**NTOA Course Setting Guide**

This document is intended to help with learning the process of setting courses for NTOA local and regional meets. It is a supplement to, not a replacement for, OUSA guidelines.

**Before going into the field:**

If you are a novice, get an experienced "course consultant" to help. Confer with the club president (Jim Stevens) or VP (Stan Darnell) to arrange this.

**Get the most current map of the venue**. Check with the map update coordinator (Stan Darnell) to see if the map has been revised since the last meet. Generally, the map printing coordinator (Ralph Courtney) will have the file from the last meet at each venue. Sometimes the previous year's course-setter will have it. Check the vintage of the map which should be in the file name and on the map itself.

**Get OCAD software**. Contact the Treasurer (Mary Lynn Genovesi) to get access to a club license or club’s mapping computer with the software on it. Have your course consultant help you learn the software, if necessary.

**Get the bag numbers you will use**. Contact Bag Coordinator (Mary Lynn) or Equipment Manager (Ralph).

**Read the official OUSA course-setting guidelines.**

**Start a new course-setting project in OCAD.** Don’t use a wizard. Add the base map as your background map. Play with the software awhile. Get help or training session when you need it. Your course consultant would be primary trainer but any experienced course-setter in the club can help.

**Design a basic course framework.** Pick locations for the start and finish. It’s helpful to have them located near each other and near parking and restrooms. Some venues may provide an opportunity to utilize a shelter or building with electricity. Consult with the meet director.

**Determine a desired direction of flow.** It’s good for all courses to move in the same general direction if possible. It simplifies the finish chute design. In cases where controls are shared by different courses, it reduces the chance of a runner on one course seeing runners from another course coming toward them from a control they are seeking, and thereby being led to the control by the traffic rather than by their skill. It is the same rationale for avoiding doglegs in the design.

**Make rough draft courses.** Pick potential control points on the map. Some of these will be changed later after visiting the field, but this will give the shape of the design and something to start with. Depending on the expected number of participants, a second White and/or Yellow course may be needed. Usually, a separate first and second control is enough to make a difference between the A and B courses. It will be easier to drop a B course than to add one later. Consult with the meet director about past participation numbers and if B courses will be needed. The first control point on each course must be unique. Subsequent points may be shared.

**Gather materials for field work.**  These are suggested items. Keep them in a pack with multiple pockets for easy access.

**Clipboard** or binder with:

**All-Control map** (with all proposed control points)

**Base** **Map** (with no controls) to mark where base map changes are needed.

**Course Statistics** printout listing which course each control is on and what the control order is on that course. This will help when you need to change a proposed control location.

**In Pockets**:

**Compass**

**Black Sharpie Markers** formarking ribbons

**Pencils and pens** for recording control descriptions and amending map.

**Flagging Tape**

**Notebook**

**Garden** **clippers**

**In Pack:** Backups for all the items in pockets list plus any items you would take on a day hike such as:

Water

Food

Phone

Battery backup

Flashlight

Poncho

Insect Repellant

**Field Work**

**Recon:** About 5 or 6 weeks before the event.

Visit the venue with a map and check for new construction, trail closures and major map changes. Confer with the ranger or land manager if venue is private property such as a church or scout camp.

If you are not already familiar with the venue. take time to explore the terrain, check map accuracy, and look at major routes. Check locations for the start and finish and discuss that with the meet director.

**Ribbon-Hanging:** About 4 weeks before the event.

Visit the control points , water stops, and the start and finish locales that you chose in the draft courses design. At each control point, verify the accuracy of the map and its suitability for the intended course(s). If you choose another point, mark it precisely on the map. (Also check the accuracy of the map along potential routes, especially on beginner courses.)

Find a good spot to hang the control bag and an e-punch box. Write the control #, “NTOA.COM”, and the event date on the ribbon with black marker. Use enough ribbon that it will be easily spotted by someone helping you to deploy later. Tie it where you want the bag to hang. Decide if a stake will be needed, and hang the ribbon on the nearest possible good place. Remove hazards like poison ivy vines, greenbriers, head-level twigs (eye-pokers) and excessive foliage with garden clippers. Preparing the location now will be easier than on event weekend. Remember that control placement should be appropriate for the difficulty level of the course.

Above all, the point should be safe. Avoid dangerous places like steep slopes, edges of high bluffs, barbed wire fences, bee hives and limbs that could fall during competition. Remember that we have some short folks and older folks (esp. on Brown) so don’t make the control too hard to reach.

In your notebook (or on the course statistics list), record the control # and control description. Note if a stake should be used. Record map changes on your base map and make sketches in the notebook if necessary.

**At the Computer**

**Create the control descriptions** in the OCAD course-setting project. Some course-setters will also use the CLUE program to create text control descriptions for White and Yellow.

**Make course adjustments.** Move control point circles for those you had to relocate.

**Check the distance and climb** for each course to insure they are within OUSA guidelines. See separate document.

**Make base map changes.** Do this on a newly saved copy of the base map which should use a current date in the file name. Retain an unaltered digital copy of the base in case you need to start over. On the new base, change event date on the map header. Water stops and out-of-bounds may be marked on the base for this map and then changed next year. Look for hidden symbols in the features menu on the right side that may be toggled on and off for high or low water conditions. If you are limited in your ability to work on the base map, confer with your consultant and map update coordinator (Stan).

**Ribbon Vetting**

About 2 or 3 weeks before the event, ribbon vetting can be a good idea to assure that the courses and points are correct and reasonable. The course consultant or meet director may help with this. Sometimes a person can be found who cannot participate on the day of the event, but would like to run the course(s) anyway. This must be early enough that there is time to make corrections if problems are found

**Equipment**

Coordinate the **equipment** **manager** (with Ralph) to get the control bags and stakes you will need. This can often be done at the preceding meet. Get a few extra bags so you have replacements in case you find damaged ones or missing punches. It’s easier to switch numbers than repair bags. Check and sort the bags ahead of deployment.

Coordinate with the **E-Punch Coordinator** (EPC) to plan when they will get export file from you and when you will get programmed boxes from them. This should happen well before control deployment.

**When the courses are finalized**

**Write the course-setter notes** and send a copy to the website team (Lisa Carr, Stan, and Mary Lynn). You may want to get a copy of a previous year’s notes and modify those. The notes should include specific info that is not already covered in the event page on the website. These include any non-standard symbols used on the map, a list of specific features the special item X and O on the map may refer to, known issues with the map quality that have not been resolved yet and restrictions imposed by the venue management. Also convey conditions that may affect participants course choice such as which courses will have water crossings or if a course may be more challenging than usual. Also add a table with raw distance, climb and number of controls for each course. Do this early so it can be posted before most folks try to pre-register.

**Send the courses export .xml file** to the EPC. You will need to have the boxes back from the EPC ahead of deployment.

**Send OCAD course-setting file and the OCAD base map** file to map printing coordinator (Ralph). Verify who will print the control description sheets. This is the course-setter’s responsibility , but map printer will usually do it. Also verify who will print all-control maps and clue-sheets for bag pickup. Generally, maps will be printed on Friday morning before the meet after registration closes on Thursday. Coordinate so that you give the map print coordinator time to prepare files

**Bag-hanging and box deployment.** Timing depends on the venue. It can be done a week (or even two) before the event in secure locations like boy scout camps. In busy public parks, you may need to wait until the Friday before the event. Some of the most exposed controls may need to wait until Friday evening or Saturday morning to be placed. Get help to make this go faster. The meet director can help recruit for this task.

**Night before deployment**: Print a few all-control maps and all-control cluesheets for your assistants. Mark which controls will need stakes on the clue sheets.

**Day of deployment**: Be sure assistants have maps, cluesheets, cutters, twine. Distribute boxes, bags, and stakes, making sure that all are accounted for. Review proper box handling. Exchange phone numbers. Afterward debrief the assistants to assure all ribbons were found. If ribbons were not found, take time to visit the location and verify bag was placed correctly.

**Clue-sheets.** (Unless other plans were made with the printingcoordinator.) After the close of pre-registration, usually at noon of Thursday before the event, an email is distributed detailing the numbers registered for each course and the suggested quantities of maps and cluesheets to print. Print copies of the clue-sheets, cut them apart, and separate them by course into zip-lock bags.

**Control Pickup maps and all-control clue-sheets (**Unless other plans were made with the printing coordinator.) If there is an assisting school include written instructions on the cluesheets about proper bag and box handling.

**Event day**

**Bring these items:**

**Clue-sheets** in plastic bags

**Master Map set** and cluesheets, one for each course. For your own reference.

**Course-setting bag** with spare punches, twine, cutters, markers, etc.

**E-Box Cases with Admin E-boxes.** Includes Start, Finish, Clear and Check, plus backups.

**Bins for control bags** with any bags that weren’t already deployed.

**Maps and Cluesheets for Control Pickup** (unless other plans were made with the map print coordinator)

**Before runners start:**

**Deploy final controls** (if any remain)

**Construct start triangle.** Place the unnumbered control bag at the triangle so it is easily visible when approached from the start line.

**Meet** **early** **starters** (if any) and get them going. Must have a clear, check and start box ready.

**Establish start line location.** (w/ Meet Director or Start Captain). Be sure they get clue-sheets and admin boxes for start, clear and check plus back-ups.

**Make sure water stops are deployed** in correct locations. Coordinate with equipment manager and assisting school (if any).

**Supervise finish chute construction.** Be sure finish e-box and backup are in place.

**During race:**

**Relax!** Be available to go into field to solve problems with missing controls, broken equipment, etc.

**Plan control pickup. (**Consult with assisting school commander, if any). Prepare maps specifying which teams or individuals will gather which controls.

**After courses close:**

**Instruct control pickup teams.** Each team should have a backpack, scissors or box-cutter, map case holding an all-control clue-sheet and map with their area outlined. It is helpful to have their specific control numbers listed, along with the number of stakes. I also want each team to have phone, but check with their commander on this. I suggest the following instructions be delivered verbally and printed on the cluesheets.

Take ONLY the bags and boxes you are assigned

Do not cut the white bag strings. Cut only the brown twine.

Take ALL the string, ribbon, boxes, bags and stakes with you.

Handle boxes Carefully,

Do not toss or drop them.

Store boxes inside ZIPPED pouch of backpack.

In case of problems, call: (include your cell# or commander’s #).

As teams return, supervise the check-in of all material. Use separate lists for bags and boxes. Have teams fold control bags neatly for storage with punches and string inside and numbers showing. Return bags to their bins in order, boxes to their carrying cases. Make a record of any damaged bags, missing punches, missing numbers, etc.

Be prepared to gather any controls that the teams missed.

After event:

Usually the equipment manager or course-setter for the next event will take the bins of bags and the next event’s EPC will often take the e-boxes. However, you may have to retain those and arrange to turn them over later.

You can upload a map to Route Gadget or O-Track, so participants can compare their routes and times. If you do that, publicize it.

Stan Darnell

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