



Bulletin 3

Updated: 1 Oct 2024

**12th Int'l Amateur Radio Union (IARU) Region 2 /
23rd American Radio Relay League (ARRL) USA**

Radio Orienteering Championship
Michigan - 5-13 October 2024



(Photo: Waterloo State Recreation Area venue near Grass Lake, MI)

Changes from Previous Bulletin:

Added/modified time schedule details, map details, transmitter assignments, stage details, changed Practice 2 venue location, added Peach Mountain Radio Observatory trail outing, updated transmitter info, some parking locations were corrected.

Invite

The [Southern Michigan Orienteering Club \(SMOC\)](#) and [Chelsea Amateur Radio Club \(CARC\)](#) extend a warm welcome to the **2024 International Amateur Radio Union (IARU) Region 2 and American Radio Relay League (ARRL) USA Radio Orienteering Championship** near Chelsea, Michigan 5-13 October, 2024.

What is Radio Orienteering?



(Photo: Elizabeth Afonkin at the 2022 World ARDF Championships in Bulgaria. IARU)

Also known as “Amateur Radio Direction Finding” (ARDF), [the sport of radio orienteering](#) combines the activities of orienteering (navigation racing) with radio transmitter hunting to present competitors with an exciting physical and mental challenge! Competitors hunt down multiple transmitters hidden in the woods by using a radio receiver and map. The sport has direct application to search & rescue, animal tracking, spectrum management, law enforcement, military and multiple other important activities. Watch this video for a brief intro to radio orienteering / ARDF: <https://www.youtube.com/watch?v=I9H8irEMnf4>

From the Event Director

Whether you're a beginner, expert, or somewhere in between, I welcome you to what will surely be an exciting, memorable, and enjoyable week of radio orienteering in this scenic and tranquil region of Michigan I am so fortunate to call home. No matter where you're at in your journey in radio and navigation sports there will be events for you! Beginner help, training and practice events, challenging competition for all skill levels, an amateur radio guest speaker presentation, and even several enjoyable outings and socials.



My first contact with radio transmitter hunting was as a teenage Civil Air Patrol (CAP) cadet learning how to track down aircraft Emergency Locating Transmitter (ELT) distress beacons. My instructor stressed the importance of locating the signal quickly, efficiently, and smartly, because in search & rescue every additional second could be the difference between life and death for those we're trying to save. I immediately fell in love with the thrill and sense of civic duty that came from this skill set. That's one reason why I am so excited to debut a search & rescue exhibition contest during the champs week!

The courses were all designed to be worthy of their international and national championship designation. Elite racers will be challenged in all aspects of the sport including the technical homing, navigation, and physical components. Fall color changes will be starting, but there will still be enough vegetation to keep forest visibility difficult. Your terrain and spatial awareness will reward or punish, and route choices can make or break your results. Three of our venues served as prior national orienteering championships or Team USA trials venues. And if that's not enough, many of the world's best radio orienteers from three continents are planning to attend, so elite competition will be formidable!

I invite you to also take some time during the week to enjoy Michigan, our host region, and the fall splendor. Don't miss out on our planned socials, dinners, and outings during the championship week! It's a great opportunity for us all to get together again, enjoy the friendships in our hobby and sport communities, and have some fun and memorable moments. Looking forward to seeing you in October!

Joseph Burkhead, KE8MKR

Joe is a 2018 World ARDF Championship bronze medalist, 2019 144 MHz Classic M40 national champion, and has competed as an athlete for the USA Radio Orienteering Team. He also competed as part of the Armed Forces USA Orienteering Team at the 2013 World Military Orienteering Championships in Eksjo, Sweden. He is a member and frequent Event Director of the Southern Michigan Orienteering Club and has designed local, regional and national orienteering races. He has served on the ARRL's Radio Orienteering Committee since 2019. Joe also is a professional pilot, Air Force Reserve officer, and is in his 30th year of volunteer service in Civil Air Patrol. But his greatest joy is his wife and two children who are often found at orienteering and radio orienteering events with him!

Race Formats

All IARU / ARRL race formats offered include **Sprint (3.5 MHz)**, **Foxoring (3.5 MHz)**, **80m Classic (3.5 MHz)**, and **2m Classic (144 MHz)**. Also planned is an exhibition **search & rescue distress beacon (121.775 MHz)** contest to find a practice distress (ELT) beacon.

Competition Categories

Competitors registered for the following age and gender categories:

Women (W)	Men (M)	Ages
	M12	12 and younger
W14	M14	14 and younger
W19	M19	19 and younger
	M21	Elite / any age
W35		35 and older
W45	M50	45/50 and older
W55	M60	55/60 and older
W65	M70	65/70 and older
W75		75 and older
Search & Rescue Team of 3 or more		N/A

** For the Search & Rescue Exhibition there will only be one Team class of entry with no age categories involved and at least three persons (2 adults minimum) must comprise a team.*

Beginner Instruction

If you or anyone you are bringing with you to the event are new to radio orienteering or need help with a refresher, rest assured there will be people to help beginners at practice and race events to help you. Don't be shy in asking for help!

Awards

Medals will be awarded to the top-3 finishers in each IARU Region 2 / ARRL USA competition class. The top finishing team in the search & rescue exhibition will receive an award. A "Paul Bunyan Trophy" will also be awarded to the top-scoring male and female athletes who successfully complete all championship races, the search & rescue exhibition race, volunteer, and demonstrate positive sportsmanship.



International Results and National Ranking Event



Championship results will be sanctioned as official IARU Region 2 results as well as USA ARRL radio orienteering national ranking calculation. 2024 USA Championship results may factor into selection criteria for Team USA selection depending on timing of the 2025 Team Trials. International competition results and national ranking event results are a consideration for team selection and athletes will likely benefit from the experience and preparation for team trials that comes from competing in this international championship. Training camp, practice & exhibition results will not be included in official results or national ranking calculations.

Training Camp

World-class radio orienteers Charles and Nadia Scharlau (NZ0I & KO4ADV) will provide a quality training camp to all, beginner through experts, who wish to improve their skills the weekend prior to competition week, 5-6 Oct 2024, from 9am until about 4 or 5 pm. The training camp will take place at [Silver Lake in Pinckney State Recreation Area](#) which closely resembles the terrain, vegetation, and navigation challenges of the competition venues.



Training Camp Location

Large parking lot at Pinckney Recreation Area, 8555 Silver Hill Rd, Pinckney, MI 48169 (Google Map: 42.417022, -83.963857), near Crooked Lake Trail trailhead. Look for the orange-and-white orienteering flag. Park hours are 8 AM to 10 PM.

Training Camp Park Access

The park requires Recreation Passports (one per vehicle), which will be available for purchase at the park office at Pinckney Recreation Area.

<https://www.michigan.gov/dnr/buy-and-apply/rec-pp>

Training Camp Maps

Maps will be provided. All training camp maps will be 1:10000 scale except for the Sprint map, which will be 1:5000 scale. If you have a map holder, you'll want to bring it. Map holders are not mandatory, but they simplify recording bearings, prevent lost maps, and can be readily constructed.

Training Camp Receivers

Training Camp attendees will need an 80m receiver on Saturday, and Sunday afternoon. You will need a 2m receiver on Sunday morning for 2m Classic training. Don't forget your headphones and compass! Let us know if you need to borrow either item.

Training Camp Schedule

5 Oct - Saturday

9:00 am: 80m Beginner Training (Please be on time!)

Short course of continuously transmitting foxes for beginners. Learn how to operate an 80m DF receiver to locate foxes and the finish beacon. Learn how Classic radio orienteering competitions are conducted.

10:30 am: 80m Classic Training

Short course of cycling (one minute on / four minutes off) regulation Classic 80m foxes. Beginners will be introduced to maps, compasses, and strategies for locating regulation 80m Classic foxes. Experts can use the course for training exercises suggested by Nadia.

Lunch: Bring own lunch/snacks. No restaurants or vending available in or near the park.

2:00 pm: Foxoring Training

Short course of regulation Foxoring foxes (continuously transmitting). Beginners will be introduced to strategies for locating Foxoring foxes. Experts can use the course for training exercises suggested by Nadia.

6 Oct - Sunday

9:00 am: 2m Classic Training (Please be on time!)

Short course of cycling (one minute on / four minutes off) regulation Classic 2m foxes. Beginners will be introduced to strategies for locating regulation 2m Classic foxes. Experts can use the course for training exercises suggested by Nadia.

Lunch: Bring their own lunch/snacks. No restaurants or vending available in or near the park.

2:00 pm: Sprint Training

Short course of cycling (12 seconds on / 48 seconds off) regulation Sprint 80m foxes. Beginners will be introduced to how Sprint competitions are conducted and strategies for locating Sprint foxes. Instructors available to give you additional beginner training as needed or to review what you have learned. Experts can use the course for training exercises suggested by Nadia.

Practice Days

Two practice events (8-9 Oct 2024 at 10:00 am) will be offered before official competition begins. The first day of practice will include Sprint and Foxoring format mini-courses. The second day of practice will offer both 80m and 2m Classic mini-courses. Both practice days will be held at [Park Lyndon](#) providing opportunities to test your skills and equipment. Experienced radio orienteers will be present to assist beginners and others seeking to hone their skills. Results are not included in the official championship results.

Cultural and Enrichment Activities

In addition to competition, the organizers also planned exciting cultural and enrichment activities. Outings include the [Henry Ford Museum](#) (see [former President's cars](#), see [Rosa Park's bus](#), learn about [American manufacturing history](#), tour Ford F-150s being made at the [Rouge factory](#)), a presentation about and trail hike to University of Michigan's enormous [Peach Mountain Radio Telescope](#) Observatory, and a trip to Michigan's oldest continuously running [apple cider mill](#)! Stay tuned to GroupMe or e-mail reflector for details.



Food and Socials

We are planning on some informal get-togethers for anyone interested as follows, stay tuned to the GroupMe channel or e-mail reflector for coordinating details:

- 9 Oct: Casual dinner before Opening Ceremony, etc - Activities Center, Chelsea, MI
- 10 Oct: After the Sprint race: Dexter Cider Mill, Dexter, MI
~ 6:00 pm: Metzger's German Restaurant, Dexter, MI
- 12 Oct: Awards and Recognition Dinner - Activities Center, Chelsea, MI

Workshops and Meetings

The Championship week provides a great opportunity for the radio orienteering community to come together and interact with one another. Workshops and meetings are often included in orienteering and radio orienteering championship weeks. If you have suggestions for workshops or meetings that could make the championship week even better, send a message to the General Inquiry e-mail to coordinate. At this time the following meetings are tentatively scheduled:

- ARRL Radio Orienteering Committee Meeting
- Info About Participating in the International Jury for ARDF
- Presentation on Peach Mountain Radio Observatory and Balloon Tracking

Schedule

5-6 Oct (Sat-Sun): [Training Camp](#) - [Silver Lake, Pinckney State Rec Area](#); Pinckney, MI

9 am - 5 pm

7 Oct (Mon) - Rest day, tourism/[cultural outing](#)

Time TBA *Cultural outing* - [Henry Ford Museum](#) & [F150 Factory](#); Dearborn, MI

8 Oct (Tues) - [Practice](#) - Sprint & Fox-O - [Park Lyndon](#); Chelsea, MI

10:00 am

9 Oct (Wed) - [Practice](#) - Classics - [Park Lyndon](#); Chelsea, MI

10:00 am

~2:00 pm *Group hike/tour*, [Stinchfield Woods / Peach Mtn Radio Observ.](#); Dexter, MI

5:00 pm *Info Mtg, [Radio Telescope talk](#), dinner, [American Legion Post 31](#)*, Chelsea, MI

+ Volunteer meeting after

10 Oct (Thurs) - Sprint - [Hudson Mills Metropark](#); Dexter, MI

Arrive before 9:30 am

After Sprint *Cultural outing* - [Dexter Cider Mill](#); Dexter, MI

~6:00 pm *Dinner outing* - [Metzgers German Restaurant](#); Dexter, MI

11 Oct - (Fri) - Fox-O - [Winnewana, Waterloo State Rec Area](#); Chelsea, MI

First start 10:00 am – Arrive at least 30 min's before your start time

12 Oct - (Sat) - 2m Classic - [Eddy Discovery Ctr, Waterloo State Rec Area](#); Chelsea, MI

Arrive before 8:30 am

1:00 pm **2m Search & Rescue Exhibition** - See details in "[Search & Rescue](#)" section

6:00 pm **Awards Ceremony & Dinner**; [American Legion Post 31](#), Chelsea, MI

13 Oct - (Sun) - 80m Classic - [Bishop Lake, Brighton State Rec Area](#); Brighton, MI

Arrive before 8:30 am

2:00 pm **80m Classic awards & closing**

Model Events / Equipment Checks

Equipment check model events will be available the day prior to a race for the next day's race. This provides competitors an opportunity to test their equipment against a transmitter for the next day's race. Here is the model event schedule:

9 Oct (at the Practice event center): 2 Sprint transmitters (1 slow, 1 fast), 1 beacon

10 Oct (at the Sprint event center): 1 Fox-O transmitter

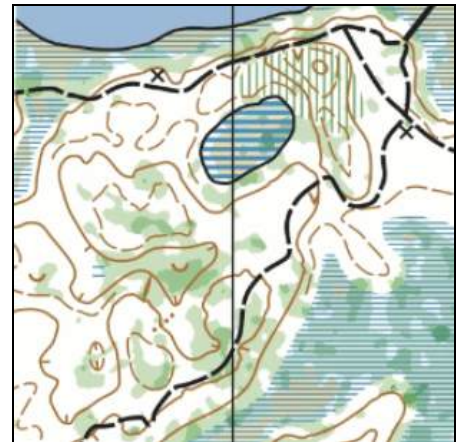
11 Oct (at the Fox-O event center): 1 2m Classic transmitter and 1 Fox-O transmitter

12 Oct (at the 2m Classic event center): 1 80m transmitter

Stages

5-6 Oct: Training Camp - Silver Lake / Pinckney State Rec Area - Pinckney, MI

[Pinckney State Recreation Area](#) is a paradise for backpackers, mountain bikers, anglers and other recreation enthusiasts. It is known for its extensive trail system and chain of excellent fishing lakes. Over forty miles of multi-use trails and remote campsites provide a superb backcountry experience. The park's 11,000+ acres and 20 lakes offer a wide variety of activities in its three major use areas: Silver Lake Day Use area, Bruin Lake Modern Campground and the Halfmoon Lake Day Use facility. The landscape, a terminal moraine area, was formed during the last glaciation period. In the 1800s, locals built a sawmill, gristmill, distillery and tavern along Hell Creek. Soon after, a summer resort opened. After the resort failed, the state appropriated funds during the 1940s and '50s to acquire the land to build a state park. Silver Lake day-use area serves as the park's center of activities. In addition to a picnic area, it has a large swimming beach with changing rooms and showers. Also available are rental facilities for kayaks, canoes, SUPS, and rowboats. Visitors also can enjoy a playground, sand volleyball courts, horseshoe pits, and a fishing pier, as well as access to a number of trails.



[Map to Parking](#)

[Map from Prior Event](#)

Stage Director / Course Setter: Charles & Nadia Scharlau

Time: 9am to 5pm

Training Notes: See [training camp details](#) above

Course Close: 5pm

Restrooms: Vault toilet

Time Limit: N/A - training

Embargoed: No

7 Oct: Cultural Outing - Henry Ford Museum & F150 Factory - Dearborn, MI

For those who wish to attend, the organizers are arranging an informal cultural outing to The Henry Ford Museum of American Innovation and the Ford Rouge F-150 factory in Dearborn, MI.

This outing offers a chance to see [former President's cars](#), [Rosa Park's bus](#), learn about [American manufacturing history](#), tour Ford F-150s being made at the [Rouge factory](#), and discover more about the host-State of Michigan's history and its pivotal role in building America's industrial and manufacturing foundation.

The F150 factory allows visitors to see one of the world's most advanced vehicle manufacturing facilities in action as it churns out as many as one F150 off the assembly line every 53 seconds!

We will depart in the morning at a time and duration of all attendees agreement to be coordinated in the event's GroupMe channel and e-mail.

We will plan to meet at the event hotel for carpool, and can arrange other options for others who need a ride but are not at the event hotel. Attendees can also meet the rest of the group at museum entrance lobby.

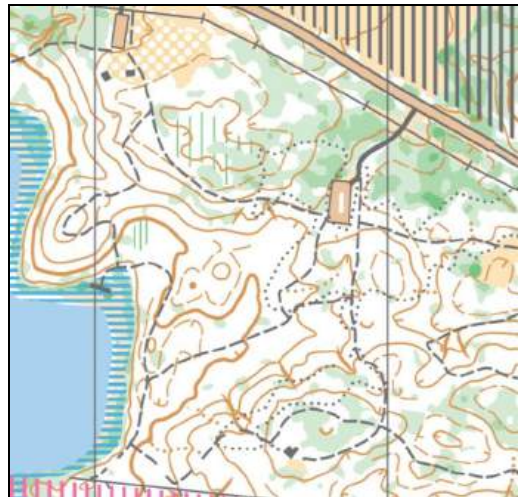
More details in the event communications channel and e-mail.

[Map to Henry Ford Museum](#)



8 Oct: Fox-O & Sprint Practice - Park Lyndon - Chelsea, MI

[Park Lyndon](#) contains over 500 species of plants in a wide variety of habitats including fens, marshes, bogs, ponds, forest, and prairie. Marked nature trails wind through the steep, glacially sculpted hillsides, connecting to the state's [Waterloo-Pinckney Trail](#) for a combined hiking experience of almost 50 miles. Ancient glaciers formed the hilly kettle and kame terrain where oak, hickory, tamarack, poplar, beech, maple, and tulip trees provide cover for ten species of orchids and over twenty-three species of ferns! Much of the upland portion of the trail is atop a long winding esker ridge created by an ancient stream. Lake Genevieve is a kettle lake formed by glacial activity over 10,000 years ago.



[Map to Parking](#)

[Map from Prior Event](#)

Stage Director / Course Setter: Joseph Burkhead

Transmitter Assignments:

Sprint: Choose from **1,2,3,4,5,B**

Fox-O: Transmitters displayed on map

First Start: 10 am

Last Start: 12 pm

Course Close: 1 pm

Time Limit: N/A - practice

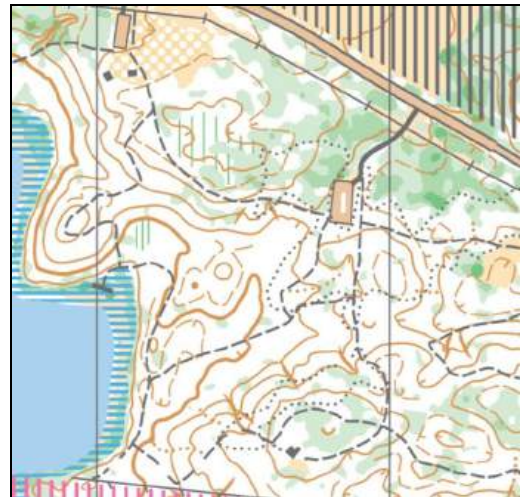
Restrooms: Vault toilet

Embargoed: No

9 Oct: Classics Practice - Park Lyndon - Chelsea, MI

[Park Lyndon](#) contains over 500 species of plants in a wide variety of habitats including fens, marshes, bogs, ponds, forest, and prairie. Marked nature trails wind through the steep, glacially sculpted hillsides, connecting to the state's [Waterloo-Pinckney Trail](#) for a combined hiking experience of almost 50 miles. Ancient glaciers formed the hilly kettle and kame terrain where oak, hickory, tamarack, poplar, beech, maple, and tulip trees provide cover for ten species of orchids and over twenty-three species of ferns! Much of the upland portion of the trail is atop a long winding esker ridge created by an ancient stream. Lake Genevieve is a kettle lake formed by glacial activity over 10,000 years ago.

For those that want to go on the Peach Mountain Radio Observatory hike, we will leave from here after finishing this practice and drive straight to Peach Mountain for the hike. The hike will be on publicly accessible trails.



[Map to Parking](#)

[Map from Prior Event](#)

Stage Director / Course Setter: Joseph Burkhead

Transmitter Assignments:

Choose from **1,2,3,4,5,B** - 2m and 80m offered

First Start: 10 am

Last Start: 12:00 pm

Course Close: 1:00 pm

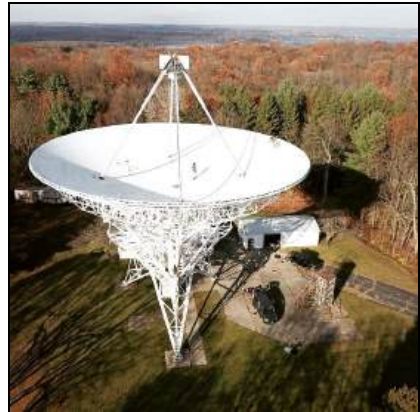
Time Limit: N/A - practice

Restrooms: Vault toilet

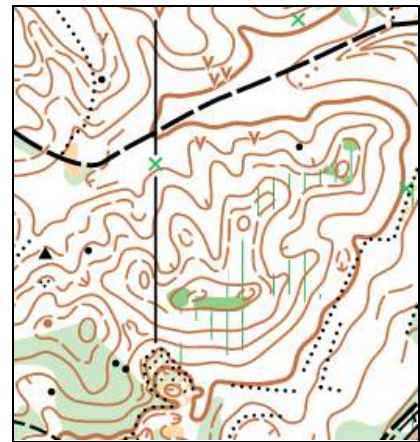
Embargoed: No

9 Oct: Group Hike & Tour - Peach Mountain / Stinchfield Woods - Dexter, MI

For those that want to view the Peach Mountain Radio Observatory and natural area up close before learning about its technicalities at the Wed evening dinner, join our small group that will go on a brief hike on the publicly-accessible trails up to the radio telescope after the Wed Classics practice concludes. No fees.



Stinchfield Woods, northwest of Ann Arbor, is an area where training in forest and sustainable ecosystem management takes place. The land was acquired in piecemeal fashion beginning in 1925. Now it comprises 777 acres of rolling hills reforested with hardwoods and evergreens. It serves as a field research area for demonstration of forest and ecosystem management for University of Michigan faculty and students, as well as the [University of Michigan's astronomical radio observatory](#) site which includes optical and radio telescope instruments. Stinchfield Woods was deeded to the University in memory of Jacob and Charles Stinchfield of Detroit. The Stinchfield brothers were descendants of the lumbermen that harvested Michigan's giant white pine in the nineteenth century. Stinchfield Woods is largely forested, though there are some old fields and open areas. Forests include 281 acres of native hardwoods (mixed oak-hickory forest) and 372 acres of conifer plantations. This venue was a competition venue during the 2007 Orienteering Team USA team trials.



[Map to Parking](#) – *small group only, more details at info meeting and in GroupMe channel

Stage Director: Joseph Burkhead

Meet up: ~2:00 pm

Finish hike: ~3:00 pm

Restriction: Public trails only

Restrooms: **None**

9 Oct: Dinner, Opening Ceremony, Guest Speakers, Info Meetings - Chelsea, MI

We will kickoff the championship portion of the week by gathering for a casual dinner, opening ceremony, guest speakers, and the required competition information meeting for all participants on **Oct 9th starting at 5:00 pm** at the [Activities Center \(1700 Ridge Rd, Chelsea, MI](#) - American Legion Post 31).



Attendees will receive their packets at this time if they didn't receive them at an earlier practice or training event.

Those that pre-ordered dinner will enjoy casual food including pizza, hot dogs, campfire food, and refreshments. Those that did not pre-order food but still wish to come are welcome to attend but we just ask you bring your own dinner and refreshments.

Our guest speakers will be **Dr. James Cutler**, Associate Professor at University of Michigan Department of Aerospace Engineering, presenting on the university's **Peach Mountain Radio Astronomy Observatory** and **"Foxhunting" Balloons**; and **Kenneth Harker**, the International Amateur Radio Union (IARU) Region 2 Radio Orienteering Coordinator, presenting on **ARDF International Jury**.

After the guest speakers have presented we will hold an information meeting for all athletes that will cover details for the rest of the week and the races and give everyone a chance to get all questions answered.

All volunteers are asked to stay after the information meeting concludes to organize and discuss volunteer-specific issues and questions.

Help with cleaning up after the event concludes is appreciated!

[Map to Parking](#)

10 Oct: Sprint - Hudson Mills Metropark - Dexter, MI

Hudson Mills is a 1,549-acre multi-use Huron-Clinton metropark that includes tamarack swamp, open fields, deciduous forest, vernal and permanent ponds, and most importantly the Huron River. It is a popular destination for canoeing and kayaking; parking areas near the Huron River provide access for canoe launching.



A paved path connects to downtown Dexter. Starting in 1827 the site was utilized for various utilitarian purposes including a saw mill, pulp mill, grist mill, cider mill, and plater mill before it was ultimately repurposed as a park. The venue is in the process of being mapped for and the championship will be an exciting debut for the park being used as an orienteering competition venue for the very first time! The venue is embargoed to competitors. Join us at Dexter Cider Mill, Michigan's oldest continuously-running cider mill, after the race for cider and donuts! We also welcome all to join us for dinner at Metzger's German Restaurant in Dexter ~6pm.

[Map to Parking](#)

First-time use as orienteering venue - no prior orienteering map

Stage Director / Course Setter: Joseph Burkhead

Arrival Time: Before 9:30 am

Transmitter Assignments:

First Start: 10:00 am

M21: **1-5, B, 1F-5F, B**

Course Close: 12:00 pm

W35: **1,2,3,5, B, 1F,2F,3F,4F, B**

Time Limit: 1 hr

M50, W19, W45: **1,2,3, B, 1F,2F,4F, B**

M60, W55, W65: **1,2,5, B, 1F,4F,5F, B**

Embargoed: **Yes**

M70, W14, W75: **1,3,5, B, 1F,4F,5F, B**

Restrooms: Flushing toilets

** Transmitter assignments will also be printed on map*

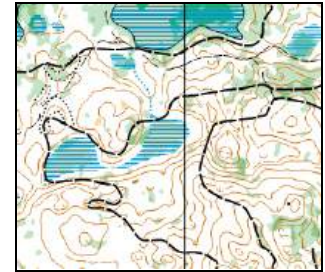
Course Setter Notes:

This is a new map and therefore a work in progress. Do not run/walk on the very busy East-West Territorial Rd. Use caution crossing parking lots, park roads, and bike paths. Many individual trees, picnic tables, and other manmade features are not yet mapped. Marshes in this area can deceptively sink you knee-deep or worse especially after rains.

11 Oct: Foxoring - Winnewana / Waterloo State Rec Area - Chelsea, MI



[Waterloo State Rec Area](#) is a former National Park Service property and is the 3rd largest park in Michigan comprising over 20,000 acres characterized by moraines, kettle lakes, swamps and bogs left by retreating glaciers after the last ice age. This venue is named after the majestic body of water known as the Winnewana Impoundment that much of the rolling, glacier-made terrain overlooks. It includes forests of Oak and Hickory as well as Winnewana Escarpment, a steep ridgeline that drops several hundred feet down to Winnewana Impoundment. A kame formation on the north portion of the venue is marked by a remarkable stand of old growth hardwoods. Fishing, mountain biking, hiking, bird and sandhill crane watching, and cross-country skiing are popular activities.



[Map to Parking](#)
[Map from Prior Event](#)

Stage Director / Course Setter: Joseph Burkhead

Arrival Time: 30 min's before start

First Start: 10:00 am

Transmitter Assignments:

Course Close: 2:00 pm

Assigned transmitters are displayed on your map

Time Limit: 3 hrs

Embargoed: No

Restrooms: Vault toilet

Course Setter Notes:

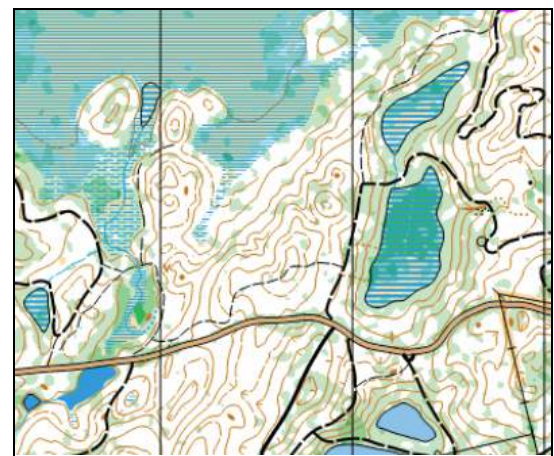
Use caution when approaching all trails as the area is very popular for mountain bikers who often traverse at very high speeds. Look both ways! Most light green vegetation is easily traversed and runnable in fall. Many minor trails are subtle and difficult to identify in the autumn leaves, even absent the leaves.

12 Oct: 2m Classic - Eddy Discovery Ctr / Waterloo State Rec Area - Chelsea, MI

[Waterloo State Rec Area](#) is a former Nat'l Park Service property and is the 3rd largest park in Michigan comprising over 20,000 acres characterized by moraines, kettle lakes, swamps and bogs left by retreating glaciers after the last ice age. The [Eddy Discovery Center](#) introduces visitors to the world of geology and the diverse natural habitats that are found within Waterloo. Trails offer hikers of all ages and abilities the chance to explore the diverse geology and habitats from forest wetlands to mature oak-hickory forests. Waterloo is also a great place to view [Sandhill Cranes](#) in a self-guided tour of the [Haehnle Sanctuary](#).

[Map to Parking](#)

[Map from Prior Event](#)



Stage Director / Course Setter: Joseph Burkhead

Arrival Time: Before 8:30 am

Transmitter Assignments:

M21: **1,2,3,4,5,B**

W35: **2,3,4,5,B**

M19, M50, W19, W45: **1,2,4,5,B**

M60, W55: **1,2,5,B**

M70, W65, W75: **1,2,4,B**

M14, W14: **2,4,B**

First Start: 9 am

Course Close: 2 pm

Time Limit: 3 hrs

Embargoed: No

Restrooms: Vault toilet

Course Setter Notes:

Intricate water and terrain features present interesting problems for foxhunters on this course. Forests accessing TXs are largely open and runnable, though some trails are difficult to identify in the autumn leaves.

12 Oct: Search & Rescue (SAR) Exhibition Contest - Eddy Disc Ctr, Chelsea, MI

All competitors and local search & rescue teams are invited to compete in an exhibition search & rescue distress beacon contest to be held on 121.775 MHz after the 2m Classic championship concludes. This exhibition race is intended to raise public awareness about the practical applications of radio and navigation sports, increase the experience-level and proficiency of local search and rescue teams, build memorable comradery among search & rescue practitioners, and encourage radio orienteers to apply their skills in life saving humanitarian efforts. Competitors will form into teams of at least three persons and will be issued



a start notice at which time a practice beacon will activate and official clock time will start. Competitors will seek to find a simulated aircraft Emergency Locating Transmitter (ELT) beacon in the shortest amount of time possible while conducting the search safely and efficiently. There is a 2-hour time limit for this contest and it is a mass start event. The team and individual that finds the beacon and then navigates to a directed checkpoint and properly completes the remaining SAR contest tasks fastest will receive special recognition at the awards night. As an exhibition event results will not count towards championship results, however results will count towards the “Paul Bunyan” trophy contest. Nominal event fee covers event and award costs.

Teams will accomplish the following tasks for this contest:

- Hunt down and locate an emergency locating transmitter (ELT) practice beacon simulating a distressed hiker or crashed aircraft
- Communicate the geographic coordinates of the located ELT practice beacon
- Navigate an azimuth
- Navigate to a specific geocoordinate
- Employ effective ground-to-air signaling to attract attention
- Demonstrate safe and effective litter-carry procedures
- Complete the course safely without any injuries

12 Oct: Awards & Recognition Dinner

On the final evening of championship week that we have everyone together we will gather to celebrate and recognize all competitors for their accomplishments, and recognize all the volunteers who put so much effort into organizing the events. Mainly it is an opportunity to gather in friendship and celebration, and we hope all who can attend will do so. Medals, trophies, and other recognition will be presented by the IARU Region 2, ARRL, and the Event Organization.

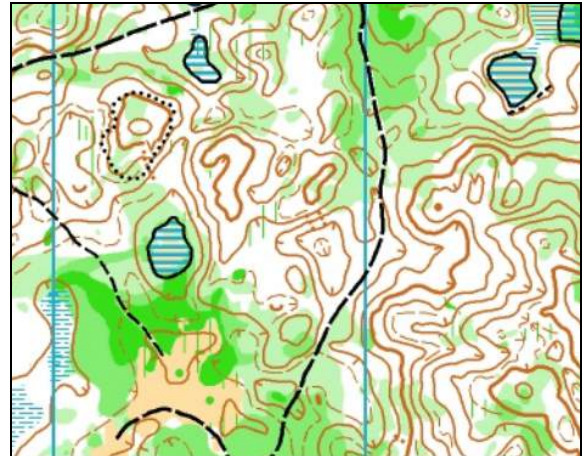


The dinner will be held Oct 12th beginning at 6:00 pm at the [Activities Center \(1700 Ridge Rd, Chelsea, MI](#) - American Legion Post 31).

At international radio orienteering / ARDF championships it has been customary for competitors to exchange small novelty items with one another at the awards dinner such as HAM post cards, trinkets, local novelties from the competitor's home area, or other small gifts although it is not required.

[Map to Parking](#)

13 Oct: 80m Classic - Bishop Lake / Brighton State Recreation Area - Brighton, MI



[Brighton State Recreation Area](#)'s 4,947 acres of public use land includes a combination of high, irregular ranges of hills, interspersed with a number of attractive lakes. Several miles of trails are available for equestrian, mountain biking and hiking. Oak forest, thick hedgerows and open spaces blend on the uplands while grassy marshes, shrub marshes and dense swamp timber mark the lowlands. This was a competition venue during the 2018 USA Orienteering Champs.

[Map to Parking](#)

[Map from prior event](#)

Stage Director / Course Setter: Thomas Chen / Gavin Burkhead

Transmitter Assignments:

M21: **1,2,3,4,5,B**

M19, M50, W19, W35, W45: **1,2,3,5,B**

M60, W55: **1,2,3,B**

M70, W65, W75: **1,3,5,B**

M14, W14: **1,3,B**

Arrival Time: Before 8:30 am

First Start: 9 am

Course Close: 2 pm

Time Limit: 3 hrs

Embargoed: No

Restrooms: Vault toilet

Course Setter Notes:

Complex and intricate terrain presents superb navigation puzzles for elite racers at this venue. Public roads on this map are fair game, but be careful not to veer into private property (DQ). Use caution in the northeast area of the map where mountain bikers may traverse trails.

Transmitters

Sprint: 3.5 MHz (1 minute cycle – 12 seconds)

- ❖ ON7YD ATX80 by G3ZOI, RF power 1 W
- ❖ Antenna: Crappie pole 26 foot w/ 3x16 foot ground radials
- ❖ Frequency:
 - TX 1-5: MOE-MO5 - 3.510 MHz
 - Spectator beacon: MO - 3.545 MHz
 - TX 1F-5F: MOE-MO5 - 3.579 MHz
 - Finish beacon: MO - 3.545 MHz

Foxoring: 3.5 MHz (Continuous)

- ❖ RF power - Field transmitters: 10 mW, Beacon: 1 W
- ❖ Antenna:
 - Field transmitters - 30 cm vertical + 30 cm counterpoise
 - Finish beacon - Crappie pole 26 foot w/ 3x16 foot ground radials
- ❖ Frequencies: TXs 1-10 - Continuous carrier pulse - 3.579 MHz,
Finish beacon - MO - 3.545 MHz

2m Classic: 144 MHz (5 min cycle - 1 min on / 4 min off)

- ❖ Foxes: G3ZOI TRO-2, RF power ~0.75W
 - Frequency: TXs 1-5: MOE-MO5 - 144.525 MHz
 - Antenna: Turnstile using four 19-inch arrow shafts
- ❖ Finish beacon: TYT TH-UV88 HT with Arducon controller, RF power ~1W
 - Frequency: MO - 144.825 MHz
 - Antenna: Turnstile

80m Classic: 3.5 MHz (5 min cycle - 1 min on / 4 min off)

- ❖ ON7YD ATX80 by G3ZOI, RF power 3W
 - Foxes: TX 1-5: MOE-MO5 3.510 MHz
 - Finish beacon: MO - 3.545 MHz
- ❖ Antenna: Crappie pole 26 foot w/ 3x16 foot ground radials

Timing and Scoring

SportIdent (SI, non-AIR) at all controls. Control numbers are written on the SI units. Pin punch backup is attached to the registering SI devices in case of registering device or SI card failure.

Control Flags / Stands

Sprint: 30x30 cm 3-sided white and orange flag at S (spectator) / B (beacon) control, red and white candy striped SI stand (no flag) at all other controls

Foxoring: 30x30 cm 3-sided white and orange flag at B (beacon) control, no flag and black or yellow SI stand at all other controls

80m Classic: Standard 30x30 cm 3-sided white and orange flags

2m Classic: Standard 30x30 cm 3-sided white and orange flags



Map Details

Sprint map:

8.5" x 11"

1:4,000

2m contour interval

Foxoring map:

8.5" x 11"

All 1:10,000 except M12/W14 1:7,500

5m contour interval

2m Classic map:

8.5" x 11"

M21, W35: 1:15,000

M14, M19, M50, M60, M70, W19, W45, W55, W65, W75: 1:10,000

5m contour interval

80m Classic map:

8.5" x 11"

1:10,000

3m contour interval

Exhibition map scale: Any map may be used according to the team's choice. Many SAR teams use USGS 1:24,000 topo quad maps. Orienteering maps are also permitted.

GPS Tracking

[Livelox](#) GPS tracking will be offered so you can record, replay, analyze, and compare your races with family, friends and fellow competitors. Bring your GPS tracking watch and then after the race you can upload your track and replay the race animation to see where everyone ran and see how well you raced

Rules

ARRL Rules: [ARRL Radio Orienteering Rules](#)

Rules Deviations:

1. Sprint TXs: The Sprint finish beacon and spectator beacon will be separated by 15 kHz. The Spectator and the fast foxes will be separated by 19 kHz.
2. Exhibition Contest: More than one event on 12 Oct 2024 to allow for a search & rescue exhibition contest, but this contest does not count for IARU / ARRL champs results.
3. Cell Phones: All participants encouraged to carry a fully charged cell phone for emergency use and/or Livelox tracking only.
4. W75: Offering W75 category on a trial basis.

Weather

Temperatures during early to mid-October in southern Michigan are mild to cold. Daytime temperatures average 60 F (16 C) and nighttime temperatures average at 41 F (5 C), however colder temperatures approaching or even reaching the freezing point of 32 F (0 C) or below are not uncommon. There are 11 days of rain in October on average, so there's a strong possibility of rain at some point during the championship week. First snow usually does not come until late October, however a snowstorm did visit the area on 17 Oct 2022. Sunrise during the championship will be approximately 7:45 am, and sunset approximately 7:00 pm. The venues are located in the U.S. Eastern time zone and daylight savings time will be in effect (EDT).

Safety / Hazards

Athletes should prepare for colder temperatures with adequate clothing and protection. Rain is a strong possibility during the event so we suggest bringing adequate rain gear for the body and receiver. Participants must ensure they are properly hydrated as courses will be long and remote. There will be many steep slopes and also several muddy bog areas. Be extremely cautious of muddy areas as quick mud is common and can suck you in quickly. We advise against crossing muddy marsh areas. Courses will include several steep slopes during the competition presenting fall and other injury hazards. Physical fitness, flexibility, and proper footwear will be key to preventing injury. Wildlife in the area is mainly not a hazard, but rattlesnakes, coyotes, and stinging insects such as wasps, hornets, and bees are common. Although Black Bears have been spotted in this area it is extremely rare to encounter them this far south in Michigan. Ticks are very common and all athletes should wear clothing and repellent to guard against tick bites, and check for ticks and remove them from your body and clothing immediately after completing your race. Numerous vines, bushes, and picker bushes present frequent tripping hazards. Eye protection against thorned bushes and trees are also recommended if you thrash through vegetation. Poison ivy is prevalent in the area which is another reason protective clothing is recommended. Numerous unstable tree-fall hazards exist from recent wind storms, so don't pull on vines or go under unstable trunks and fallen trees. All participants are required to carry a safety whistle and are also encouraged to carry a cell phone that is fully charged for emergency use only. Competitors are required to register and compete only for the skill level and class of contest that they are prepared to handle.

Accommodations

Event Hotel

Comfort Inn

877-424-6423

[1645 Commerce Park Dr., Chelsea, MI, 48118](https://www.comfortinn.com/hotel/1645-Commerce-Park-Dr-Chelsea-MI-48118)



Official event lodging will be at the **Comfort Inn** (may rebrand to Hampton Inn and Suites before competition) located at **1645 Commerce Park Dr, Chelsea, MI 48118**. A **group rate of \$109 per night** for competitors is available by booking at the following link:

<https://www.choicehotels.com/reservations/groups/GA28J3>

...or by calling the hotel and asking for the “*US Radio Orienteering Championship*” group rate upon making reservations. Due to accommodations being scarce and prices inflated during Michigan football weekends, the organizers highly recommend that you make lodging reservations early to secure a room with this good rate.

Map link: <https://maps.app.goo.gl/qUrhnLJ9JRJHTzb7>

Other Hotels

[Holiday Inn Express](#)

323 North Zeeb Road, Ann Arbor, MI 48103
1-734-8271100



Conveniently located off of I-94 in between the championship venues and Ann Arbor, close to Dexter, and neighboring Metzgers German restaurant. Numerous shopping, restaurants, and conveniences close by.

[Chelsea House - Victorian Inn](#)

118 E Middle St
Chelsea, MI 48118
(734) 475-2244
innkeeper@chelseahouseinn.com



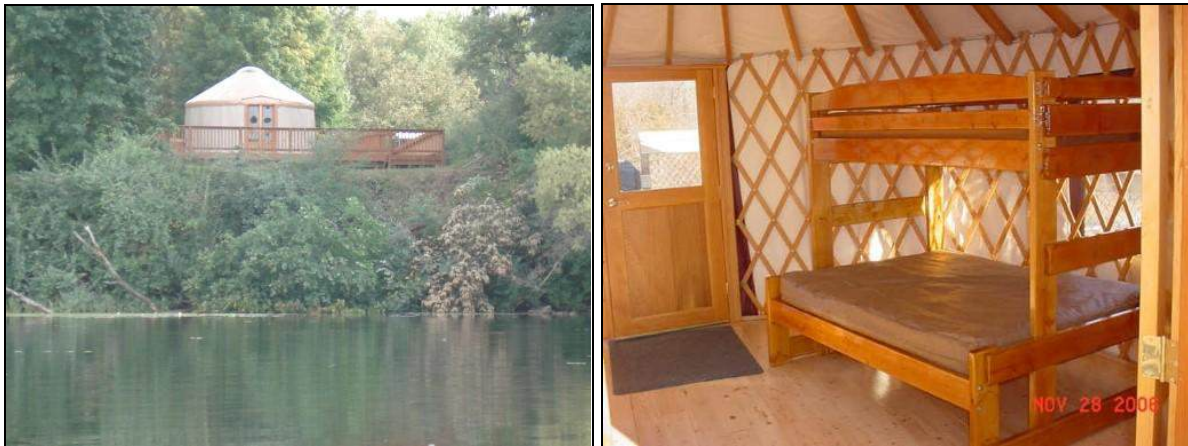
A fancy 1880's Queen Anne Victorian Inn, Chelsea House - Victorian Inn is the only lodging located in downtown Chelsea and walkable to main street restaurants and shops. All modern essentials for today's traveler with restored original craftsmanship.

Misc Other Hotels - Ann Arbor, Brighton, and Jackson all offer numerous additional hotels but are a 30+ minute drive to the venues and many will be priced higher than the event hotel.

Cabins and Camping

Camping options are available in the area to include rustic, yurt, modern, cabin, and recreational vehicle campgrounds. Reservations are highly recommended as campgrounds fill up quickly in this popular area of state forests, particularly on weekends. Unfortunately several State Recreation Area modern campgrounds in the area will be closed for renovations due to State government delays in executing projects so many options that are usually available in Waterloo and Pinckney State Rec Areas are unavailable during the event week. That means the remaining options are narrower than normal which is another reason we recommend making reservations early! State Rec Area reservations are available 6 months in advance (April 2024). Here is a linked list of some campgrounds that are expected to be open during the championship but please confirm w/ the facilities:

Waterloo State Rec Area - [Green Lake Yurt](#) (up to 5 people)



Waterloo State Rec Area - [Green Lake Rustic Campground](#) (tents, campers, RVs)



Waterloo State Rec Area - [Burns and Mill Cabins](#) (up to 8/10/20 people per cabin)



Pinckney State Rec Area - [Crooked Lake Rustic Campground](#) (tents, campers, RVs)



Pinckney State Rec Area - [Glenbrook Yurt](#) (up to 5 people)



Private / Commercial Campgrounds

[Hell Creek Campground](#)



Near Pinckney State Rec Area centrally located relative to all venues, this campground offers both primitive and modern electrical / RV sites, pool, basketball courts, playground, trails, fishing, horse stables, kayak rentals, and more.

734-878-3632

10866 Cedar Lake Rd

Pinckney, MI 48169

hellcreekbranch1@gmail.com

Farmlane Campground



Near Waterloo State Rec Area, located west of all venues, this campground caters to both families and equestrian visitors. Access to Waterloo State Rec Area trails, some sites have electricity and water, and some RV support, contact campground for most up to date info.

8020 Clear Lake Rd, Grass Lake, MI 49240

(734) 260-9009

farmlanecampground@yahoo.com

Other Camping Options

The above options are those most convenient and closest to competition and practice venues. Additional options for camping farther away from the venues includes campgrounds at Brighton State Rec Area (near the final day of competition). If all else fails and you have trouble finding camping options, send a message to the inquiry e-mail to check into the possibility of camping on the private property of organizing committee members who reside in the vicinity of Waterloo State Rec Area.

** Note: Sugarloaf Lake Campground & Portage Lake Campground in Waterloo State Rec Area and Bruin Lake Campground in Pinckney State Rec Area will all be closed for renovations.*

Activities Center

American Legion [Herbert J. McKune Post 31](#), 1700 Ridge Rd., Chelsea, Michigan 48118



Multiple activities during the event such as meetings, dinners, awards, workshops, and other social gatherings will be held at the American Legion Post 31 property on beautiful Cavanaugh Lake outside of Chelsea. The facility includes indoor halls, a pavilion, a kitchen and BBQ grill, and campfire pit, all overlooking the lake. We are thankful for the American Legion Post 31 making the facility available for our use. For more information about the American Legion, see www.legion.org

Map link: <https://maps.app.goo.gl/WMyQ1LtADsTv6yTQA>

Sandhill Cranes

You might wonder why when you go into stores in Chelsea such as Mike's Deli there are Sandhill Crane statues. You might also hear some really prehistoric, dinosaur-sounding bird cackling while you're traversing the local woods. That's because this area is a prime spot to find Sandhill Cranes, especially in October while the migration south is commencing. These striking cranes are one of the oldest bird species and have been around for at least 2 million years. They stand about 4 feet tall with a wingspan that can stretch out to 6 feet. In addition to their distinctive height, the sandhill crane sports a recognizable red crown that contrasts with their rust or grey plumage—making them an unmistakable species. Their most famous behavior is their dancing courtship ritual. They produce a variety of calls of differing intensity and volume that are used in different social contexts. The calls range from a piercing rattle that can be heard from four kilometers away to low purrs that only carry a few meters.



Their local story is told best by Tom Hodgson and the [Waterloo Natural History Association](#): “Jackson and Washtenaw Counties still have the largest nesting concentration of sandhills. And in the fall when cranes from all over the state descend on southern Michigan, about 10,000 of those end up in these two counties. To fatten up before migration, they spend October and part of November feeding on waste grain and insects in area farm fields... At night, they roost in area marshes. The Haehnle Audubon Sanctuary on Seymour Road in Jackson County is the largest roosting area.” ([Chelsea Update article](#))

Things To Do

The following are recommended activities from the organizers. Don't hesitate to contact the organizers with any questions or curiosity, we are happy to help everyone have the best experience possible before, during, and after the championship!

Festivals

[Dexter Apple Daze Festival](#) - 5 Oct 2024 - Downtown fun, pumpkin bowling, hayrides, cider, music, antique car drive-in, arts & crafts, and more!

[Waterloo Farm Pioneer Day](#) - 6 Oct 2024 - Waterloo Farm Museum living history Pioneer Day

Museums, History, and Automotive

[Henry Ford Museum](#)

[Ford Rouge F-150 Factory Tour](#)

[Waterloo Farm & Dewey School Museum](#)

[University of Michigan Museum of Natural History](#)

[Chelsea Downtown Historic Walking Tour](#)

Outdoors

Canoeing / kayaking / tubing - [Huron River water trail](#)

Mountain biking - [DTE Trail](#)

Sandhill Crane fall migration watching - [Haehnle Sanctuary](#)

Disc Golf - Hudson Mills & Waterloo State Rec Area

[Fishing](#) (Pike, Bass, Crappie)

[Sandhill Soaring Club](#) (glider flights)

Downtown Districts & Area Visitors Centers

[Chelsea](#)

[Dexter](#)

[Ann Arbor](#)

[Hell](#)

Cider Mills, Orchards, Autumn Markets

[Dexter Cider Mill](#)

[Jenny's Farm Stand & Cider Mill](#)

[Berry Hill Farm](#) (raspberry picking)

[Lesser Farms and Orchard](#)

[The Frosty Apple Orchard](#)

Indoor Recreation

Ice Skating, Hockey, Curling - [Arctic Breakaway](#)

Bowling - [Chelsea Lanes](#)

Planetarium - [University of Michigan Planetarium & Dome Theater](#)

Entertainment

[Purple Rose Theater](#) (Chelsea)

[The Encore Musical Theater](#) (Dexter)

Movie Theaters - MJR in Brighton, Cinemark & IMAX in Ann Arbor

Sports

[University of Michigan Wolverines](#)

[Detroit Red Wings Hockey](#)

[Detroit Lions](#)

Places to Eat

*Items marked w/ asterisk are must-tries!

Chelsea

[Mike's Deli](#) * (lunch in Chelsea, a favorite!)

[Common Grill](#) (Fine bistro dining - or just go to back door to take-out their tasty rolls*)

[Smokehouse 52](#) (BBQ) (this will be the catered meal on Saturday evening)

[Brahma Haus](#) (Mediterranean)

[Jiffy Mix - World HQ](#) in Chelsea! See: [Virtual Tour](#)

[Thompson's Pizza](#) (our favorite pizza in the area)

[Jet's Pizza](#) (for Detroit-style)

Dexter

[Metzger's](#) * (German - planned outing Thurs night)

[Aubree's](#) (American, Pizza, etc)

[La Marsa](#) (Mediterranean)

[Riverview Cafe](#) (Breakfast & brunch)

[A&W](#) (drive-in, fast food, burgers, root beer & floats)

Ann Arbor

[Zingerman's Delicatessen](#)* (Must-try sandwiches, cheeses, etc deli!)

[Zingerman's Roadhouse](#) (American)

[The Gandy Dancer](#) (Fine dining in historic 1886 Michigan Central train depot)

Aventura (Spanish)

Jerusalem Garden (Mediterranean)

Cafe Zola (Crepes, Mediterranean, Turkish)

Sava's (Eclectic, local, and brunches too)

Seva (Vegetarian/Vegan)

Frita Baditos (Burgers)

Main Osteria (Italian)

Visitor Info

[Chelsea Area Visitors Info](#)

[Ann Arbor Visitors Info](#)

[Detroit Visitors Info](#)

[Pure Michigan Travel Guide](#)

Area Maps

[Waterloo State Recreation Area Map](#)

[Pinckney State Recreation Area Map](#)

[Park Lyndon Map](#)

[Hudson Mills Map](#)

[Chelsea City Maps](#)

Repeaters & Simplex

WD8IEL on 145.45 MHz (-0.6 MHz offset, 100 Hz tone) is the commonly-used repeater in the area of Chelsea/Dexter. Tuesday evening nets, 8:30pm

W8LRK on 146.68 (162.2) is commonly used in the area of Brighton.

W8UM on 145.23 (-0.6 MHz offset, 100 Hz tone) is commonly used in the Ann Arbor / University of Michigan area.

Simplex: 144.42 MHz

Medical Emergencies & Hospitals

Safety Plan: [Safety Plan Link](#)

Emergencies: Call “911” and/or contact/find event EMT Thomas Chen

Chelsea Hospital

Phone: 734-593-6000

Address: 775 S Main St, Chelsea, MI 48118

University of Michigan Hospital

Phone: 734-936-4000

Address: 1500 E Medical Center Dr, Ann Arbor, MI 48109

Transportation

Arriving by Air

Airport Information		
<i>Airport</i>	<i>Service</i>	<i>Driving Distance to Event Hotel</i>
Detroit (DTW)	Major international hub airport for the entire Detroit metropolitan area; comprehensive world-wide service from many airlines; comprehensive USA service. Also provides Fixed Base Operator (FBO) services for private aircraft.	39 miles
Lansing (LAN)	Regional airport connecting to major international hubs including Detroit, MI (DTW), Chicago O-Hare (ORD), Washington D.C. Reagan National (DCA) and Orlando, FL (MCO). International service to Mexico, Jamaica and Dominican Republic. Also provides Fixed Base Operator (FBO) services for private aircraft.	57 miles
Flint (FNT)	Regional airport connecting to Chicago O-Hare (ORD) as well as direct flights to Florida locations in Fort Lauderdale (FLL), Sanford (SFB), Sarasota (SRQ), Punta Gorda / Ft Meyers (PGD), Tampa Bay / St Pete (PIE), and Jacksonville (JAX); and direct flights to other location in the U.S. including Nashville, TN (BNA), Phoenix/Mesa, AZ (AZA) and Savannah, GA (SAV). Also provides Fixed Base Operator (FBO) services for private aircraft.	65 miles
Toledo (TOL)	Small regional airport with direct flights to Phoenix/Mesa, AZ (AZA) as well as Sanford (SFB), Tampa Bay / St Pete (PIE) and Punta Gorda / Ft Meyers (PGD), FL. Also provides Fixed Base Operator (FBO) services for private aircraft.	70 miles
Ann Arbor (ARB), Jackson (JXN), Ypsilanti (YIP) and Livingston County (OZW)	Airports serving private aircraft closer to event venues than the above commercial airports. These airports offer full service Fixed Base Operator (FBO) support, fuel, and maintenance.	20 to 30 miles

Arriving by Train

[Amtrak passenger trains](#) service Ann Arbor and Jackson train stations via the Wolverine line and each station is approximately a 30 minute drive to the event venues.

[Ann Arbor Station](#)

[Jackson Station](#)



Arriving by Automobile

All event venues are conveniently accessible from Interstate 94 (I-94) and U.S. 23 expressways.

Transportation Within the Area

Western Washtenaw Area Value Express (WAVE) operates a fleet of 15 vehicles offering both door-to-door and scheduled public transport service in the area. You can either call and schedule specific door-to-door service, or if you are near a regularly scheduled bus stop you can utilize the scheduled service. Ridesharing services are minimal to non-existent in the area of the venues and also in Chelsea and Dexter. Abundant public transport options and ride sharing services are offered within Ann Arbor extending east into the Detroit metropolitan area. The best and recommended form of transport to championship events is via automobile. Here are links to the WAVE public transport service options in Chelsea/Dexter/Washtenaw County:

[WAVE Door-to-Door](#)

[WAVE within Chelsea](#)

[WAVE connecting Chelsea-Dexter-Ann Arbor](#)



Foreign Visitor Information

Passport and a visa may be needed to enter the United States depending on your country of passport issue. For visa information, please visit the federal travel website:

<http://travel.state.gov/content/visas/en.html>

If you need visa help or special documentation, such as a visa invitation letter, please send an e-mail to RadioO2024@gmail.com to request.

Registration

Pre-registration is required by registering here:

<https://eventreg.orienteingusa.org/eventregister/register/start/ardf2024>

Early registration deadline: June 30, 2024

Regular registration deadline: August 14, 2024

Late registration fee period commences: August 15, 2024

Final registration deadline: September 15, 2024

Pricing

	<u>Early (before 30 Jun)</u>	<u>Regular (before 15 Aug)</u>	<u>Late (after 15 Aug)</u>
Training Camp / day	\$10	\$10	\$15
Practice / day	\$10	\$15	\$20
SAR race / team	\$10	\$10	\$10
Sprint	\$20	\$25	\$30
Fox-O	\$20	\$25	\$30
2m Classic	\$30	\$35	\$40
80m Classic	\$30	\$35	\$40
All champ races	\$100	\$120	\$140
All races & practices/ trng camp/ SAR team	\$150	\$180	\$220

Radio receiver rental: \$5/day

Compass rental: \$2/day

SI rental: \$2/day, \$60 replacement fee if not returned

** Registrations after 15 Sep subject to staff permission/denial & possible \$10 extra fee per event*

Park Entry Fees

You will need to pay for a vehicle pass for the following events & venues:

State Recreation Areas (Training Camp, Fox-O, 2m Classic, & 80m Classic)

Michigan residents: \$19 annual vehicle passport or annual passport “P” on your license plate

Michigan residents must either 1) purchase a vehicle “passport” in conjunction with your annual license plate renewal, or 2) purchase at a State Park, Recreation Area, or DNR Service Center and also pay a \$5 service charge.

Non-Michigan residents: \$40 annual vehicle pass, or \$11 per day vehicle pass paid on-site.

Non-Michigan residents may purchase your annual vehicle “passport” online at:

<https://www.michigan.gov/dnr/buy-and-apply/rec-pp>

Hudson Mills Metropark (Sprint)

Every vehicle needs a pass to enter the Hudson Mills Metropark. If you already have an annual Metroparks vehicle pass then you can enter the park with that pass. If you don't have an annual pass and need a daily pass, indicate in your registration that you will need a vehicle pass and you will be charged the \$10 fee for your daily vehicle pass along with your registration fees. You will then be given a QR code to bring with you to the event to scan in at the park entrance gate.

Park Lyndon (Practice Days)

Vehicle passes are not required at Park Lyndon

Peach Mountain (Outing)

Vehicle passes are not required at Peach Mountain and must park offsite, small group only.

Merchandise

If you ordered a t-shirt it will be included in your packet when you check in to your first event.

Stay Connected

GroupMe Messenger Channel: https://groupme.com/join_group/103667249/DxkU2mFN

Social media channel for event news, announcements, & relevant info:

<https://www.facebook.com/2024USRadioO>

E-mail Event Director & General Inquiries: RadioO2024@gmail.com

Information Distro E-mail Group:

<https://groups.google.com/u/1/g/2024-usa-iaru-r2-radio-o-champs>

Meals

Meals will be offered for purchase during registration for the information meeting and guest speaker night on 9 Oct 2024, and at the awards dinner night on 12 Oct 2024. Both dinners will be served at the [Activities Center](#) (American Legion Post 31) on Cavanaugh Lake. The dinner for the information meeting and guest speaker will be an informal dinner including pizza, hot dogs, campfire food, & other casual food & refreshments for \$15 per person. The awards dinner will be a complete catered dinner from Smokehouse 52 BBQ of pulled pork, chicken, macaroni, salad, as well as vegetarian options for \$25 per person. Given the autumn season we also plan to have fresh Michigan apple cider at the dinners! All other meals during the week will be at athletes' own responsibility or arranged ad-hoc. There also is a planned group outing to Metzgers German restaurant the night of 10 Oct 2024.

Accessible and Religious Accommodations

The organizers intend to accommodate all individuals who wish to participate in the event regardless of physical or other impairments. We also intend to ensure all religious service scheduling and other religious accommodations are satisfied. Those who wish to arrange for reasonable accommodation please send a message to the General Inquiry e-mail at RadioO2024@gmail.com with "Accommodation Request" in the subject line and submit as early as possible to ensure adequate time for planning and so we can accommodate.

Event Organization

Personnel

Event Director: Joseph Burkhead (KE8MKR)

Assistant Event Director and Training Camp Director: Charles Scharlau (NZ01)

Technical Director: Bob Frey (WA6EZV)

Operations and Planning Assistant: Thomas Chen

Operations and Planning Assistant: Michelle Dye (KD8GWX)

Logistics Specialist: Rebecca Burkhead

Training Camp Assistant: Nadia Scharlau (KO4ADV)

Map Coordinator: Igor Guskov

Registrar: Ruth Bromer (WB4QZG)

Course Designers: Joseph Burkhead, Charles Scharlau, Gavin Burkhead

Results Specialist: Joseph Huberman (K5JGH)

HAM Radio Operator: Wesley Cardone (N8QM)

Website Designer: Alan Murray

Canine Field Checker: Ahnah the Alaskan Malamute

Host Clubs

[Southern Michigan Orienteering Club \(SMOC\)](#)

[Chelsea Amateur Radio Club \(WD8IEL\)](#)

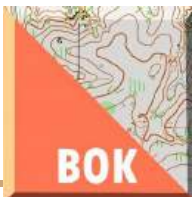


Sport Federations



Sponsors & Partners

Organizations wishing to sponsor or partner please contact RadioO2024@gmail.com





Contact Information

E-mail Address: RadioO2024@gmail.com

GroupMe Messenger Channel: https://groupme.com/join_group/103667249/DxkU2mFN

Stay updated: <https://www.facebook.com/2024USRadioO>

Stay updated: <https://groups.google.com/u/1/g/2024-usa-iaru-r2-radio-o-champs>

Website: www.radioorienteingchamps.us

