



COMPUTER TEAM LEADER'S HANDBOOK

Introduction

These days, running an orienteering event depends heavily on computers and electronic equipment. In particular:

Before the event

- (a) The SI boxes have to be programmed to be "awake" for the appropriate period of time (and to have the correct ID numbers).
- (b) The courses need to be entered into the OE2003 Event Management software.

Either before the event or during the registration period at the event

- (c) The competitors' information needs to be entered into OE2003.

During the event

- (d) There may be a need to print out additional maps.
- (e) There needs to be a facility for competitors to download their dibbers and receive print-outs of their split times.
- (f) Provisional results should be displayed during the event.
- (g) Towards the end of the event it will be necessary to check whether any competitors are still out in the competition area.

After the event

- (h) The results and split times need to be prepared for issuing.

The Computer Team Leader is the person charged with the responsibility for making all this happen. He or she has to obtain and set up the necessary equipment, find volunteers to man the computer station at the event, and resolve any problems (with the equipment, the software or the procedures) that arise during the event.

This document attempts to capture what it is that the Computer Team Leader needs to do and to give some practical advice on how to do it.

This is version 2.0 of these notes. Please check the Event Organisation Toolkit area of the CLOK web site (at www.clok.org.uk) to see if there is a later version.

1 SI Punching or Conventional Pin-Punching?

ACTION: Contact the Organiser and/or the Planner and check whether the event is going to use SI punching or conventional pin-punching.

The remainder of this document assumes that the event will be using SI punching.

2 Obtaining the SI Equipment.

The NEOA SI equipment

Most CLOK events use the NEOA SI equipment, which consists of:

- 72 control boxes, usually configured with ID numbers 101 - 172.
- 8 boxes configured for use as Clear stations (2 boxes), Check stations (2 boxes), Start (2 boxes) and Finish (2 boxes).
- **[How many?]** SI cards ("dibbers") for hiring out at events.

Note: This will change in May 2007, because NEOA has obtained some additional SI boxes. These SI boxes are the new type that do not need to be programmed to wake up for an event. Watch this space for further information.

See appendix 1 for a complete list of the NEOA SI equipment.

The custodian of the NEOA SI equipment is Andrew Nicoll. He maintains a list of bookings at www.geocities.com/andrew_nicoll/sibookings or www.geocities.com/andrew_nicoll/sibookings2007.

[Who usually books the NEOA SI equipment for CLOK events?]

ACTION: As soon as you've agreed to be the Computer Team Leader for the event, visit Andrew Nicoll's booking page and check that the NEOA SI equipment has been booked for your event. If it hasn't already been booked then contact Andrew Nicoll and book it.

ACTION: As soon as possible, and in any case at least four weeks before the event, contact Andrew Nicoll and make arrangements to get hold of the NEOA SI equipment.

The best way to get hold of the NEOA SI equipment is usually to arrange for someone to pick it up from whichever event is using it immediately before your event.

Stakes, kites and batteries

NEOA has a number of stakes and blank kites, but CLOK events usually use the CLOK stakes and kites. CLOK has:

- 69 stakes, normally labelled with ID numbers 101 - 163.
- 6 stakes labelled for use with the Clear stations (2), Start boxes (2) and Finish boxes (2).
- **[How many?]** blank kites.
- 2 "deep cycle" batteries.

The CLOK stakes, kites and batteries are usually kept in the Archers' store. **[Is this correct? Does Will Dehany still have any of the equipment?]**

ACTION: At least four weeks before the event, contact Peter or Marion Archer and make arrangements to get hold of the CLOK batteries.

Note: The Planner needs to arrange to get hold of the CLOK stakes and kites. It would be a good idea to check that he or she has made the necessary arrangements.

Computers

CLOK has:-

- Two notebook computers.
- A print server / router that is used to (a) network the two notebook computers, and (b) enable the notebook computers to print to the splits printer.
- An inkjet printer for printing results.
- A USB flash memory stick for taking back-ups of important data..

The computers and associated equipment are normally kept by Alastair Mackenzie.

ACTION: At least four weeks before the event, contact Alastair Mackenzie and arrange to get hold of the CLOK computers and associated equipment.

3 Programming the SI Boxes

ACTION: A couple of weeks before the event, contact the Planner and agree the arrangements for (a) programming the SI boxes and (b) getting them to the Planner in time for him or her to put them out in the competition area. At the same time, agree the arrangements for the Planner to give you the course specifications. (See the first action in Section 4 below.)

In particular, you will need to find out when the Planner is intending to start putting the SI boxes out in the competition area.

For a Sunday morning event, the normal schedule is as follows:

- On Saturday afternoon / evening the Planner puts out all the stakes and kites except the ones that are going to be in exposed positions on paths, etc. The Controller checks that the stakes are in the right places.
- On Saturday afternoon / evening the Computer Team Leader programs the SI boxes and delivers them to the Planner.
- On Sunday morning the Planner goes round and puts the SI boxes on to the stakes.

Because the SI boxes start drawing a small current from their batteries as soon as they are programmed, it is best to program them shortly before the Planner is going to start putting them out into the competition area. However, don't get too hung up on trying to minimise the drain on the batteries. If it suits you and the Planner to get the boxes programmed earlier then do it that way. For example, the Planner might want to put some of the more remote boxes out on the Saturday afternoon or evening.

ACTION: About a week before the event, contact the Organiser and agree the overall timetable for the event. At the same time, it is useful to agree the registration procedure. (See the second action in Section 7 below.)

It is particularly important to agree (i) when the accommodation for the computer station will be ready (ii) when the computer system will be available for helpers' registration, and (iii) the time period for which the SI boxes need to be "awake".

A typical timetable is as follows:

08:45	Computer station accommodation ready. Computer Team Leader starts setting up the computer station.
09:30	Computer station ready for helpers' registration.
10:00	First helper's start. Registration opens.
10:30	First start for normal competitors.
12:00	Registration closes.
12:30	Last start for normal competitors.
13:00	Last helper's start.
15:00	Courses close.

The SI boxes need to wake up in time to allow "helpers' starts" at the beginning of the event and to stay awake until at least the course closing time. It's simplest to program all the boxes to be awake for the same period of time, but you may decide to keep the Finish boxes awake for an extra hour after the course closing time so that late-finishing competitors at least get a total running time. For a major event, consult the Organiser to check whether there is any danger of the start times having to be put back because of logistical problems with the parking or the arrangements for transporting competitors to the Start. If there is, then consider keeping the boxes awake longer (e.g. for an extra hour) so that they will continue to operate for the full competition period even if the start times are delayed.

Typical "awake periods" for the various SI boxes are as follows:

SI box duty	Switch on time	Switch off time
Check and Clear	Fifteen minutes before the first helper's start. E.g. 09:45	Fifteen minutes after the last helper's start. E.g. 13:15
Start	First helper's start. E.g. 10:00	Fifteen minutes after the last helper's start time. E.g. 13:15
Control	First helper's start. E.g. 10:00	Five minutes after the course closing time. E.g. 15:05
Finish	First helper's start. E.g. 10:00	Half an hour after the course closing time. E.g. 15:30

ACTION: During the week before the event, contact the Planner and find out which control numbers he or she is using.

At the same time, it is useful to get the course definitions – i.e. the sequence of control numbers on each course – which you will need in order to set up the courses in OE2003. See the second action in Section 4 below. The best approach is for the Planner to send you (a) a list of all the control numbers and (b) the control description list for each course. These can usually be printed from OCAD.

ACTION: At the appropriate time – usually Saturday afternoon or evening – program the SI boxes and give them to the Planner.

You need to program:

- (a) The SI boxes being used on the courses.
- (b) The three or four extra SI boxes that can be used to replace any SI boxes that fail during the event.
- (c) Two Clear boxes.
- (d) Two Check boxes.
- (e) Two Start boxes.
- (f) Two Finish boxes.

See Appendix 3 for detailed instructions on programming the SI boxes.

4 Setting Up the Event in OE2003

ACTION: A couple of weeks before the event, contact the Planner and agree the arrangements for the Planner to give you the course specifications.

You will need:

- (a) A list of all the control numbers that the Planner is using.
- (b) The list of control numbers (in the correct order) that make up each course.

ACTION: During the week before the event, contact the Planner and get (i) the final list of the control numbers that he or she is using and (ii) the final course definitions – i.e. the sequence of control numbers on each course. Also, agree how many "spare" SI boxes will be programmed to wake up for the event so that they can be used as replacements if needed.

The best approach is for the Planner to send you (a) a list of all the control numbers and (b) the control description list for each course. These can usually be printed from OCAD.

ACTION: A few days before the event, set up a new event in OE2003 and enter the course specifications.

See Appendix 2 for detailed instructions on setting up an event in OE2003.

You won't need to put the control descriptions into OE2003 unless you're going to use OE2003 to print out control description sheets. For most events the Planner or the map printer will print the control description sheets directly from OCAD.

5 Updating the Competitor Archive

OE2003's archive is a database containing information about orienteers and their SI-cards. This is particularly useful during the entry process, because entering an SI-card number (either manually or by a "dibbing entry") brings up the competitor's name, club and age class. provided, of course, that the competitor's information in the archive is up to date.

Each of CLOK's two notebook computers has its own independent copy of the OE2003 archive, so both copies need to be updated.

Note: There are separate archives for OE2003, MT2003 and OEScore2003. Updating the OE2003 archive does not update the MT2003 archive or the OEScore2003 archive.

Before each event, you need to update the two copies of the archive that you will be using for the event. The master copy of the competitor information is kept on the SPORTident UK database, and the relevant information can be downloaded from the SPORTident UK web site as a comma-separated value (CSV) that can be imported into the OE2003 archive using Archive Manager. See Appendix 6 for details.

ACTION: During the week before the event, download the competitor information from the SPORTident UK web site and use it to update the OE2003 archives on both the CLOK notebook computers.

[Add a note about the arrangements for updating the competitor information in the SPORTident UK database.]

6 Printing Additional Maps on the Day of the Event.

ACTION: About a week before the event, contact the Planner and/or the map printer and sort out the arrangements for printing additional maps and control description sheets on the day of the event.

Note: It is generally best to avoid the need to print additional maps at the event because this is time-consuming and distracts the Computer Team from their main jobs.

There are two options for printing maps and control description sheets on the day of the event.

(a) You can print the course maps and control descriptions from OCAD.

In this case you will need to have OCAD 8 loaded on one of the notebook computers that you will be using at the event and you will need to obtain the relevant OCAD map files – i.e. the courses file and the map template file – from the Planner or the map printer before the event.

(b) You can print the course maps and control descriptions from PDF files.

In this case you will need to have Adobe Acrobat Reader loaded on one of the notebook computers that you will be using at the event and you will need to obtain the relevant

PDF files from the Planner or the map printer before the event. There will be a PDF file for each individual course map and one or more PDF files for the control descriptions.

Note: As an alternative, the control descriptions may be in the form of an Excel spreadsheet or a Word document.

ACTION: About 2 - 3 days before the event, get the course map and control description files from the Planner or the map printer.

ACTION: When you get the course map files, check that the colour table for the template map is correctly set up for the inkjet printer that you will be using at the event. If you are using OCAD, this involves importing the colour table from the "swatch file" for the particular printer.

It is a good idea to do a test to check that you can actually print out maps using the equipment that you will be using at the event.

7 The Computer Station at the Event

ACTION: A couple of weeks before the event, make arrangements to obtain the equipment that you will need for the Computer Station.

You will need:

- The NEOA SI equipment (excluding the SI boxes). See Appendix 1 for the list.
- The NEOA dibbers for hire.
- The two "deep cycle" batteries (unless you are going to have the luxury of a mains power supply).
- The two notebook computers and associated equipment (including the router / print server, various network cables and the USB flash memory stick).
- The inkjet printer.
- Ordinary paper (for printing out results).
- "Photo quality" inkjet paper (for printing out extra maps on the day).
- Sellotape.
- Scissors.

ACTION: About a week before the event, contact the Organiser and agree (a) the procedures for registration and download, and (b) the layout of Registration, Enquiries and the Computer Station. At the same time:-

- (a) Agree how many registration cards will be needed the arrangements for getting them to the Registration point and the parking marshals.
- (b) Confirm the arrangements for printing additional maps on the day and transporting those maps from the Computer Station to the start.

There are two different schools of thought on the best procedure for registration.

The default approach is to have all competitors coming to a single Registration point at which they pay their entry fees and receive control descriptions. What happens next depends on

whether the competitor is using his or her own SI card, a hired SI card or an SI card borrowed from someone else.

- Competitors using their own SI cards then go to the computer station to do a "dibbing registration".
- Competitors hiring SI cards hand in a registration card at the Registration point, receive their hired dibber and then go straight to the Start.
- Competitors who have borrowed SI cards from other people hand in a registration card at the Registration point and then go straight to the Start.

The alternative approach is to have two separate Registration points.

- Competitors hiring SI cards or using SI cards borrowed from other people go to the "Hired or Borrowed SI Card Registration" point, where they hand in their registration cards, pay their entry fees, receive control descriptions and, where relevant, receive hired SI cards.
- Competitors using their own SI cards go to the "Own SI Card Registration" point at the computer station, where they pay their entry fees, receive control descriptions and do a "dibbing entry".

When the second approach is used it is necessary to split the control descriptions between the two registration points and to have two cash boxes.

We generally print about 50 registration cards for a District Event.

At low key events it is usually acceptable for competitors to carry their own maps to the start. In this case the maps should be rolled up and sellotaped.

ACTION: During the week before the event obtain the SI equipment.

ACTION: During the week before the event obtain the other equipment that you will need. See the first action in this Section 6.

ACTION: A day or two before the event, set up the computer(s) that you will be using for the event and do the following:

- (a) Check that the computers can talk to each other across the network.
- (b) Make sure that the OE2003 software works across the network.
- (c) Check that relevant computers can print to the splits printer via the router / print server.

This can conveniently be done when you are setting up the event in OE2003.

ACTION: A day or two before the event, print out the appropriate number of copies of (a) the registration card, (b) the notice asking competitors to register their SI-cards via the SPORTident web site, and (c) the form to enable people without Internet access to register their SI-cards.

Also, consider whether there are any signs that you might need.

8 The Computer Team.

ACTION: About 2 - 4 weeks before the event, phone round and ask people to volunteer to be members of the Computer Team for the event.

In addition to yourself as Computer Team Leader you will need:

- Two volunteers for the early shift.
- Two volunteers for the late shift.

If you are going to have a run, you will need to ensure that at least one of the computer team members on the late shift has sufficient experience to be able to deal with download problems. It is generally better for the Computer Team Leader to have a late run rather than an early one, because if the data entry is done correctly then there should be few problems during download.

[Need to provide a list of the people who have experience of being on the computer team.]

9 Setting up the Computer Station

ACTION: On the day of the event, get the Computer Station set up in time for helpers' registration (and at least half an hour before the start of the main Registration period).



[This section is now out of date. I need to re-write it for the two CLOK computers and the router / print server.]

Set-up for an average District Event

The basic set-up is as follows.

- (a) The two computers are networked via the cross-over cable.

I will refer to the computer closer to the entrance to the Computer Station as computer A and the other computer as computer B.

- (b) One of the SI reader stations and the splits printer are connected to computer A.
- (c) The inkjet printer is connected to computer B.
- (d) If mains power is not available then both inverters and both batteries are used, with the load being split between them.

Initially, dibbing registration is handled by computer A. Computer B is used for entering the data from registration cards and printing additional maps.

Once competitors start returning from their runs, computer A switches to download duties. Computer B is used for accepting the remaining entries, sorting out download problems and printing preliminary results.

Note: Since there is no reader station attached to computer B it is not possible to do dibbing registration. Instead, the computer operator needs to type in the competitor's SI card number and tab out of the field.

Set-up for a larger District event

When a larger number of competitors are expected, SI reader stations are connected to both computers.

Initially, both computers are used to handle dibbing registration, with the less busy computer (which should be computer B) also being used for entering data from registration cards and printing additional maps and control descriptions.

Once competitors start returning from their runs, one computer (probably computer A) switches to download duties, while computer B continues to be used for accepting dibbing registrations as well as sorting out download problems and printing preliminary results.

Once the registration period is over, both computers are used for downloading. The less busy computer (which should be computer B) is also used for sorting out download problems and printing preliminary results.

10 Taking Entries

Preparing to receive dibbing entries

1. In OE2003, click on **Entries** in the menu bar and then on **Direct Entries** in the drop-down menu.
2. **[Show the archive table.]**
3. **[If necessary, use View to display the Text1 field.]**
4. **[Activate the SI reader station.]**

Remember that using the SI reader station to read a competitor's dibber is equivalent to typing the SI card number into the **SI card** field in the **Direct Entries** window and then tabbing out of that field.

Taking a "dibbing entry"

1. Ask the competitor to put his or her dibber into the SI reader.

If the competitor does not have his or her SI card but knows its number then you can type the number into the **SI card** box and tab out of the box.

2. The computer will read the competitor's dibber number and get the competitor's data – name, club and age class – from the archive.

3. If the competitor's data does not come up then his or her SI-card is not in the archive. The appropriate response depends on how busy you are.

- If you have time then ask the competitor for his or her name, club and age class and type them into the computer.
- If a queue is building up then ask the competitor to go and fill in a registration form as if he or she was using a borrowed SI-card.

In either case, give the competitor a copy of the notice asking them to register their SI-card via the SPORTident UK web site.

If they say that they do not have Internet access then give them a copy of the form for registering SI-cards and ask them to fill it in and hand it in later.

4. Ask the competitor which course he or she wishes to enter. It is useful to take the opportunity to check that the competitor has picked up the correct SI card by using the competitor's name. For example, "Okay, John. Which course would you like to do?"
5. Enter the appropriate course into the **Class** box. You can do this by selecting from the drop-down menu or by typing in the two-letter abbreviation for the course name and pressing **Return**.
6. Press **Return** and check that the entry appears in the list in the top half of the screen.

Important note: Do not let the next competitor put his or her SI card into the SI reader until the current entry has appeared in the top half of the screen. If the next SI card is read before the current entry is completed then the next SI card number will over-write the current SI card number but the rest of the competitor's data will not be updated. This is a recipe for confusion during download.

Note that if you have typed in the two-letter abbreviation for the course name then you need to press **Return** twice to finish off the entry.

To put in an entry from a registration card:-

5. In OE2003, click on **Entries** in the menu bar and then on **Entries** in the drop-down menu.

If you prefer, you can use the **Direct Entries** window instead, but the **Entries** window is more convenient for typing in entries from registration cards.

6. Go to the last row of the table and use the down-arrow key to open a new row.
7. Type in the competitor's data. Remember to check the **Hired** box if the competitor is using a hired SI card.
8. Press **Return** to save the new entry.

11 Download

To prepare to download competitors' SI-cards after their runs:-

1. Switch on the splits printer.
2. In OE2003, click on **Competition day** in the menu bar and then on **Read SI cards** in the drop-down menu. This opens the **Read SI cards** window.

The **Automatic print settings** should also open. This allows you to set up the splits printer to print out each competitor's split times as he or she downloads his or her SI card.
3. In the **Automatic print settings** window, click on **[what?]**. This opens the **Label settings** window.
4. In the **Label settings** window, click on the three dots to the right of **Printer**. This opens the **Print setup** window.
5. In the **Print setup** window:-
 - Check that the printer name is **EPSON TM-90 Receipt**.
 - Check that the paper size is **80 x 297 mm**.
 - In the **Source** box, use the drop-down menu to select **Report [Cut]**.
6. Click on **OK** to close the **Print setup** window.
7. Click on **OK** to close the **Label settings** window.
8. Click on **OK** to close the **Automatic print settings** window.

9. [Activate the SI reader station.]

12 Printing Results

To print results during the event:-

1. Make sure that the inkjet printer is switched on and has ordinary paper in it.
2. In OE2003, click on **Competition day** in the menu bar and then on **Results** in the drop-down menu. This opens the **[which?]** window.

[I still have to write the rest of this section.]

13 Checking for Missing Runners

[Need to say something about checking that all the competitors have returned safely from the competition area. Interrogating the Start (or Check) boxes.]

Competition day → Other reports → Missing runners

14 Issuing Results after the Event

These days, competitors expect the preliminary results and split times to be available on the host club's web site by the evening of the event, and we should try to meet that expectation.

ACTION: After the event, check through the results for missing information, mis-spellings, etc. and make any necessary corrections in the **Entries** table.

ACTION: Once you have tidied up the information, generate electronic copies of the results and split times and send them to the CLOK Webmaster at webmaster@clok.org.uk.

Three files are needed:-

- A text version of the results by class.
- An HTML version of the split times by course.
- An "interface file" of the split times by course.

See Appendix 7 for a detailed explanation of how to generate these three files.

The text version of the results by class is used to produce the results displayed on the CLOK web site. The Webmaster has a Perl script that automatically translates the text file into an HTML page with the CLOK logo, etc. The colour lines are then added manually.

The HTML version of the split times by course is used to generate the split times displayed on the CLOK web site. The Webmaster has a Perl script that takes the HTML split times file and automatically generates an HTML page for each course.

The "interface file" version of the split times by course is submitted to Splitsbrowser and is used to set up the RouteGadget display for the event. For a Regional Event the interface file is also used to generate the data submitted to the ranking system on the BOF web site.

Alastair Mackenzie

May 2007

Note to other orienteering clubs

You are very welcome to use these notes as they stand, to adapt them for your own circumstances, or to extract relevant sections for inclusion in your own Organiser's Handbook. Where appropriate, a brief acknowledgement that the material originally came from CLOK would be appreciated.

If you have any questions, comments or suggestions for improving these notes then please contact Alastair Mackenzie.