

2016



# North American Orienteering Championships 2016 Hanover NH



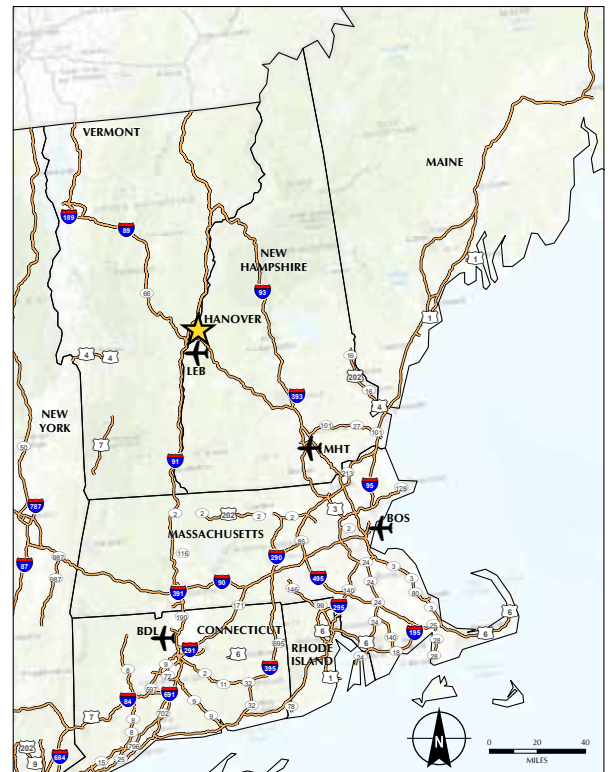
## Bulletin 2





The North American Orienteering Championships (NAOC) is a biennial regional event, sanctioned by the International Orienteering Federation (IOF). NAOC 2016 will be hosted by Dartmouth College and Orienteering USA Clubs, September 23 to 25 in Hanover, New Hampshire. Hanover is located in the heart of the Connecticut River valley, three hours from both Boston and Montreal.

Passports are needed to enter the United States. For visa information, please visit the federal travel website: <http://travel.state.gov/content/visas/en.html>



# Welcome to NAOC 2016

## From Philip Hanlon, President of Dartmouth College

As the co-host of the 2016 North American Orienteering Championships (Sept. 23-25, 2016), Dartmouth looks forward to welcoming you! We have partnered with Orienteering USA to offer excellent orienteering on our campus and in surrounding areas. Dartmouth, a member of the Ivy League, is located in Hanover, New Hampshire, a wonderful college town with lots to offer, which is part of the Upper Valley region of New Hampshire and Vermont. New England fall foliage will be getting into full swing and with the backdrop of the Connecticut River, we are certain that you will have a wonderful time at this premier orienteering event.

## From Peter Goodwin, Event Director

I am pleased to invite you to NAOC 2016, the North American Orienteering Championships. An organizing team is preparing a superb event with great courses on challenging terrain, but it is the people who come to run those courses that really make the event. Orienteering USA and many volunteers from clubs across the country are working with Dartmouth College in Hanover, New Hampshire, to bring you some memorable orienteering. Support from the college has been wonderful and they are looking forward to having the Sprint Event on their historic campus. The new and revised maps will allow for great challenges and the organizers are working hard to bring you a first class event.

Events leading up to the championships, including the US Classic Championships the weekend prior in southeastern New York and events at West Point, will allow you plenty of orienteering opportunities during the week before NAOC 2016, and the color in the Upper Connecticut Valley will be spectacular! We are looking forward to having people from across North America and from abroad come and enjoy Hanover, NH for a weekend of fun. Join us and Head for the Hills in Hanover for NAOC 2016!



Storrs Pond • Burnt Mountain • Dartmouth Campus



**T**he North American Orienteering Championships (NAOC) 2016 encompasses three IOF World Ranking Events (WRE), the Björn Kellström Cup, and the Future Champions Cup, all on the historic Dartmouth College campus and its surrounding forests. The week before NAOC 2016 will feature O-Fest 2016, headlined by the U.S. Classic Championships and including training on some of the best regional maps.

NAOC 2016 is open to everyone, but only members of North American orienteering federations are eligible for NAOC medals, and the sprint relay is reserved for national team members. After battling it out over the four races of this event, the triumphant nation wins the Björn Kellström Cup, with the Future Championships Cup going to the winning junior national team. For more information on scoring for the Cups, please visit the website.

Over 500 competitors from 10 different countries will take part in NAOC2016, and we are looking forward to hosting everyone.

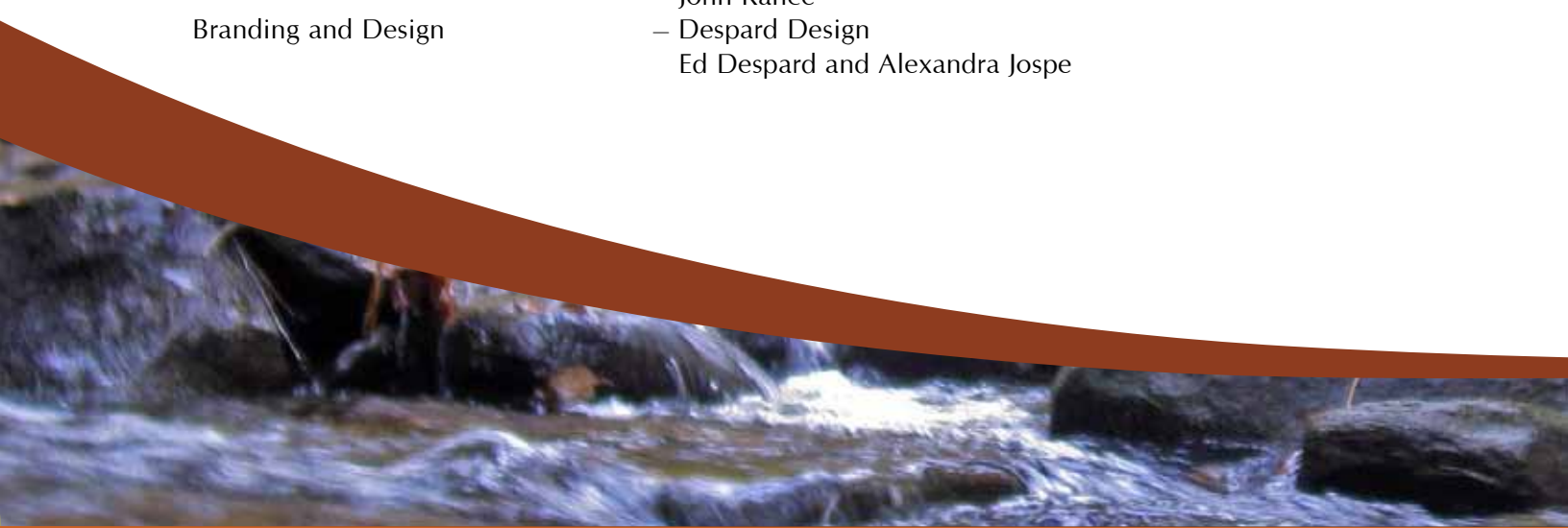
Website: [www.NAOC2016.us](http://www.NAOC2016.us)

Email: [pgwolfe66@gmail.com](mailto:pgwolfe66@gmail.com)

Facebook: [bit.ly/NAOC2016](http://bit.ly/NAOC2016)

## Coordinating Committee

IOF Adviser	– Stefan Bergstrom
Event Director	– Peter Goodwin
Assistant Event Director	– Donna Fluegel
Registrar	– Barb Dominie
Course and Map Coordinator	– Mark Dominie
Financial Administrator	– Darrell Scott
Public Relations Coordinator	– Janet Tryson
Dartmouth College Liaison	– Brian Kunz
Course Setters	– Glen Tryson Alar Ruutopold Linda Kohn
OUA Course Consultants	– JJ Cote David Cady Eric Weyman
Course Vettors	– Ken Walker Ernst Linder Carl Childs
Jury	– Greg Balter Neal Barlow John Rance
Branding and Design	– Despard Design Ed Despard and Alexandra Jospe





# Travel

## By Car

3 hours from Boston, 5 hours from New York City, and 3.5 hours from Montreal.

## By Plane

Manchester-Boston Regional Airport: Manchester, New Hampshire (MHT) - 75 miles, 1.2hr drive

Logan International Airport: Boston, Massachusetts (BOS) - 120 miles, about 2.5hr drive

Bradley International Airport: Hartford, Connecticut (BDL) - 150 miles, about 2.5hr drive

Lebanon Airport (regional): Lebanon, New Hampshire (LEB) - 15min drive. Limited service and subject to weather conditions

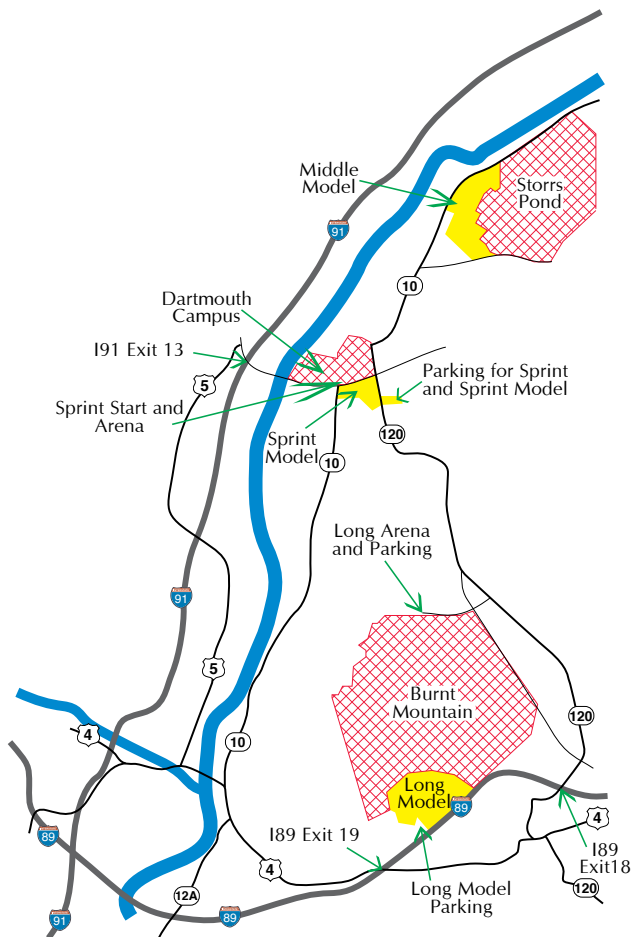
## By Bus

Dartmouth Coach offers daily service between the Dartmouth campus and Boston's South Station and Logan Airport.

Greyhound serves White River Junction, Vermont, about 5 miles (10 minutes driving time) from the Dartmouth campus.

## By Train

Amtrak's Vermonter service, connecting Northern New England with New York City and Washington DC, arrives daily in White River Junction, Vermont, about 5 miles (10 minutes driving time) from the Dartmouth campus.



### Storrs Pond

43.722439,-72.262854

Middle Distance model and race

### Burnt Mountain

43.644801,-72.274200

Long Distance model

### Burnt Mountain

43.674106,-72.261494

Long Distance race

### Dartmouth Campus

43.700268,-72.280335

Sprint model, Sprint parking,  
Saturday dinner, Evening program,  
Sprint race, Elite Sprint Relay



Storrs Pond • Burnt Mountain • Dartmouth Campus



# Program

## Thursday 22 September

1:00 - 5:00 PM

– Middle Event Headquarters and Registration open at Storrs Pond, north end of cross-country parking lot.  
Camping information will be available.

1:00 PM - Dusk

– Model event for Middle Distance open at Storrs Pond

7:00 - 9:00 PM

– Registration/Middle Event Headquarters open at Storrs Pond, north end of Cross Country Ski Area parking lot.

Camping information will be available.

2:00 PM - Dusk

– Model event for Long distance open at Burnt Mountain

## Friday 23 September

8:00 AM

– Model events for Middle, Sprint and Long Distance open

10:00 AM - 5:00 PM

– Middle Event Headquarters and Registration open at Storrs Pond, north end of Cross Country Ski Area parking lot.

Camping information will be available.

11:00 AM

– Team leader meeting for middle

12:30 – 3:45 PM

– Starts for Middle Distance at Oak Hill/Storrs Pond

5:30 PM

– IOF Awards for Middle Distance Elite Classes

6:00 PM

– Team leader meeting for long

## Saturday 24 September

8:00 AM

– Model events for Long and Sprint distance open

9:00 AM - 4:00 PM

– Long Distance Event Headquarters and Registration open at Burnt Mountain. Camping information will be available.

10:00 AM - 1:30PM

– Starts for Long Distance at Burnt Mountain

4:00 PM

– Sprint embargo in effect on Dartmouth Campus

4:30 PM

– IOF Awards for Long Distance Elite Classes

5:00 PM

– Team leader meeting for sprint (Immediately following awards)

6:00 PM

–Dinner at Dartmouth College Campus, in the Class of 1953 Commons.  
You must keep out of embargoed areas as you walk from designated parking near Thompson Arena

7:45 PM

– Awards ceremony for Middle and Long Distance championships and Presentation of the history of U.S. Orienteering at Alumni Hall, in the Hopkins Center

8:00 PM

– Entries due for Elite Sprint Relay. Final team rosters are not due until 10:00 AM Sunday, but teams must be registered by 8:00 PM

## Sunday 25 September

7:00 AM

– Model event for Sprint Distance open at Dartmouth Campus

7:00 AM

– Sprint Event Headquarters/Registration at Dartmouth College arena

8:00 - 10:00 AM

– Starts for Sprint Distance at Dartmouth College Campus

11:00 AM

– Quarantine for Elite Relay participants

11:00 AM

– Relay guides released for sale

12:00 PM

– Elite Sprint Relay starts

1:00 PM

– IOF Awards and NAOC Awards Ceremony for Sprint and Sprint Relay including Future Champions and Bjorn Kjellstrom Cup awards.

# Registration

All registration will be through the standard EventReg system used by Orienteering USA. The link to registration is on the Registration/Fees page of the NAOC2016.us website.

M/F-21+ and M/F-20 competitors are required to enter their IOF ID. If you do not have an IOF ID, you must create an account on IOF Eventor prior to registering for NAOC.

	Adult (age 21+)	Junior (age 20 and under)
Middle	\$67	\$33
Long	\$67	\$33
Sprint	\$52	\$26

Late fees are in effect; online registration closes at Midnight EDT 16 September 2016.

Orienteering USA and Canadian Orienteering Federation members have fees reduced by \$4 per event (\$2 for Juniors).

## Schedule of Fees

3-16 September - Late fee of \$20 per competition day is in effect (\$10 for junior entries).

12 September - Last day for mailed payments; they must be received by the registrar by 16 September.

16 September - Online registration closes; no refund for cancellation after this date.

**There will be no day-of entries except recreational white courses which will be offered each day.**

## Model Events and Event Headquarters

The model events will provide an area and a map relevant to the NAOC competitions. Maps will be included in the competitors packets. There will be some controls in the forest on representative features. The Event Headquarters will move every day to the race site. If you cannot find an official at the Event Headquarters, please email or call Peter Goodwin.

### Competition Office Contact

Peter Goodwin, Email: pgwolfe66@gmail.com Phone: (603) 998-3582

### Middle Distance

The Middle Distance model is at Storrs Pond. The model opens at 1:00pm on Thursday 22nd September, and remains open during daylight hours until the event starts at 12:30pm on Friday.

### Long Distance

The Long Distance model is at the southern end of Burnt Mountain. The model opens at 2:00pm on Thursday 22 September, and remains open during daylight hours until the event starts at 10:00am on Saturday.

### Sprint Distance

The Sprint model is on the Dartmouth Campus. The majority of the campus is embargoed from 4:00 PM on Saturday until after the completion of the sprint race. The Sprint model opens at 8:00am on Saturday 24 September, and remains open during daylight hours until the race starts at 8:00am on Sunday. All orienteers must stay out of the football stadium area, including where model control S3 will be located, until 6:15 PM on Thursday.



### **Storrs Pond/Oak Hill, Middle Distance model event and arena**

From Hanover, New Hampshire, take NH Route 10 North about 1.4 miles to the first traffic circle and turn right onto Reservoir Road. After 0.6 miles turn sharply left onto Oak Hill Drive. The parking area for Storrs Pond Cross Country Ski Area is down the hill on the right.

Registration and information about camping will be available in the building at the north end of the Cross Country Ski Area parking lot. GPS Coordinates: 43.722439, -72.262854

Middle Distance Model event start and Camping are down the hill beyond the Cross Country Ski Area parking; some parking is available at the campground.

Middle Distance Arena is at the Cross Country Ski Area. If the car parking area is full continue down Oak Hill Drive and park at the campground.

Embargoed areas: All areas North and East of Oak Hill Road/Cross Country Ski Area parking and campground are embargoed. No travel is allowed in that area.

### **Long Distance model event**

From Hanover, travel south on NH Route 120 / Lebanon Street (called Hanover Street in Lebanon). Cross over Interstate 89 (exit 18) and continue into Lebanon, New Hampshire. At the junction with US Route 4, turn right/West and travel 0.1 mile on US Route 4. Turn right onto Mascoma Street. Continue 0.8 miles (crossing the interstate again). Immediately past a business called Top Stitch Embroidery, turn right onto a gravel drive. Follow O signs to parking. GPS Coordinates: 43.644801, -72.274200

### **Burnt Mountain, Long Distance arena**

From Hanover, travel south on NH Route 120 approximately 2.3 miles, and turn right on Lehay Drive. Go past one stoplight and follow O signs to parking. GPS Coordinates for Lehay Drive: 43.674106, -72.261494

### **Dartmouth Campus, Saturday Dinner, Evening Program, Sprint Model and Sprint Parking**

From South Park Street (NH Route 120), enter the parking area for Thompson Arena from Summer Court. Dinner is in the Class of 1953 Commons; Program in Alumni Hall inside Hopkins Center. Google address for parking: 4 Summer Court, Hanover, NH. GPS Coordinates: 43.700268, -72.280335

## **Complaints and Protests**

Orienteering USA rules, section A.31, includes:

A.31.1 Complaints against infringements of the rules by the organizers or a competitor or accompanying parties shall be made in writing to the organizer as soon as possible. The organizer adjudicates a complaint. The complainant and any other affected parties shall be informed about the decision immediately.

A.31.2 Complaints shall be made within one hour of the previously announced time of closure of the finish, or of the actual closure of the finish, whichever is later. Complaints received after this time limit shall only be considered if there are valid exceptional circumstances, which must be explained in the complaint.

A.31.3 If a complaint is against a provisional result it shall be raised within one hour of the results being posted.

A.31.4 Protests against the decision of a complaint shall be made in writing to the organizer within one hour of the announcement of the complaint decision.

Complaints and protests shall be submitted in writing at the results table per the schedule above, or to the Event Director. If needed to consider a protest, a jury will present their findings before the event is disbanded.



## Competition Classes

The NAOC 2016 elite classes (M/F-21+, M/F-20) have three WRE races. North American Championship awards are for eligible North American competitors in their age class only. All competition classes are open to all nationalities.

North American Championship medals will be awarded in each age class. The classes for masters runners (age 35+) are 5-year age groups, and junior classes (age -20) are 2-year age groups. Color-coded classes are open categories.

IOF Medals will be awarded to the top three elite seniors and juniors (M/F-21+ and M/F-20 classes) in each race.

White	Yellow	Orange	Brown	Brown	Green	Red	Blue
F-10	F-14	F-16	F-18	M65+	F-20	F-21+	M-21+
F-12	M-14	M-16	F55+	M70+	F35+	M-20	
M-10	F-Yellow	F-Orange	F60+	M75+	F40+	M35+	
M-12	M-Yellow	M-Orange	F65+	M80+	F45+	M40+	
M/F-White			F70+	M85+	F50+	M45+	
			F75+	M90+	M-18	M-Red	
			F80+	M-Brown	M50+		
			F85+		M55+		
			F90+		M60+		
			F-Brown		F-Green		
					M-Green		

## Punching System

This event will use the SportIdent (SI) electronic punch system for all events. Please record your SI punch number when you register. Rental SI sticks will be available at \$2 per competition day. Competitors who do not return their rental SI sticks will be charged a \$50 replacement fee.

## Existing Maps

Previously used maps of Storrs Pond-Oak Hill and Burnt Mountain can be found on the NAOC2016.us website and downloaded as needed. Look for download links at the bottom of the Maps page. These maps are embargoed areas and no entry by competitors is allowed. Both maps have been completely updated so these old maps only give an approximation of the event areas. There is no existing map of the Dartmouth Campus but model maps will be available before the competition.



## Embargoed Areas

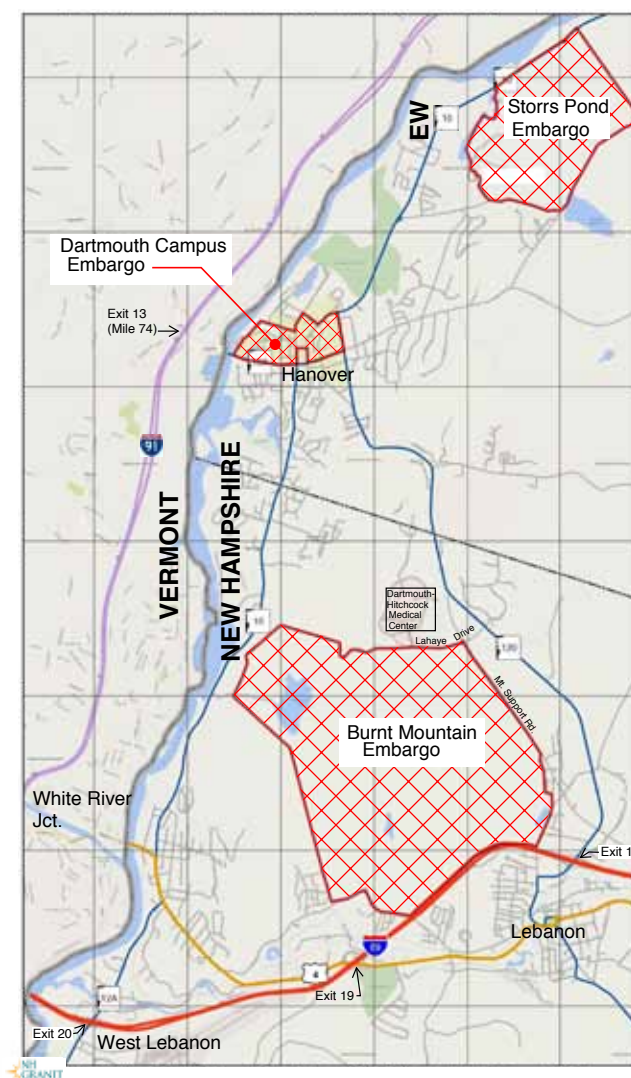
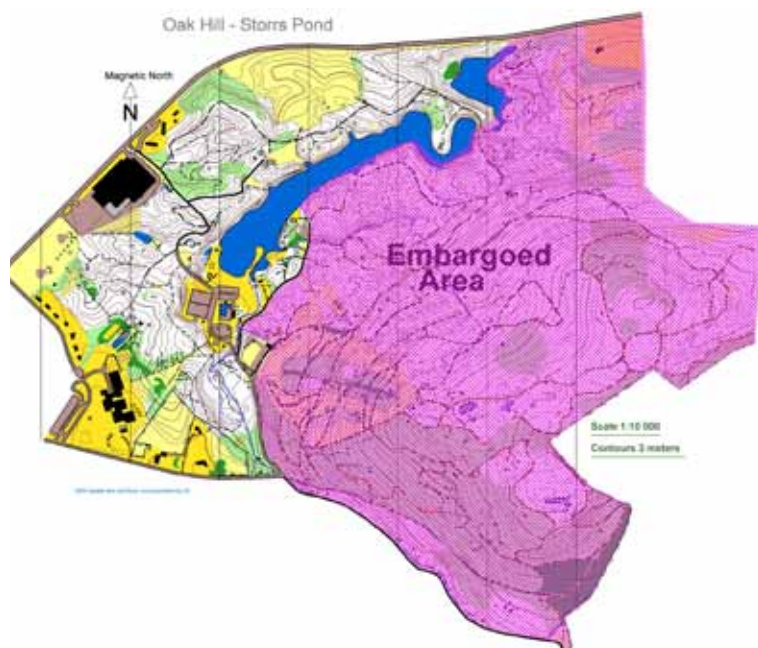
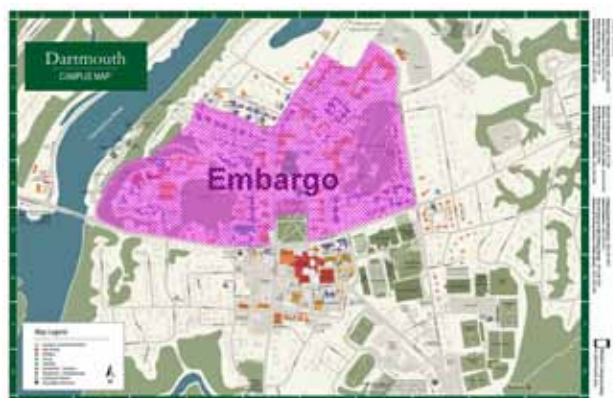
The Storrs Pond–Oak Hill area is an active cross country ski area with frequent races. The embargo of this area does allow for racers (not coaches) to ski during their races in this area although they may not have a map of any kind in their possession. No training is permitted in the embargoed areas and coaches may not enter the area to assist skiers except in a medical emergency.

The Dartmouth Campus is embargoed as shown in the map below. Competitors are allowed in the area until 4 pm Saturday, September 24, 2016. However, no training with a map or route choice testing by competitors, coaches or supporters is allowed at any time prior to the event.

Dartmouth students competing in the event who are living on campus and traveling between their dorms, dining and the competition arena are exempt from the embargo, although training with a map and route choice testing in the embargo area is not permitted. They are expected to use direct routes from point to point (dorm to dining hall for example) after 4 pm on Saturday.

Burnt Mountain is entirely embargoed except for the model area at the southern end of the map.

The embargo extends not only to competitors, but also to any coaches, team officials, supporters, or anyone else who could provide them any information regarding the map or mapped area.



## Meals

Food will be available for purchase at the arenas from local food trucks. There will likely be some sponsor representatives on site, and LLBean with their famous Boot Truck, as well as orienteering equipment vendors.

Dinner on Saturday September 24 (6 pm) is reserved through Event Register and will be held at the Dartmouth College Class of '53 Commons in Hanover. The Awards Ceremony and Program will follow at 7:45 pm, at Alumni Hall in the Hopkins Center on the Dartmouth College campus. All attendees must respect the Sprint embargo and follow directions from the parking area near Thompson Arena.

## Merchandise

Teeshirts and buffs will be available for purchase at time of registration. Merchandise will also be available in limited quantities and sizes at the event site.

	Price
Men's and women's cotton blend	\$15
Youth cotton	\$15
Technical shirt	\$18
Bufs	\$7

## Babysitting

Due to insurance regulations at Dartmouth College, the organizers cannot provide child care. We will make every effort to adjust start times to allow for parents to take care of their children, but runners in the WRE classes have no flexibility in their start times and should make other arrangements as necessary.

## Lodging

Book lodging early, because NAOC2016 coincides with the popular fall foliage season and there will be competition for rooms.

Camping is available at Storrs Pond (adjacent to Middle distance map), exclusively to NAOC attendees. Sites can hold up to 10 people. More information is available on the NAOC2016 website. Registration for these campsites is separate from the event registration, and can be arranged via email. Check-in for camping will be at Storrs Pond Event Registration in the building adjacent to the Cross Country Ski Area parking. Questions? Contact camping coordinator Deb Humiston at (603) 978-2815.



# Start/Finish Procedures

## Start

Competitors must report to the start 6 minutes before their official start time. They will go through the lines as instructed by volunteers, and will be provided with control descriptions during this procedure. All WRE competitors must start at their designated time, with no exceptions given.

## Finish

Competitors' time stops when they cross the finish line. There will be no finish punch. Competitors must download their SI punch immediately after finishing.

## Sprint Relay

The start will be a mass start. All runners must be in quarantine by 11:00am, and will be led from quarantine to the relay start zone and the exchange zone.

## Late Starts

IOF rules will be followed for all classes for late starts.

### 22.9

Competitors who are late for their start time shall be permitted to start. Their new start time must be recorded.

- In an interval start, if the competitor is at the start line less than half the start interval after their start time they shall start immediately.
- If the competitor is at the start line more than half the start interval after their start time they shall start at the next available half start interval.

### 22.10

Competitors who are late for their start time through their own fault shall be timed as if they had started at their original start time. Competitors who are late for their start time through the fault of the organiser shall be timed from their new start time.

## GPS Watches

IOF Competition Rules forbid the use of GPS devices unless there is "no display or audible feedback". This applies to the WRE classes, M-20, F-20, M-21+ and F-21+. There are no restrictions on GPS watches for any other classes.

# O-Fest 2016

O-Fest 2016 combines the US Classic Championships (Ward Pound Ridge, NY, 17-18 September) with a week of self-directed orienteering training at some of the best maps in New York and New England.

## Program

September 16 - Model event for US Classic Championships at Westmoreland Sanctuary. See HVO website for details

September 17-18 - US Classic Championship Event, Ward Pound Ridge Reservation, Cross River, New York

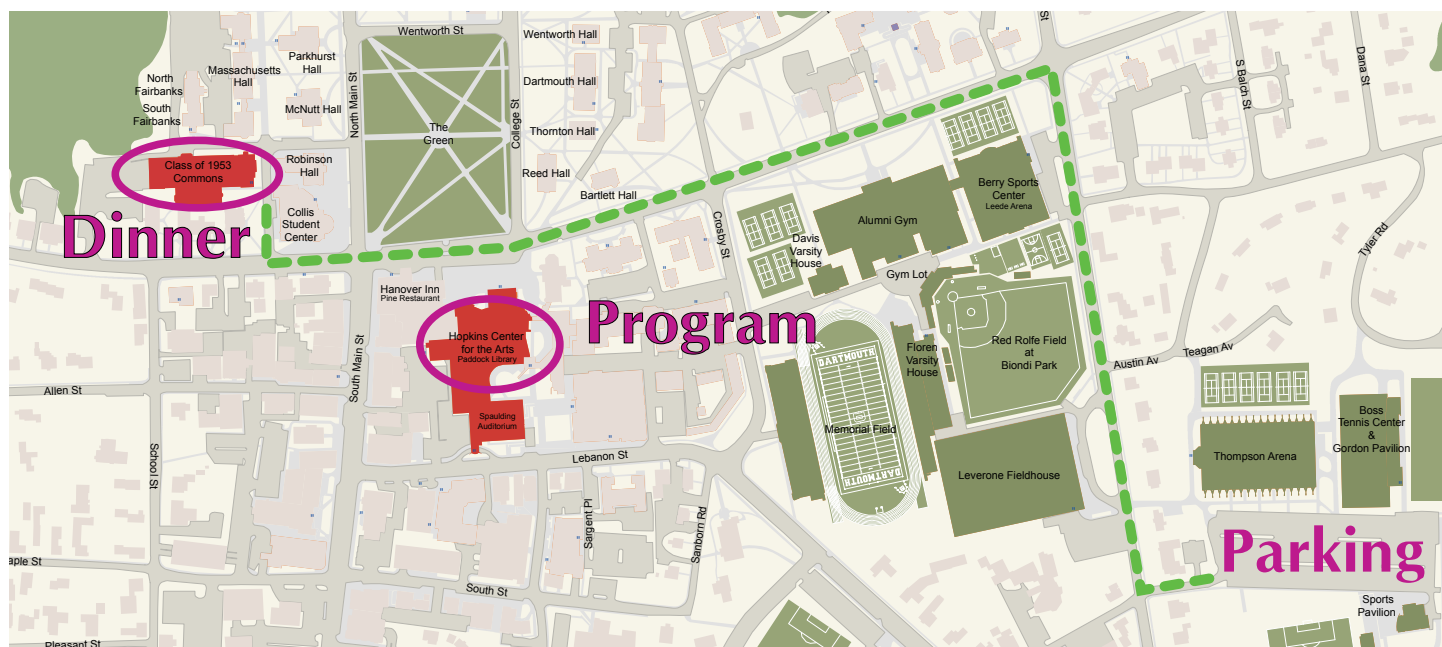
September 19 - Sprint relay at Mountain Lakes State Park, South Salem, New York

September 20-21 - informal training at Long Mountain map (USMAOC), in Harriman State Park. Streamers will be hung by Tuesday morning. There will be a mix of exercises aimed at advanced orienteers, with one of them designed by Thierry Gueorgiou. Maps are available for download at the NAOC2016 website. Maps are self-print, training is self-served and at your own risk. Please do not cross into USMA land, because we do not have permission to be there. Parking will be in the Turkey Hill Parking off of Route 6. Grab some friends and enjoy the rugged, complex terrain of the Hudson Highlands!

September 22 - Model events open for NAOC2016

## Dinner/Program Walking Route

Follow the dashed green line to walk between the parking and Dinner/Program on Saturday evening. Follow a similar route between parking and the green for the sprints on Sunday. All other areas of campus are inside the embargo.







# Middle — Storrs Pond

Scale: 1:10000

Contour Interval 5 m

Course Setter: Glen Tryson

WRE winning times will follow IOF guidelines (30-35min).

For other classes: 25-35min.

Course time limit: 2 hours

WRE Control description sheet size:

2 inches wide. Blue 6.5 inches long, Red 6 inches long, Green 5 inches long

Clothing drop: There will be a clothing drop at the start, but with the long walk, we can not guarantee when the clothing will be returned to the arena.

Warmup area: A warmup map will be provided of the area along the walk to the start.

Course	Classes	Length	Climb (m)	Controls	Water Stops
White	M-10,F-10,M-12,M/F-White	2.2	45	11	0
Yellow	M-14,F-14,M-Yellow,F-Yellow	2.8	90	12	1
Orange	M-16,F-16,M-Orange,F-Orange	3.7	120	15	1
Brown X	M65+,M70+,M75+,M-Brown	2.9	75	12	1
Brown Y	F55+,F60+,F65+,F-18,F-Brown	2.4	60	10	0
Brown Z	M80+,M85+,F70+,F75+,F80+,F85+	2.1	45	10	0
Green X	M50+,M55+,M60+,M-18.M-Green	3.9	105	18	1
Green Y	F35+,F40+,F45+,F50+,F-Green	3.6	85	15	1
Red X	M35+,M40+,M45+,M-Red	4.6	165	22	1
Green Z (WRE)	F-20	3.7	110	16	1
Red Y (WRE)	F-21+,M-20	4.6	155	22	1
Blue (WRE)	M-21+	5.5	205	26	1

## Terrain

This area has typical New England forest, mostly deciduous, with some rock features and varied topography. The terrain has a cross country ski trail network, and some previously cleared downhill skiing slopes.

## Non-Standard Symbols

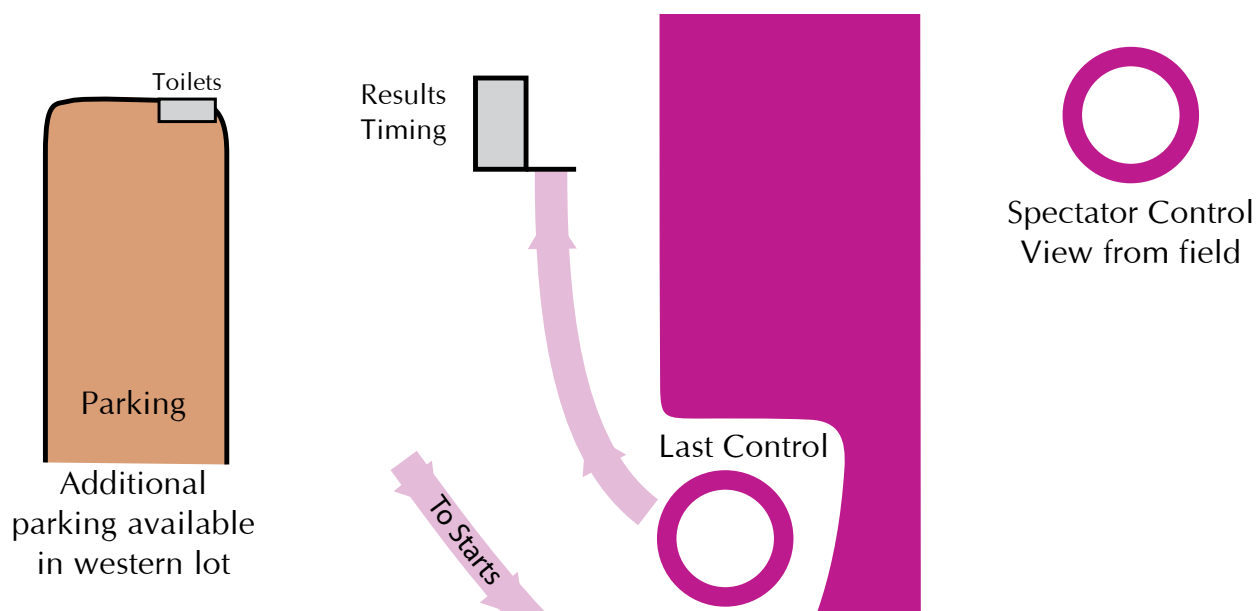
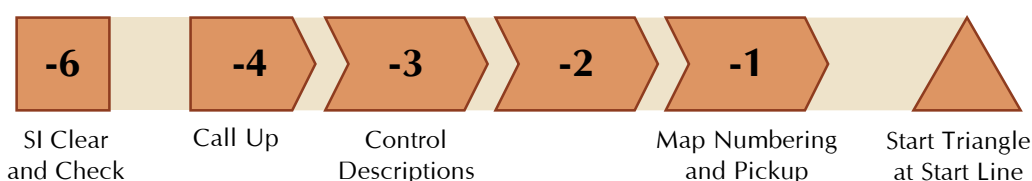
There is a disc golf course on the map and some non-standard symbols relate to features on the course. On the Middle Distance maps, a black circle is a disc golf basket; a brown triangle is a disc golf tee; a brown X is used to symbolize a root stock (roots of an overturned tree); black \* denotes exercise equipment.

## Walk to Start

Arena is adjacent to parking.

Walk to start from arena: 1.5 km, 100 m climb, estimated time 30 minutes.

## Call Up





# Long — Burnt Mountain

Scale: 1:15000 WRE, White/Yellow/Brown-Z 1:5000, all other courses 1:10000  
Contour Interval 5 m

Course Setter: Alar Ruutopold

WRE winning times will follow IOF guidelines (90-100min for men, 70-80min for women).

Other classes: 30min White/Yellow, 45-50min Orange/Brown, 55min Green, 70-80min Red.

Course time limit: 3 hours

WRE control description sheet size:

2 inches wide. Blue 6.5 inches long, Red 5.5 inches long and Green 5 inches long

Warmup area: The woods adjacent to the walk to the start may be used to warmup. No maps of these woods will be provided.

Course	Classes	Length	Climb (m)	Controls	Water Stops
White	M-10,F-10,M-12,M/F-White	1.8	70	12	1
Yellow	M-14,F-14,M-Yellow,F-Yellow	2.4	115	10	1
Orange	M-16,F-16,M-Orange,F-Orange	3.8	145	10	2
Brown X	M65+,M70+,M75+,M-Brown	4.3	210	9	2
Brown Y	F55+,F60+,F65+,F-18,F-Brown	4.0	210	10	2
Brown Z	M80+,M85+,F70+,F75+,F80+,F85+	2.6	125	8	1
Green X	M50+,M55+,M60+,M-18.M-Green	6.0	260	14	3
Green Y	F35+,F40+,F45+,F50+,F-Green	5.9	185	12	2
Red X	M35+,M40+,M45+,M-Red	8.5	360	15	3
Green Z (WRE)	F-20	6.0	215	17	5
Red Y (WRE)	F-21+,M-20	9.2	370	18	3
Blue (WRE)	M-21+	13.7	575	23	4

## Terrain

Burnt Mountain features typical New England forest, with more conifers than Storrs Pond-Oak Hill. The terrain shows more of a glacial profile with more rock features and intricate contour detail. In places, there is rocky footing and there are few major trails. There is quite a bit of vertical relief. You may encounter mountain bikers in the woods. The use of a magnifier is recommended.

## Non-Standard Symbols

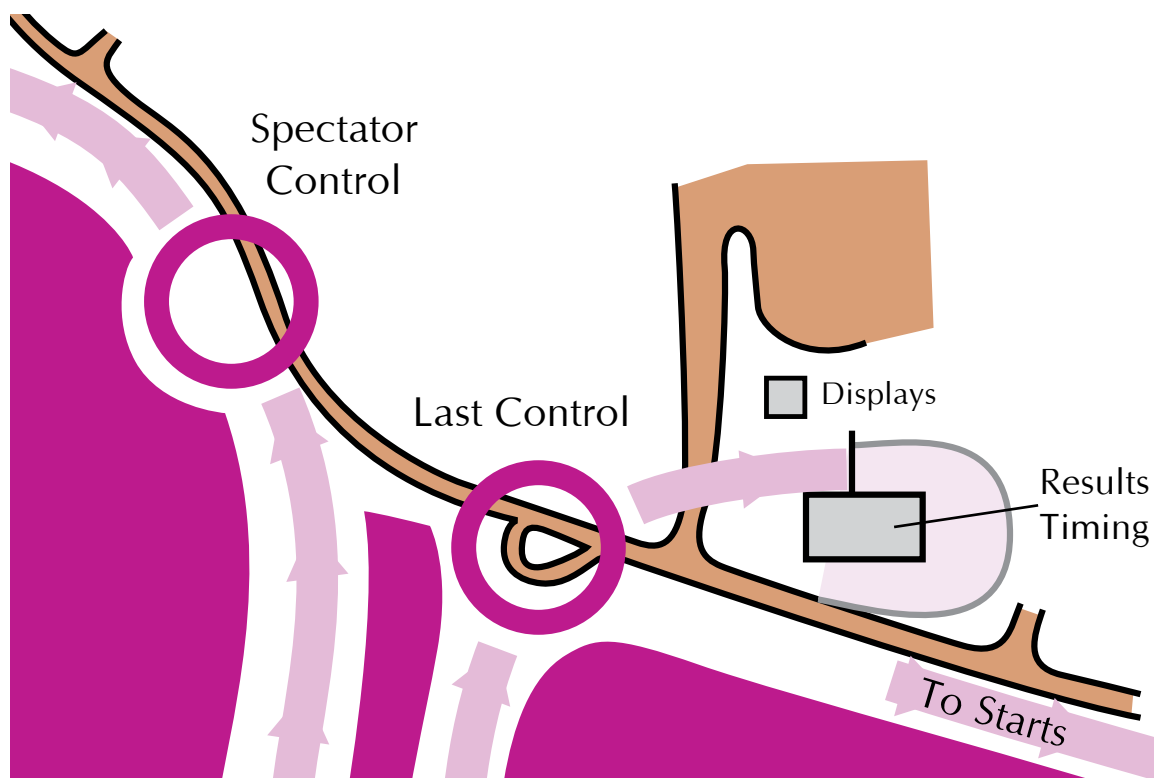
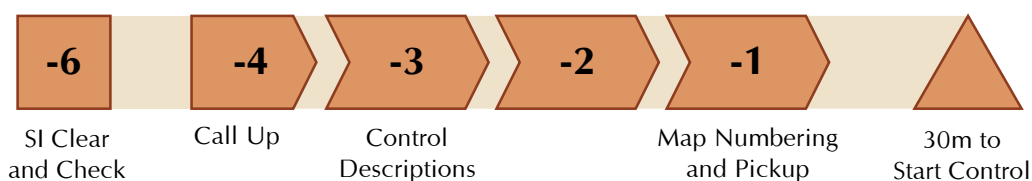
A black X indicates a wrecked car.

## Walk to Start

Arena is adjacent to parking.

Walk to start from arena: 1.4 km, 5 m climb, estimated time 20 minutes.

## Call Up





# Sprint — Dartmouth Campus

Scale: 1:4000  
Contour Interval 2 m

Course Setter: Linda Kohn

WRE winning times will follow IOF guidelines (12-15min) for all classes.

Course time limit: 1 hours

WRE Control description sheet size:

2 inches wide. Blue 7 inches long, Red 6.5 inches long and Green 6 inches long

Spikes are NOT permitted in any college building. Organizers do not recommend spikes for the race itself.

Warmup area: The model event area and map may be used as a warmup area.

Course	Classes	Length	Climb (m)	Controls
White	M-10,F-10,M-12,M/F-White	1.2	10	13
Yellow	M-14,F-14,M-Yellow,F-Yellow	1.5	15	14
Orange	M-16,F-16,M-Orange,F-Orange	2.2	20	17
Brown X	M65+,M70+,M75+,M-Brown	2.1	25	16
Brown Y	F55+,F60+,F65+,F-18,F-Brown	1.9	30	15
Brown Z	M80+,M85+,F70+,F75+,F80+,F85+	1.7	25	15
Green X	M50+,M55+,M60+,M-18.M-Green	2.8	45	21
Green Y	F35+,F40+,F45+,F50+,F-Green	2.5	45	18
Red X	M35+,M40+,M45+,M-Red	3.3	70	22
Green Z (WRE)	F-20	2.8	45	21
Red Y (WRE)	F-21+,M-20	3.1	50	20
Blue (WRE)	M-21+	4.0	65	24



## Terrain

The Campus has some wooded areas surrounding a mix of buildings and grassy quadrangles. Significant hills exist within the wooded areas. Courses will go through a cemetery. Do not touch tombstones, but it is permissible to be in the area. Spikes are NOT allowed in college buildings.

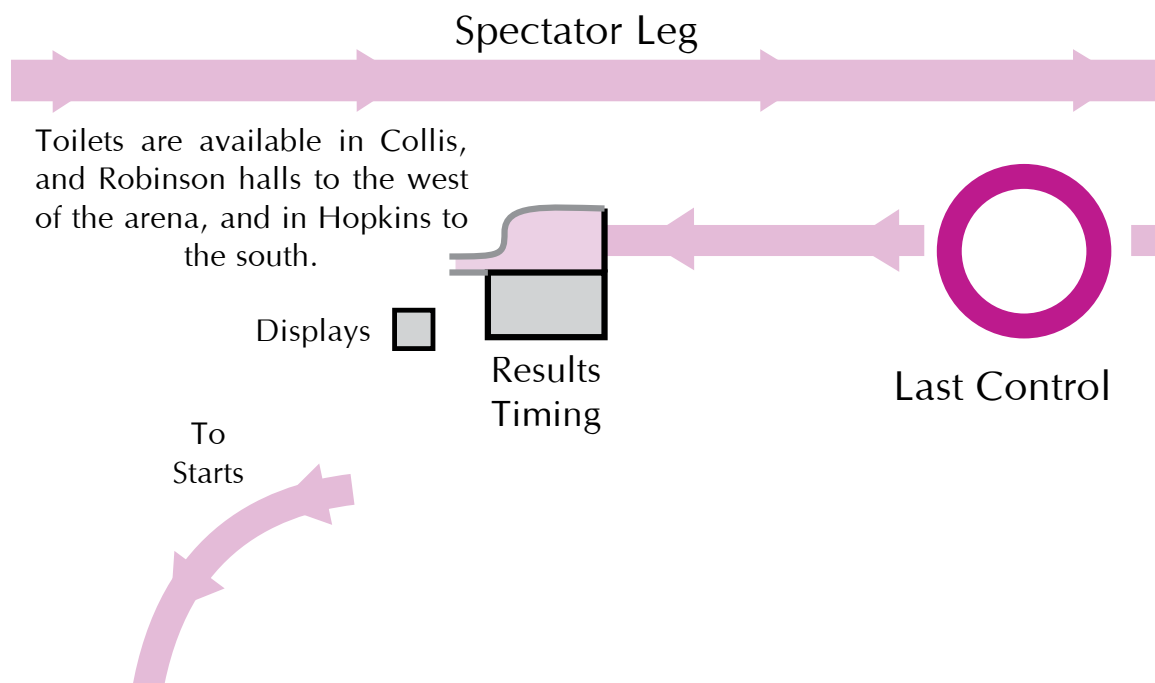
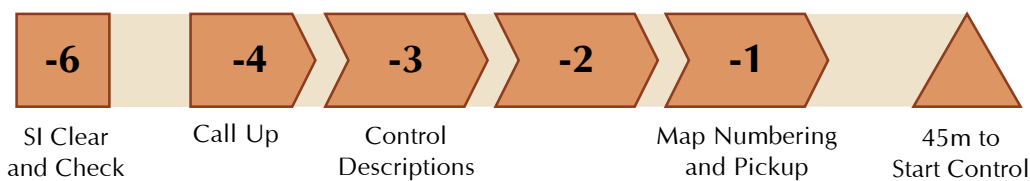
## Non-Standard Symbols

A black X denotes an art installation.

## Walk to Start

From parking to arena is 1 km; from arena to start is less than 100m. Estimated time is 5 minutes from arena (15-20 minutes from parking).

## Call Up





# Sprint Relay

Stay to watch the Canadian and American Junior and Senior Teams battle for the final points of the Bjorn Kjellstrom Cup! Purchase a Relay Guide, which includes team bios and competition maps, to enhance your viewing experience.

Scale: 1:4000

Contour Interval 2 m

Course Setter: Linda Kohn

Course lengths are between 2.2 and 2.7km

Spikes are NOT permitted in any college building. Organizers do not recommend spikes for the race itself.

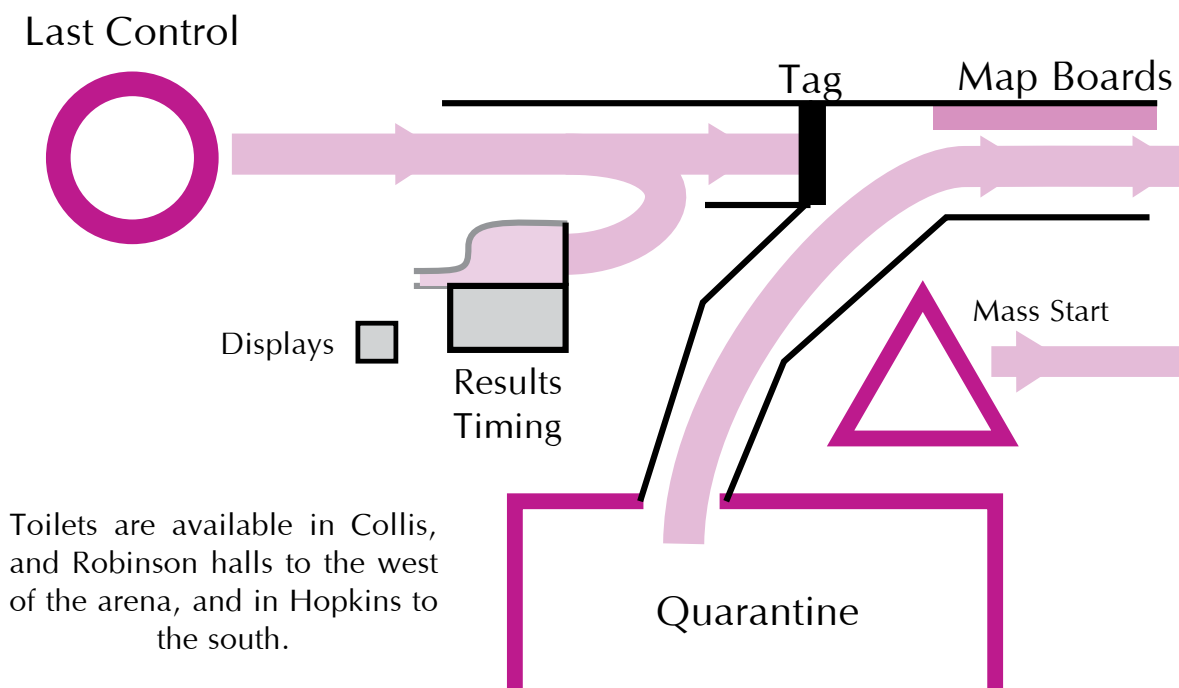
Warmup area: The model event area and map may be used as a warmup area.

Canada and USA may enter as many teams as they can assemble from the registered elite classes (M-21+, F-21+, M-20, F-20).

Each country will declare how many teams will be competing by 8 PM on Saturday 24 September. Entry fees of \$50 per team will be billed to the respective federations. All or some of the cost will be deferred by the sale of Relay Guides.

Final rosters are due by 11:00 AM on Sunday 25 September.

All teams report to quarantine by 11:00 AM, in the basement of Robinson Hall, and then move to the Dartmouth Green at 11:30. Hand-off demo will take place at 11:45, with mass start of all teams at 12:00 noon.



Head for the hills in Hanover

# Dartmouth

