



ORIENTEERING

Bulletin #4

Published July 10, 2022

This bulletin is a supplement to the bulletins published by the Birmingham Organizing Committee and only covers information specific to Orienteering. For the latest BOC bulletin, go to: <https://twg2022.com/bulletins/>

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1 Organizing Committee

The technical aspects of the orienteering competitions at The World Games 2022 are being organized by members of Orienteering USA and local clubs. The Birmingham Organizing Committee is responsible for non-technical aspects of the competition. Please see the TWG Birmingham Organizing Committee bulletins for more information.

Organizers

Competition Manager	Cristina Luis
Assistant Competition Manager	Anne Mathews
IOF Senior Event Advisor	Stefan Bergstrom (CAN)
Course setter	Sandy Fillebrown
Course setter	Linda Kohn
Course setter	Samantha Saeger
Operations Director	Kris Beecroft
Mapper	Ed Despard
Mapper	Jonathan Campbell
Controller	Glen Tryson

2 Contact Information

The World Games 2022

Web: <https://twg2022.com/>

Orienteering information

Web: <https://eventor.orienteering.org/Events/Show/6803>

Email: worldgames2022@orienteeringusa.org

Phone: +1 617 945 8273

3 Program

All times given in this bulletin are in Central Daylight Time (CDT), the local time in Birmingham. CDT is five hours behind GMT and seven hours behind Central European Time.

Date	Time	Event	Location
Tuesday, July 12th		Arrival for overseas participants	
Wednesday, July 13th		Arrival/jet lag day	
	5pm	Team Officials Meeting	University of Alabama, Birmingham (UAB)
	5pm	Athlete's Night	Jones Valley Teaching Farm
Thursday, July 14th	9am	Middle model	Oak Mountain State Park
	3pm	Sprint & technical model	UAB Campus Green
	5pm	Team Officials Meeting	UAB
Friday, July 15th	9am	Sprint Final, Men	Birmingham Southern College (BSC)
	10am	Sprint Final, Women	BSC
	5pm	Team Officials Meeting	UAB
Saturday, July 16th	9am	Middle Final, Men	Oak Mountain State Park
	11am	Middle Final, Women	Oak Mountain State Park
	5pm	Team Officials Meeting	UAB
Sunday, July 17th	9am	Sprint Relay	Railroad Park
	8pm	TWG Closing Ceremony	Protective Stadium
Monday, July 18th		Departure	

4 Venue, Access, and Transport

4.1 Location

The city of Birmingham, in the US state of Alabama, is host to The World Games 2022 and the orienteering competitions. All athletes arriving by plane must terminate their travel in Birmingham. Transport from Atlanta or other airports will not be provided. Once arrived in Birmingham, all transportation will be provided for by the Birmingham Organizing Committee.



For detailed information on arrival procedures and transportation to/from the airport, please see [TWG Bulletin 5](#), section 2.5

4.2 Competition Center

All athletes and team officials will be housed in the dormitories at the University of Alabama-Birmingham. The Accreditation Center is on the first floor of Blazer Hall, located at 920 16th St S, Birmingham, AL 35205. The Accreditation Center will be open from 8am to 6pm each day. However, a credential is required to enter the Halls so accreditation will be open on arrival days until the last arrival. If your flight is delayed and you will arrive late, please text 001-806-223-4936.

4.3 Team Officials Meetings

Team Officials Meetings will take place each day at 5pm in the Magnolia Room (135A) of McMahon Hall on the campus of the University of Alabama-Birmingham. Every team should aim to have a representative at the meeting to receive printed information and equipment. To submit questions for the Team Officials Meetings, please email worldgames2022@orienteeringusa.org.

Slides from the Team Officials Meetings will be published to IOF Eventor after each meeting.



4.4 Transportation to events

All athletes and team officials **are required** to use organizer bus transport to and from all scheduled training and competitions, with the exception of the Sprint Training & Technical Model (walking distance from the Athlete's Village). Transportation is also provided to The World Games Plaza, Closing Ceremony, and Athlete's Night. Buses will depart from UAB near the corner of 10th Ave South and 16th Street South and return to the same. Coaches and team officials may ride in either bus with the athletes for official orienteering training and competitions.

Transportation Schedule

Thursday, July 14th	Middle distance model - Oak Mountain 8:00 am - Buses depart for Oak Mountain 11:30 am - Buses return to UAB
Friday, July 15th	Sprint - BSC 7:15 am - Bus for men departs for BSC 8:15 am - Bus for women departs for BSC 12:00pm - Buses for all athletes return to UAB
Saturday, July 16th	Middle - Oak Mountain 7:00 am - Bus for men departs for Oak Mountain 8:00 am - Bus for women departs for Oak Mountain 2:00pm - Buses for all athletes return to UAB
Sunday, July 17th	Mixed Sprint Relay - Railroad Park 7:15 am - Bus for runners on legs 1+ 2 departs for Railroad Park 7:30 am - Bus for runners on legs 3 + 4 departs for Railroad Park 11:00 am - Buses for all athletes return to UAB

4.5 General Transportation

For transportation outside of official orienteering events, please see [TWG Bulletin 5](#), section 2.5. Note that athletes and team officials have different credentials and will not necessarily have access to the same levels of private shuttles.

For information about The World Games bus system, open to the public, please see <https://twg2022.com/ride/>

4.6 Climate and Fauna

The weather in Birmingham in July will be hot and humid. Expect daytime temperatures to reach or exceed 90°F/32°C with a potential for afternoon thunderstorms. Morning temperatures are likely to be somewhat lower, ranging from about 75°F/24°C to 85°F/29°C, but with very high relative humidity. It is also advisable to protect against the local fauna, especially chiggers and ticks, the latter of which sometimes carry disease. Treat clothing with permethrin and/or use a repellent with DEET or Picaridin for protection. Runners are advised that they may encounter numerous poisonous plants such as poison ivy and poison sumac, and skin contact with such plants may result in a rash.

5 Registration

5.1 Qualification Rules

Information about which countries and individual athletes have qualified for entry can be found on IOF Eventor: [Rules published March, 2021](#)

5.2 Entries

There are no entry fees for athletes selected to participate in The World Games. As of July 1st, it is no longer possible to make team entry changes.

Teams should inform the organizers if an athlete will not start by emailing worldgames2022@orienteingusa.org by 7:00 am the day of the competition.

Team composition for the Sprint Relay must be submitted, on paper or via IOF Eventor, by 3:00 pm on Saturday, July 16th. Substitutions for injury or illness are allowed up until 7:00 am on Sunday, July 17th. Substitutions must be made by emailing the organizer at worldgames2022@orienteingusa.org.

5.3 Summary of Entries

Country	Men	Women	Team Officials	Total
Australia	2	2	1	5
Austria	2	2	2	6
Belgium	1		1	2
Brazil	2	2	1	5
Canada	2	2	1	5
Czechia	1	2	2	5
Denmark	2	2	1	5
Egypt		1	3	4
Estonia	2	2		4
Finland	2			2
Germany	2	2	2	6
Great Britain	2	2		4
Hong Kong	2	2	2	6
Hungary		1	1	2
Italy		1		1
Latvia		1	1	2
Lithuania	1	1		2
Netherlands		1		1
New Zealand	1			1
Norway	3	2	1	6
Poland	2	2		4
Sweden	3	3	2	8
Switzerland	3	2	2	7
Ukraine	2	2	1	5
United States of America	2	2	1	5
TOTAL	39	39	25	103

6 Accommodation and Food

6.1 Athletes

Accommodation and food is provided at no charge for all athletes competing in The World Games. For more details about the Athletes' Villages catering and accommodations, please see [TWG Bulletin 5](#), section 2.4.

6.2 Team Officials

Team Officials are responsible for the costs of their accommodations, meals, and transportation. The available options range from \$55/day for accreditation only (meals and transportation, but no accommodations) to \$120/day for double accommodations and \$180/day for single. For details, please see [TWG Bulletin 5](#), section 2.2.

6.3 Meal Hours

Meals are served in the dining hall UAB. Meal hours are 6:30 am-10:00 am, 12:00 pm-4:00 pm, and 6:00 pm-10:00 pm. For more information on dining, please see [TWG Bulletin 5](#), section 2.4.

7 Embargoed Areas

According to the IOF Competition rules (§ 26.5), embargoed areas are forbidden for all potential TWG 2022 athletes, team officials and other persons, who, through knowledge of the terrain, may influence the results of the competitions. All embargoed areas are 'strict embargo'. More information and maps are available on IOF [Eventor](#) ([Digital version](#))

Athletes and team officials are permitted to attend other sporting events at The World Games as spectators, and they may take the organizer's transportation.

It is not permitted to spectate at any events taking place at Birmingham Southern College (Fistball, Jiu-Jitsu, Karate, and Wushu) until after the conclusion of the Sprint competition.

It is not permitted to spectate at any events taking place at Oak Mountain State Park (Canoe Marathon, Waterski & Wakeboard) until after the conclusion of the Middle competition.

It is not permitted to spectate at any events taking place at Railroad Park & Powell Steam Plant (Duathlon, Speed Skating) until after the conclusion of the Sprint Relay competition.

Athletes and coaches may use the organizer's transport TWG Shuttle buses but may not depart or embark at the following stops, which are in the embargo area for the Sprint Relay:

- Yellow Line: Railroad Park/Powell Steam Plant
- Red Line: Powell Ave, 1st Ave S., 3rd Ave. S., 4th Ave. S., 5th Ave. S.

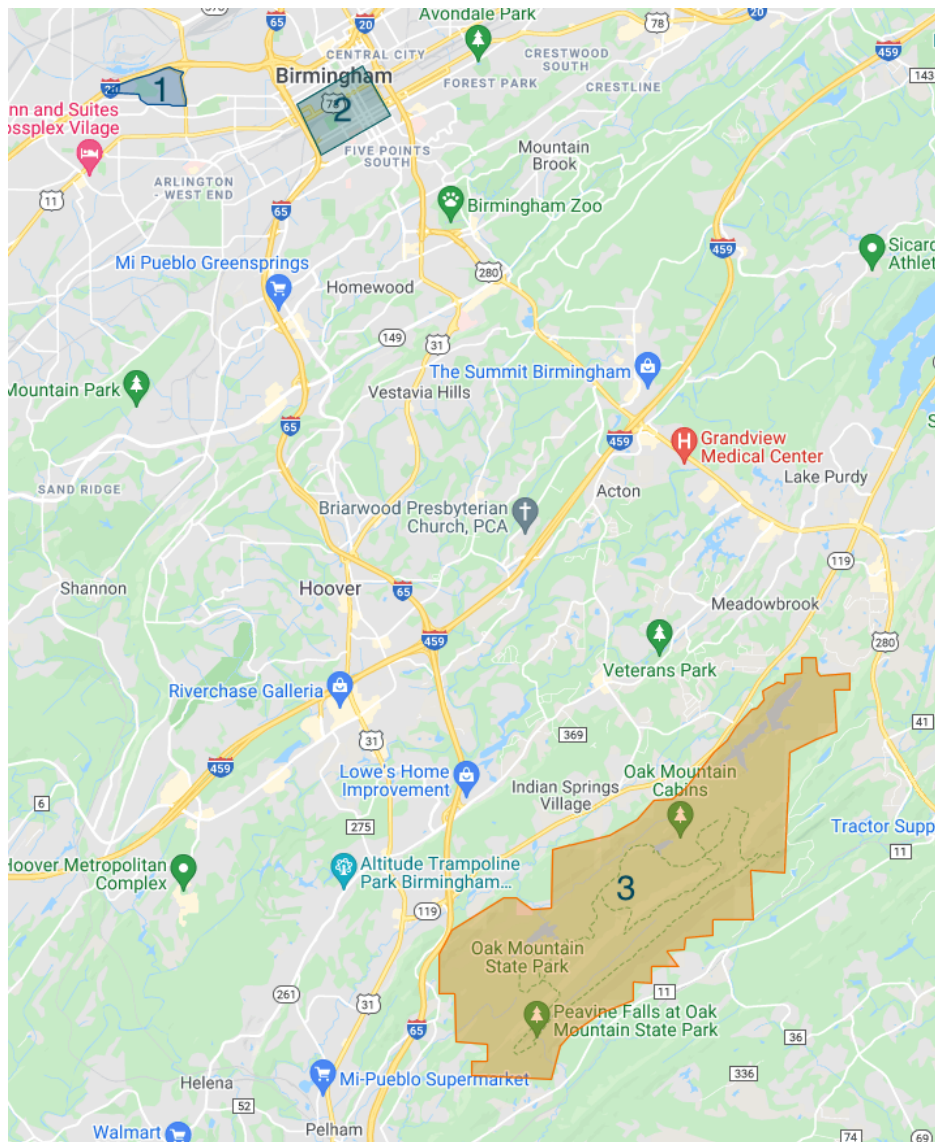
The Greyhound Bus station is inside the embargo area for the Sprint Relay. It is permitted to take the Greyhound Bus to this station and then a taxi/Uber/Lyft to UAB, as long as the follow-on transportation takes 18th St., the same as the Yellow Line does.

Map of embargoed areas:

1 - Birmingham Southern College - entire campus

2 - Downtown Birmingham - area bounded by 5th Ave N to the northwest, 24th St to the northeast, Interstate 65 to the southwest, and 6th Ave S. to the southeast

3 - Oak Mountain State Park - entire park



8 Training

The only ISOM and ISSprOM maps in Alabama are those used for The World Games. The closest areas with relevant terrain are those mapped by the [Georgia Orienteering Club](#). Athletes wishing to train in relevant terrain (both sprint and forest) and with a similar climate to Birmingham should consider spending time in Georgia before the event.

9 Rules and Participation Information

9.1 Competition Rules

The 2022 edition of the competition rules for IOF Foot Orienteering events will be applicable to TWG 2022. Please refer to the [Competition Rules on the IOF website](#).

9.2 Classes and Entry Regulations

Classes: The individual races have classes for Men and Women without any age restrictions. The sprint relay is mixed with at least two women per team and without age restrictions.

All competitors must represent a Federation. All athletes must be full passport-holding citizens of the country they are representing. Athletes who are citizens of more than one country can represent only the country for which they have run IOF events during the calendar year.

9.3 Anti-Doping

For complete information about anti-doping, please see [TWG Bulletin 5](#), section 2.6.

9.4 COVID-19 Policies

All participants are required to be fully vaccinated. There are no testing requirements, though testing is available at the Athlete's Village. For complete information about COVID-19 policies, please see [TWG Bulletin 5](#), section 2.1

10 Media

For media information please see bulletins for The World Games:

<https://twg2022.com/bulletins/>

11 Race Information

11.1 Punching

SportIdent Air+ punching will be used for all competitions. Competitors will be provided with two SIACs at the first Team Officials Meeting. Both SIACs must be worn on the same side.

Check of function and battery status for the SIACs will be done at the quarantine check-out or pre-start. Runners with non-functioning SIACs will be given a replacement. Runners will be able to test their SIACs at the Technical Model.

11.2 Timing

For the Sprint and Middle competitions, the runners will start at their start time (no start gate), indicated by a clock and an audible signal. In addition, the start official will place a hand on the runner's shoulder for the final five seconds and release it at the start time.

For the Mixed Sprint Relay, the start signal will be given by the start official. Early start leads to disqualification.

The finish time will be taken when the SIAC crosses the finish line. In case of a head-to-head run in the Mixed Sprint Relay, the finish judges will rule on the final placings based on the order that the competitors' chests cross the finish line.

The running times will be rounded down to the nearest second.

11.3 GPS Tracking

All competitors may be asked to carry a GPS tracking device in every race. It must be carried on the back of the competitor in an elastic harness. Harnesses will be provided for any runner who does not have their own. The GPS units weigh 150 grams and have the dimensions 87 × 51 × 30mm.

11.4 Clothing and Footwear

There are no regulations regarding clothing. Choice of footwear is free for the middle distance.

Shoes with metal dobbs or spikes are not allowed in the Sprint Model, Sprint or Sprint Relay competitions.

11.4 Bib numbers

Bib numbers for the individual races will be available for self-service pick up in the quarantine of each competition. Two bib numbers are provided, one for the back and one for the chest. Bib numbers must be placed visibly on both chest and back and must not be folded or cut. The size of the bib numbers is 25 x 25 cm.

11.5 Maps

All maps are printed on laser paper. Competition maps will be sealed in plastic cases.

11.6 Jury

Jaroslav Kacmarcik	CZE
Killian Imhof	SUI
Meghan Rance	CAN
Reserve 1: Håkan Carlsson	SWE
Reserve 2: Jeppe Ruud	DEN

11.7 Complaints and Protests

Complaints must be handed over in writing using the official form to an event official in the finish area no later than 15 minutes after the final results have been announced (separately for women and men; announced by the speaker). Forms will be available at the download tent. There is no fee for a complaint. A protest may be made against the organizer's decision about a complaint. Any protest must be made in writing, on the official form, no later than 15 minutes after the organizer has informed the complainant of the decision about the complaint. There is no fee for a protest.

11.8 Quarantine

There is a mandatory quarantine for all three races. The organizer bus transport will drop off all runners and coaches a short distance from the quarantine each day. Runners must check in by showing their accreditation card and signing the list before the quarantine closes. No one will be allowed into the quarantine area after the deadline.

Athletes will get number bibs and warm-up maps when entering the quarantine.

All quarantines consist of indoor and outdoor areas with water and toilets. Warm-up maps are considered part of quarantine and athletes may return indoors after using the warm-up map.

Coaches and athletes can leave quarantine any time, but once they have left, they are not allowed to return.

The use of mobile phones, smart watches, computers or any communication device inside the quarantine is strictly forbidden.

It is not allowed to bring any maps into the quarantine zones.

11.9 Medal Ceremonies

The top three finishers in each class will be awarded medals in the medal ceremony for each event. The medal ceremonies take place near the finish of each race once the final results are announced. Athletes will be called to the podium area approximately ten minutes before the ceremony.

11.10 Team tents

Team tents are not allowed at the venues.

11.11 Traffic

All competition areas are open to the public and competitors may encounter slow-moving vehicle traffic or pedestrians. In addition, there may be stationary cameras and running camera operators.

12 Specific Event Information

12.1 Middle distance training/model

Date: Thursday, July 14th, 9:00 am-11:00 am.

Venue: Oak Mountain State Park. Athletes and team officials will be transported directly to the venue. There will be toilets and shade. Water is available, but athletes should bring their own refreshments beyond water.

Transportation: Buses depart UAB at 8:00 am and depart the training area at 11:30 am.

Map: 1:10,000, 5m contours, ISOM 2017-2. New map by Jonathan Campbell.

Course: There are 14 controls on the map. Control locations in the terrain are marked using the same control flags and stands as will be used during the Middle competition. There will be no punching or timing, and there are no codes on the controls in the terrain. Mapping style, terrain, control features, and placement is indicative of what will be encountered in the Middle competition.

12.2 Sprint training/model and technical model

Date: Thursday, July 14th, 3pm-5pm.

Venue: University of Alabama-Birmingham Campus Green, GPS coordinates: 33.500417N, -86.805639W

Transportation: Athletes and team officials should walk to the Campus Green.

Map: 1:4,000, 2m contours, ISSprOM 2019-2. New map by Ed Despard and Jonathan Campbell.

Course: There are 14 controls on the map. Control locations in the terrain are marked using the same control flags and stands as will be used during the Sprint and Sprint Relay competitions. There will be no punching or timing on the training controls, and there are no codes on the controls in the terrain. Mapping style, terrain, control features, and taping for forbidden features is indicative of what will be encountered in the Sprint and Sprint Relay competitions.

Note that the model area is bisected by a busy road. There is no traffic control. Runners should use a crosswalk and take care while crossing.

Technical model: Co-located with the start of the sprint training. Athletes and team officials will be able to test the punching system and see an example of the start procedure.

12.3 Sprint

Date: Friday, July 15th.

Venue: Birmingham Southern College, GPS coordinates: 33.515065N, 86.854773W

Transportation: The men's bus departs UAB at 7:00 am. The women's bus departs UAB at 8:00 am. Buses depart BSC at 12:00 pm. It is mandatory to use the transportation provided.

Format: Sprint race with one minute start interval. The start list is based on World Ranking.

Map: Birmingham Southern College. 1:4,000/2m ISSprOM 2019-2. Map by Ed Despard and Jonathan Campbell.

Course Details

Class	Winning time (min)	Length (km)	Climb (m)	Number of Controls	Water stops
Men	12-15	3.8	92	23	0
Women	12-15	3.3	78	20	0

Course Setter: Linda Kohn

Terrain: University campus with some elevation changes. The campus is typical for North American campuses, with a variety of different buildings and pathways. The running surfaces are primarily paved streets and grass.

Visibility: very good

Runnability: very good



Start Time: The first start for men is 9:00 am. The first start for women is 10:00 am.

Quarantine: The quarantine opens when the first bus arrives at 7:30 am. The latest check-in time is 9:00 am. There is space indoors and a warmup map will be provided. Athletes should follow signs that say “to warmup” to access the warmup area. They must return through the same door. Athletes will proceed to the pre-start by exiting through the same door as they initially entered quarantine.

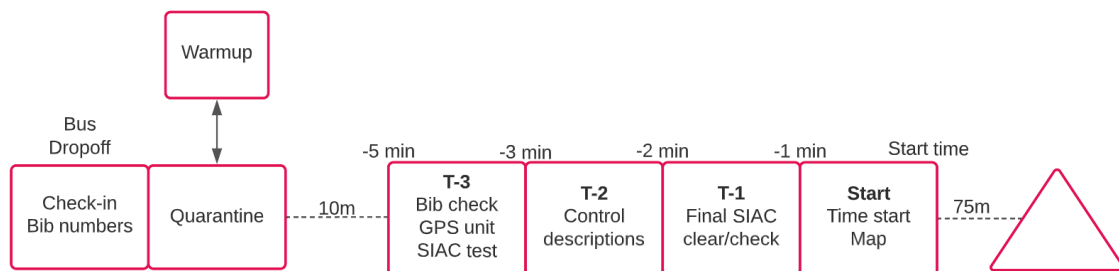
Team officials leaving the quarantine must follow the directions of the quarantine personnel to the recovery zone in the arena.

Pre-start and call-up procedure: Runners should arrive at the pre-start, located 10m from the quarantine entrance, five minutes before their start time. They will have their bib number checked, receive a GPS unit, and test their SIACs.

Runners will receive control descriptions at the T-2 tent. At the T-1 tent runners will do a final clear/check of their SIACS, and then proceed to the Start tent callup.

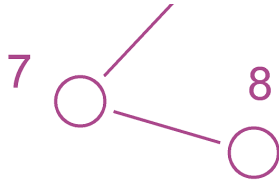
The runner’s map will be placed on a table and will be released by the start official at the start time. There is a map flip (see below) and the first side will be face-up and covered. The start official will place their hand on the athlete's shoulder for the last 5 seconds before start. At start time, the start official will release their hand and the runner may proceed to the start point.

The route to the start point is marked and is 75m from the map issue point. The start point is marked by a control flag.



Control descriptions: The size of the control description sheets are 5.0 x 14.9 cm for Women and 5.0 x 16.5 cm for Men.

Map flip: There is a map flip in the middle of the course. Upon reaching the last numbered control on the first side, runners should flip their maps. The same control (with the same control number) will be the first numbered control on the second side.



First side of map (example only)



Second side of map (example only)

Special notes: Some uncrossable walls and out-of-bounds gardens will be marked with orange tape to make them more visible. Not all forbidden walls and gardens are taped and athletes must rely on the map to determine whether or not a feature is forbidden to cross.

There may be barriers and/or police cars blocking traffic on some roads. They are not marked on the map. Runners are permitted to pass freely.

Large metal electrical/utility boxes or generators are mapped as small buildings, where useful for navigation. They range in height from 1m to 2m high and may not be shown when wholly inside out-of-bounds areas (e.g. gardens next to buildings). This is demonstrated on the model map at UAB.



The finish chute contains a sharp turn through a narrow gate (approximately 1m wide).

Finish and cool down: After finishing, runners will remain in the recovery zone. The recovery zone is enclosed by a fence. There will be shade and an area for cooling down.

Maximum running time: The maximum running time is 50 minutes.

12.4 Middle

Date: Saturday, July 16th

Venue: Oak Mountain State Park, GPS coordinates: 33.327048N, 86.757239W

Transportation: Men's bus departs UAB at 7:00 am. Women's bus departs at 8:00 am.

Format: Middle distance with two minute start interval. The start list is based on World Ranking.

Map: Oak Mountain State Park. 1:10,000/5m ISOM 2017-2. Mapped by Jonathan Campbell.

Course Details

Class	Winning time (min)	Length (km)	Climb (m)	Number of Controls	Water stops
Men	30-35	6.4km	310	23	2
Women	30-35	5.6km	265	19	2

Course Setter: Sandy Fillebrown

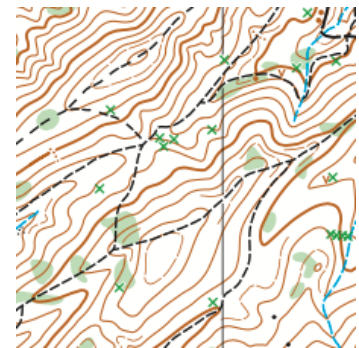
Terrain: Continental forest terrain with deciduous trees and little undergrowth. Some mountain bike and horse trails wind through the area and hillsides are often steep. Altitude 165m-250m.

Visibility: mostly very good

Runnability: mostly very good

Start Time: The first start for men is 9:00 am. The first start for women is 11:00 am.

Quarantine: The quarantine opens at 7:30 am and the latest check-in time is 9:00 am. There is space indoors and a warmup map will be



provided. Team officials and athlete bags will be transported by the organizers to the recovery zone at the finish.

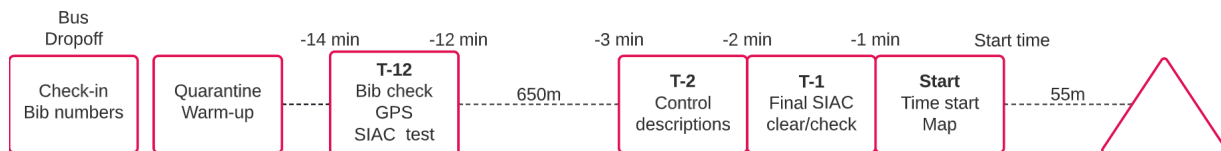
Pre-start and call-up procedure: The call-up tent is in the warm-up area of the quarantine. There are bathrooms and a shade tent available at the pre-start. Call-up will take place 14 minutes before the start time. Here the runner's bib will be checked and the start crew will place a GPS unit in the runner's harness. Note that there is no water past the check-in and before the start.

Runners depart the pre-start (T-12) 12 minutes before their start time and will follow a streamered route 650m to the T-2 tent. The 650m route is on trail and in terrain and includes a steep and rocky descent. Runners will receive their control descriptions at the T-2 tent.

At the T-1 tent runners will do a final clear/check of their SIACS, and then proceed to the Start tent callup.

The map will be placed on a table and will be released by the start official at the start time. The start official will place their hand on the athlete's shoulder for the last 5 seconds before start. At start time, the start official will release their hand and the runner may proceed to the start point.

The start point is 55m from the map issue point and is marked by a control flag. The route to the start point is marked.



Control descriptions: The size of the control description sheets are 4.6 x 13.7 cm for Women and 4.6 x 15.9 cm for Men.

Arena passage: There will be an arena passage. It is clearly marked on the map and in the terrain.

Water stations: There are two water stations. The first after approximately one third of the course has been run, the second after two thirds of the course, during the arena passage.

Coaching zone: There will be a coaching zone along the spectator loop, next to the water stop.

Special notes: There are several places on the course where runners will cross a road with designated crossing points. Organizers will stop traffic at these points and allow the runners to cross unimpeded.

Runners may encounter the Treetop Nature Trail, a boardwalk with large bird cages. It is a raised walkway in parts and is mapped as a canopy. Runners are allowed to pass underneath.



Pictures of the Treetop Nature Trail

Finish and cool down: A cool-down map will show the area allowed for cool-down after the race. Runners who have finished may cheer along the arena passage and finish chute, but otherwise must remain in the area depicted on the cool down map and may not enter the competition area until after the competition is over.

Maximum running time: The maximum running time is 120 minutes.

12.5 Mixed Sprint Relay

Date: Sunday, July 17th

Venue: Railroad Park, GPS coordinates: 33.509945N, 86.808204W

Transportation: The bus for runners on legs 1+2 departs UAB at 7:15 am. The bus for runners on legs 3 + 4 departs UAB at 7:30 am. Buses depart Railroad Park at 11:00 am.

Format: Sprint Relay, mass start, four legs (Woman-Man-Man-Woman).

Map: 1:4,000/2m ISSPrOM 2019-2. Map by Ed Despard and Jonathan Campbell.

Course details

Class	Winning time (min)	Length (km)	Climb (m)	Number of Controls	Water stops
Men	11-13	3.5	14	22	0
Women	12-14	3.2	14	20	0

Course setter: Samantha Saeger

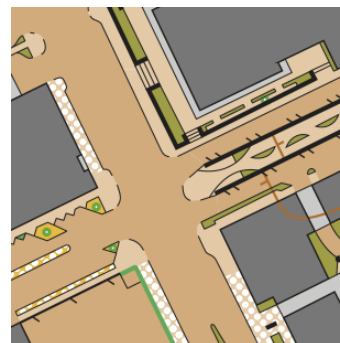
Terrain: City streets and park in downtown Birmingham. The area is almost completely flat. This is an urban environment with paved streets, sidewalks, and some grass.

Visibility: very good

Runnability: very good

Start time: 9:00 am mass start

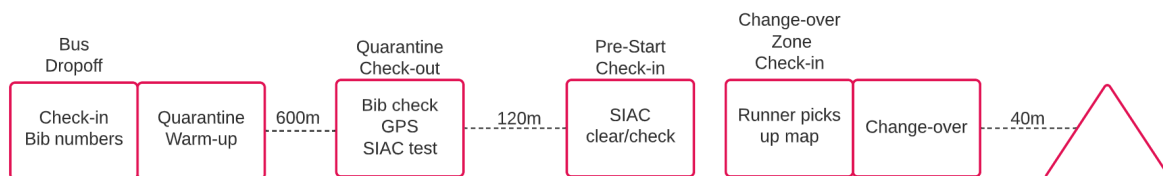
Quarantine: The quarantine opens at 7:30 am and the latest check-in time is 9:00 am. There is space indoors and outdoors. No warmup map will be provided. Athlete bags can be left at the bag drop in the quarantine and organizers will transport them to the recovery zone at the arena. Team officials and non-competing athletes must follow organizer directions to reach the arena.



Pre-start/call-up: Runners will be allowed to pass through the quarantine check-out tent, which is 600m from the quarantine building, at the following times:

- Leg 1: 8:50 am
- Leg 2: 9:00 am
- Leg 3: 9:10 am
- Leg 4: 9:20 am

Runners should arrive at the quarantine check-out tent before these times in order to test their SIACs and to have their GPS unit placed in their harness. They will be permitted into the pre-start area at the times listed above. There are bathrooms and a small warm up area available between the pre-start and the change-over zone.



Maps: The maps are rolled and enclosed with a paper loop. The team's start number and leg are visible on the outside of the map and it is the runner's responsibility to take the correct map from the map table. You will keep the rolled map in your hand until the start or until you have been tagged by your teammate. There is no map flip or map exchange.

First leg: First leg runners will proceed to the start line at 8:57 am and will be lined up by start number. Runners may remove the paper loop but must keep the map rolled up until the start official has signaled the start.

Additional legs: Second, third, and fourth leg runners may watch for their previous leg runner passing the spectator control. The spectator control is approximately halfway through the course. It is the runner's responsibility to enter the Change-over Zone and pick up their map in time.

Change-over procedure: Runners finishing their leg will run across the finish line and tag their teammate across the change-over zone fence. Runners may unroll their map once they have been tagged.

Starting point: The start point is marked with a control flag that is immediately visible from the change-over zone.

Spectator control: Runners will visit a spectator control visible from the pre-start area approximately halfway through the course.

Special Notes: See note about electrical boxes from the Sprint.

Mass start for slower teams: A mass start for 2nd, 3rd and 4th leg runners of slower teams may take place if needed approximately 10 minutes after the leading teams have exchanged to their fourth leg runner. The exact time will be announced well in advance in the change-over zone.

Recovery zone and cool-down: After finishing their leg runners will proceed to the recovery zone. There will be shade and an area for cooling down.

Maximum running time: The maximum running time for a team is 120 minutes.