2014.

Emma was first licensed in 2014, and holds a Technician license. She has used ham radio to volunteer in numerous community events.

Fascinated by space travel and exploration, Emma plans to continue classes at Purdue College, focusing on Robotics Engineering. Her goal is to someday "work with NASA or a collaborating company to create robotic equipment such as the Mars Curiosity Rover," or other type of space machinery. Emma says, perhaps if I am lucky enough, and with a lot of hard work and dedication, I will eventually get to work on the space station as an engineer."

## Aaron B.Carman, W5AXE

Aaron B.Carman, W5AXE, lives in Wink, Texas, and will graduate from Wink High School this year. He is Class President, President of the National Honor Society, and Treasurer of the Student Council. His activities in high school are diverse, including sports, theater, debate and community volunteerism.

Aaron founded the Wink Amateur Radio Project, and has participated in School Club Roundup and high altitude balloon flights, with an attached repeater. He is planning to study electrical engineering at Texas Tech University. "I choose this career because it involves two things that I love: working with people, and working with electronics, specifically Amateur Radio," Aaron says. He hopes to "revolutionize our daily lives by applying a knowledge of electricity and RF signals to almost every aspect we see day to day."

Aaron was licensed in 2015, and currently holds a General Class license.

# 2017 ARRL/DARA Scholarships

## David J. Hashe, KG5EGK

David J. Hashe, KG5EGK, is from Plano, Texas, and is in his senior year at the Texas Academy of Mathematics and Science. His impressive list of student activities includes participation in the USA Computing and Biology Olympiads Gold Division, FIRST Robotics World Championships, where he also serves as Robot Design Captain, a volunteer referee, and programming lead, the Texas State Science Fair, and the Texas Forensic Association State Debate Tournament, among others. He has received multiple awards including Intel Science Talent Search, and the National Speech and Debate Association Degree of Excellence.

David achieved his Eagle Scout Award in 2014, and serves as a Junior Assistant Scoutmaster and an Order of the Arrow representative. He has volunteered as a software developer for Spacemacs Emacs and GNU Guix, and was chapter president of Junior State of America.

David intends to study computer science as the University of Texas at Austin. He says, "my career goal is to become a professor of computer science and research ways to efficiently translate emerging algorithms in machine learning, computer vision, and data mining to computer hardware. Being a professor will be exciting for me because I never want to stop learning, and because I enjoy teaching others."

## Randal J. Michnovicz, KF5JIT

Randal J. Michnovicz, KF5JIT, is from Houston, Texas. After graduating from the Texas Academy of Mathematics and Science, he is now attending the University of Texas, where he is on both the President and Dean's List.

In high school, Randal participated in the band and orchestra, and volunteered for multiple organizations, including the Denton Community Food Center and the Houston Food Bank. He was also active with his church. He achieved Eagle Scout, and served as Patrol Leader and Scribe for his Boy Scout troop.

Randal was also president of his school's Amateur Radio club, and has volunteered as a ham at various community events. He helped the club set up software for CW and RTTY, and has encouraged many of his peers to get licensed and get on the air.

At the University of Texas, Randal intends to major in computer science with the hope of building a career in robotics. He says, "I would like to be a roboticist because it would let me combine my interests in computer science and engineering, helping to improve people's lives."

## Alexander A. Williams, KF7TWR

Alexander A. Williams, KF7TWR, lives in Coeur D'Alene, Idaho, and attends the Coeur D'Alene Charter Academy. He was the University of Montana Model U.N. Distinguished Delegate in 2015 and 2016, and awarded the U.N. Distinguished Paper in 2016.

He is a member of his city's local Amateur Radio club, and his ham activities include building his own radio and antenna, and volunteering at the local Boy Scouts Jamboree-on-the-Air. When he turns 18, Alexander hopes to become a Volunteer Examiner.

Upon graduation, Alexander plans to attend the University of Idaho, and to study Math and Physics. He says, "ever since I received my license, I have been passionate about math and science. I enjoy critical thinking, analysis, and problem solving, and plan a career as either an engineer or actuary."

### Future Scholarships

The ARRL Foundation will be announcing the recipients of DARA's Scholarships for this year after May 15th. To apply for future DARA Scholarships, each applicant must submit a transcript from their high school or college to complete their application. Applications must be submitted via the ARRL website and transcripts should be sent via e-mail. Applications without transcripts will not be considered. Questions concerning the application process should be directed to foundation@arrl.org.

*Applications must be submitted no earlier than October 1st and no later than February 1st along with a current academic transcript.*

# Dayton Hamvention Past General Chairs

| | | |
|---|---|---|
| 1952-I955 | John J. Willig, W8ACE | * |
| 1956-1957 | Rudy Plak, W8ZOF (W6TIK) | * |
| 1958 | Frank J. Schwab, W8YCP (W80K) | * |
| 1959-1960 | Ed F. Bonnet, W80VG | * |
| 1961-1962 | Joseph H. McNutt, W8GFN | * |
| 1963-1964 | Sheemon A. Wolfe, W8WJL | * |
| 1965-1966 | Edgar A. Smith, W8RKL | * |
| 1967 | Robert Wilcox, K8EJI | * |
| 1968-1969 | Jack Ohmart, K8CUA | * |
| 1970-1971 | Kenneth E. Mills, W8RLY | |
| 1972 | George L. Shearer, WA8IHC (KE8WJ) | * |
| 1973-1976 | Ted L. Suarez, K8BSC | * |
| 1977 | Wallace M. Wright, WA8ZCA (AD8N) | * |
| 1978 | John Basilotto, W5GI (WA8ZAN) | * |
| 1979 | Sandford H.Cohen, W8JEZ | * |
| 1980-1981 | Noel K. McKeown, WB8QQC | |
| 1982-1983 | Harold A. Judd, K4GZL | * |
| 1984-1985 | Jack Mitchell, AA8Q | |
| 1986-1987 | Jim Simpson, WB8QZZ | |
| 1988-1989 | Bill McNabb, WD8SAY | |
| 1990 | Ed Hillman, N8ALN | |
| 1991-1992 | Ross Brown, WA8DQH | |
| 1993-1994 | Dave Grubb, KC8CF | |
| 1995-1996 | Ken Allen, KB8KE | |
| 1997-1999 | Dick Miller, N8CBU | * |
| 2000-2002 | Jim Graver, KB8PSO | |
| 2003 | Pat Neff, N8IGS | |
| 2004- 2005 | Gary Des Combes, N8EMO | |
| 2006-2007 | Jim Nies, WX8F | |
| 2008-2009 | Carl Rose, K8CPR | |
| 2010 | Lee Boeckerman, W8LFB | |
| 2011-2012 | Michael Kalter, W8CI | |
| 2013-2014 | Charles Kaiser, KD8JZR | |
| 2015-2016 | Jim Tiderman, N8IDS | |

*** Silent Key**

# Past DARA Presidents

| | | |
|---|---|---|
| 1926 | C.A. Petry | 8AWN |
| 1927 | C.A. Petry | 8AWN |
| 1928 | Lou Driggs | W8HEQ |
| 1929 | Ray Stotts | |
| 1930 | Art John | W8DMI |
| 1931 | Fred Rawson | W8KKH |
| 1932 | | |
| 1933 | Fred Allen | W8GER /W8FU |
| 1934 | | |
| 1935 | Dan C. McCoy | W8CI/W8DG |
| 1936 | | |
| 1937 | | |
| 1938 | Emil Henrich | W8OVL |
| 1939 | | |
| 1940 | Russ Gardner | W8TPC |
| 1941 | | |
| 1942 | Cheever Ely | W8LJ |
| 1943 | Cheever Ely | W8LJ |
| 1944 | Cheever Ely | W8LJ |
| 1945 | Hyde E. Ruble | W8PTF |
| 1946 | Hyde E. Ruble | W8PTF |
| 1947 | Russ Hardy | W8AQT |
| 1948 | Clem Wolford | W8ENH |
| 1949 | John Willig | W8ACE |
| 1950 | Clem Wolford | W8ENH |
| 1951 | Frank Schwab | W8YCP/W8OK |
| 1952 | Frank Schwab | W8YCP/W8OK |
| 1953 | Hyde E. Ruble | W8PTF |
| 1954 | Rudy Plak | W8ZOF |
| 1955 | Allan D. Gunston | W8GQ |
| 1956 | Andrew B. Henderson | W8WYL |
| 1957 | Robert G. Siff | W8QDI |
| 1958 | Ed F. Bonnet | W8OVG |
| 1959 | Joseph H. McNutt | W8GFN |
| 1960 | Walter G. Burdine | W8ZCV |
| 1961 | Robert F. Zimmerman | W8DPW/W8ZM |
| 1962 | Hyde E. Ruble | W8PTF |
| 1963 | Richard D. McFadden | K8ERE |
| 1964 | Ted Suarez | K8BSC |
| 1965 | Robert E. Wilcox | K8EJI |
| 1966 | Jim Dakin | K8BPC |
| 1967 | Ken Mills | W8RLY |
| 1968 | George Shearer | WA8IHC/KE8WJ |
| 1969 | George Shearer | WA8IHC/ KE8WJ |
| 1970 | Owen Vance | WA8PHW |
| 1971 | Jules Wittebort | W8SE |
| 1972 | Budd Chaney | WA8UUX |
| 1973 | Wesley Duckwitz | W8IPT |
| 1974 | Ken Mills | W8RLY |
| 1975 | Robert O. Wilson | W8JRN |
| 1976 | Robert O. Wilson | W8JRN |
| 1977 | Melvin L. Levy | WA8YKV |
| 1978 | Melvin L. Levy | WA8YKV |
| 1979 | William G. Ingling | W8SVI |
| 1980 | William G. Ingling | W8SVI |
| 1981 | Victor M. Stauder | N8FPF/WA2KOO |
| 1982 | Victor M. Stauder | N8FPF/WA2KOO |
| 1983 | Thomas Holmes | N8ZM |
| 1984 | Victor M. Stauder | N8FPF/WA2KOO |
| 1985 | Edgar “Red” Smith | W8RKL |
| 1986 | Ray Smith | KR8B |
| 1987 | Ray Smith | KR8B |
| 1988 | Al Torres | KP4AQI |
| 1989 | Thomas Holmes | N8ZM |
| 1990 | Thomas Holmes | N8ZM |
| 1991 | Ron L. Moorefield | W8ILC |
| 1992 | Thomas Holmes | N8ZM |
| 1993 | Victor M. Stauder | N8FPF/WA2KOO |
| 1994 | Thomas Holmes | N8ZM |
| 1995 | Dave Coons | WT8W |
| 1996 | Dave Coons | WT8W |
| 1997 | Michelle Ervin | KA9FUL |
| 1998 | Gary DesCombes | N8EMO |
| 1999 | Gary DesCombes | N8EMO |
| 2000 | John Phillips | N8ZGT |
| 2001 | Reuben Meeks | W8GUC |
| 2002 | Reuben Meeks | W8GUC |
| 2003 | Mike Buehler | N8XGA |
| 2004 | Mike Buehler | N8XGA |
| 2005 | Michael Kalter | W8CI |
| 2006 | Michael Kalter | W8CI |
| 2007 | Jim Simpson | WB8QZZ |
| 2008 | Jim Simpson | WB8QZZ |
| 2009 | Steve Coy | K8UD |
| 2010 | Jim Simpson | WB8QZZ |
| 2011 | Steve Coy | K8UD |
| 2012 | Don Dubon | N6JRL |
| 2013 | Don Dubon | N6JRL |
| 2014 | Reuben Meeks | W8GUC |
| 2015 | Don Dubon | N6JRL |
| 2016 | Andrew Anderson | N8VES |

# Dayton Amateur Radio Association

## DARA Board

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Jim Tiderman, N8IDS
Vice President

Nancy Krodel, KC8RMT
Secretary

Michael Kalter, W8CI
Treasurer

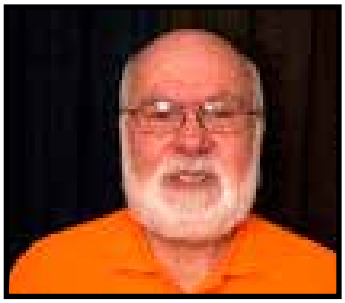
Jeff Devoe, K8JTD
Junior Trustee

Jim Simpson, WB8QZZ
Senior Trustee

Ron Cramer, KD8ENJ
Hamvention General Chair

## Planning Council

Rob Lunsford, KB8UEY



Charles Kaiser, KD8JZR

Carl Rose, K8CPR

# While you are in town be sure to stop by the newly re-modeled club house with a 4000 square foot addition

## DARA Club House

**Open House Hours:**

Friday 6:00 p.m.-8:00 p.m.

Saturday 6:00 p.m.-8:00 p.m.

## Directions to DARA's Club House

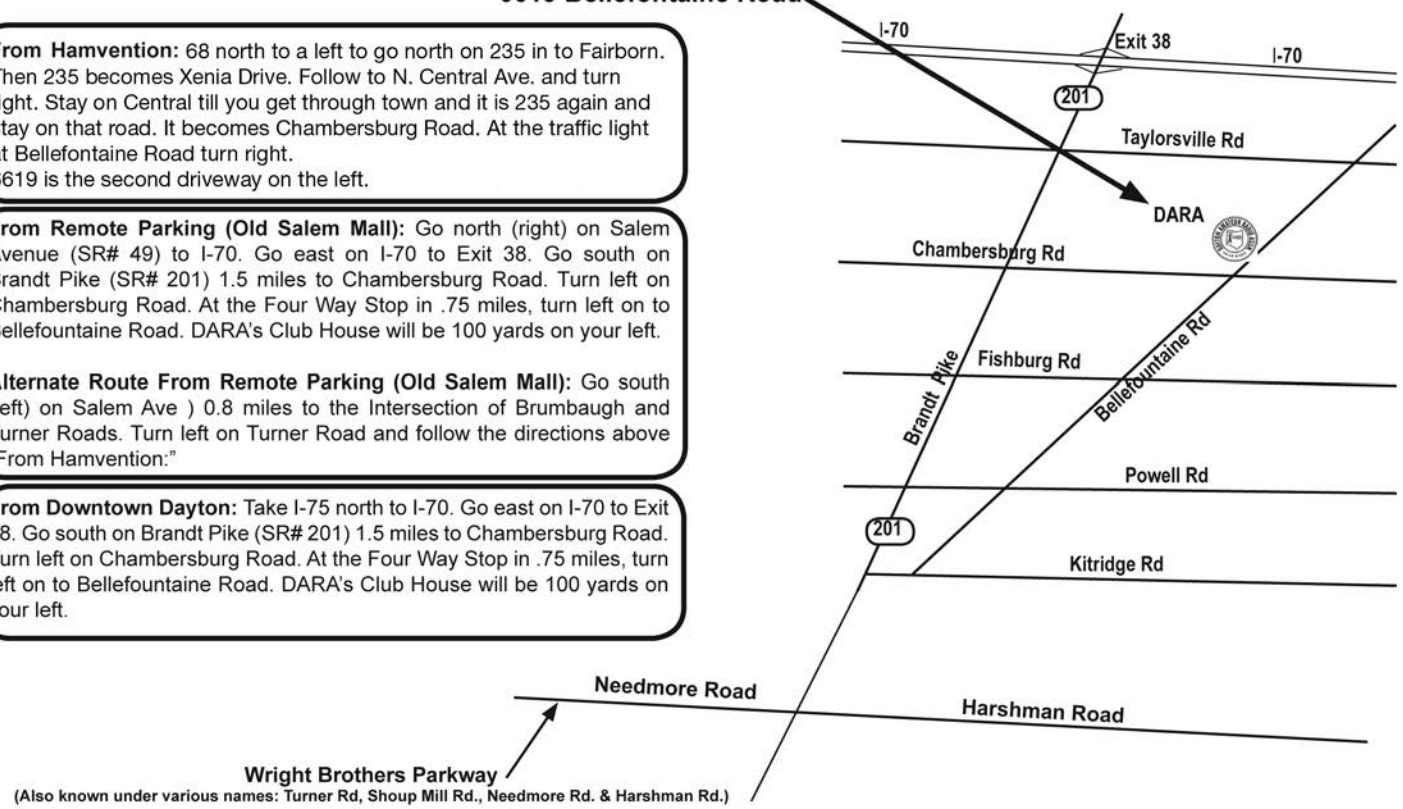
6619 Bellefontaine Road

**From Hamvention:** 68 north to a left to go north on 235 in to Fairborn. Then 235 becomes Xenia Drive. Follow to N. Central Ave. and turn right. Stay on Central till you get through town and it is 235 again and stay on that road. It becomes Chambersburg Road. At the traffic light at Bellefontaine Road turn right.
6619 is the second driveway on the left.

**From Remote Parking (Old Salem Mall):** Go north (right) on Salem Avenue (SR# 49) to I-70. Go east on I-70 to Exit 38. Go south on Brandt Pike (SR# 201) 1.5 miles to Chambersburg Road. Turn left on Chambersburg Road. At the Four Way Stop in .75 miles, turn left on to Bellefountaine Road. DARA's Club House will be 100 yards on your left.

**Alternate Route From Remote Parking (Old Salem Mall):** Go south (left) on Salem Ave ) 0.8 miles to the Intersection of Brumbaugh and Turner Roads. Turn left on Turner Road and follow the directions above "From Hamvention:"

**From Downtown Dayton:** Take I-75 north to I-70. Go east on I-70 to Exit 38. Go south on Brandt Pike (SR# 201) 1.5 miles to Chambersburg Road. Turn left on Chambersburg Road. At the Four Way Stop in .75 miles, turn left on to Bellefountaine Road. DARA's Club House will be 100 yards on your left.



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## TH-D74A 144/220/430 MHz Tribander

Presenting the TH-D74A for the ultimate in APRS and D-STAR performance. KENWOOD has already garnered an enviable reputation with the TH-D72A handheld APRS amateur radio transceiver. And now it has raised the bar even further with the new TH-D74A, adding support for D-STAR, the digital voice & data protocol developed by the JARL, and enabling simultaneous APRS and D-STAR operation – an industry first.

- APRS compliance using packet communication to exchange real-time GPS position information and messages
- Compliant with digital/voice mode D-STAR digital amateur radio networks
- Built-in high performance GPS unit with Auto Clock Setting
- Wide-band and multi-mode reception
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- IF Filtering for improved SSB/CW/AM reception
- High performance DSP-based audio processing & voice recording
- Compliant with Bluetooth, microSD & Micro-USB standards
- External Decode function (PC Decode 12kHz IF Output, BW:15 kHz)
- Free software for Memory and Frequency Control Program
- Data Import / Export (Digital Repeater List, Call sign, Memory Channel)
- Four TX Power selections (5/2/0.5/0.05 W)
- Dust and Water resistant IP54/55 standards

APRS (The Automatic Packet Reporting System) is a registered American trademark of WB4APR (Mr. Bob Bruninga).
D-Star is a digital radio protocol developed by JARL (Japan Amateur Radio League).

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