

Apple Raceberry JaM

Demo Program for ARJ Cross Country Programs

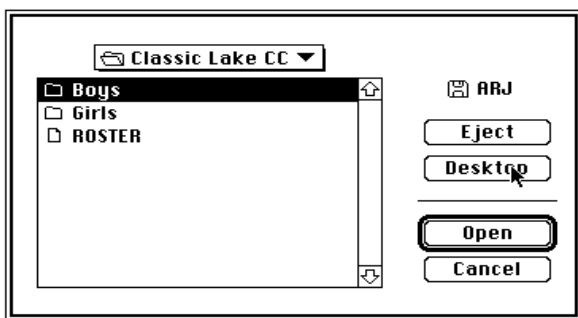
The “demonstration disk” contains a folder called “Classic Lake CC” which contains the files for a coed high-school cross-country meet and a program RACEDAY. Move the folder to your hard disk before you start working on it, so that you’ll have a backup copy in case you want to redo some of the operations.

Although it is not absolutely necessary, it is hoped that you will have a printer hooked up during this demo. One of the areas in which Apple Raceberry JaM excels is in the quality of its output, and I don’t want you to miss it!

The files in “Classic Lake CC” are as they would be after all the data have been entered, including the order of finish, times, and select times. They were prepared with the help of two other programs in the ARJ package that are not included on this disk. This write-up will guide you through an exploration of RACEDAY’s reporting capabilities and also some aspects of the data entry and correction process.

Results Output

Locate ROSTER



looking for one of the files, ROSTER, which contains name-age-sex-team-data (you cannot start the program by double-clicking on the file). The standard file dialog appears, with ROSTER among the items listed. Double-click on it to open up the file.

You are now asked to locate a file called ORDER, which is used to hold the ID numbers of the finishers in order of finish, their teams, and their age groups. You’ll see two folders in the standard file dialog, “Boys” and “Girls.”

Open up the “Classic Lake CC” folder and double-click on RACEDAY. This starts the program, which first asks you how many ROSTERs are to be used; it is rare that you need more than one, so hit <return> or <enter> to accept the default of “1.”

RACEDAY then starts

Double-click on one or the other and then hit <return> to open ORDER, which is already selected.

Locate and open ORDER

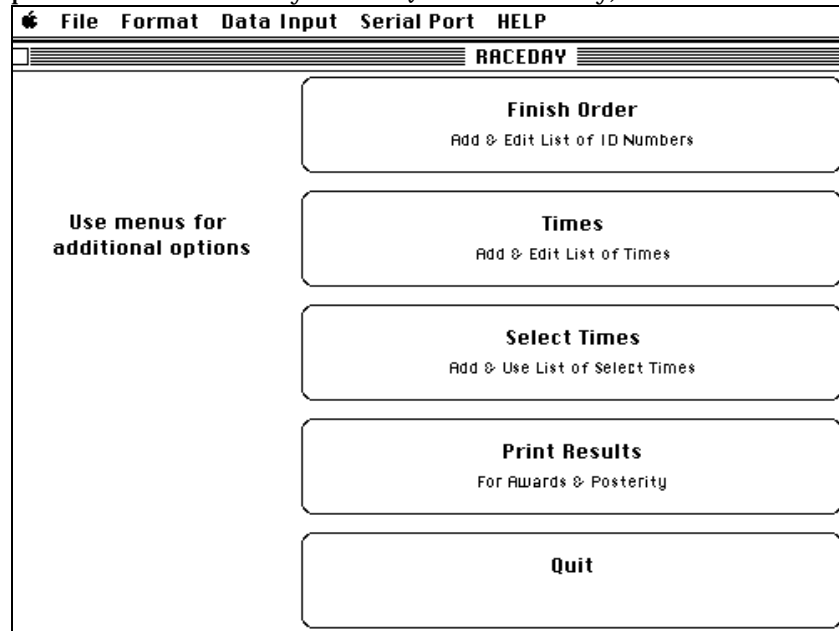


Locate and open ORDER



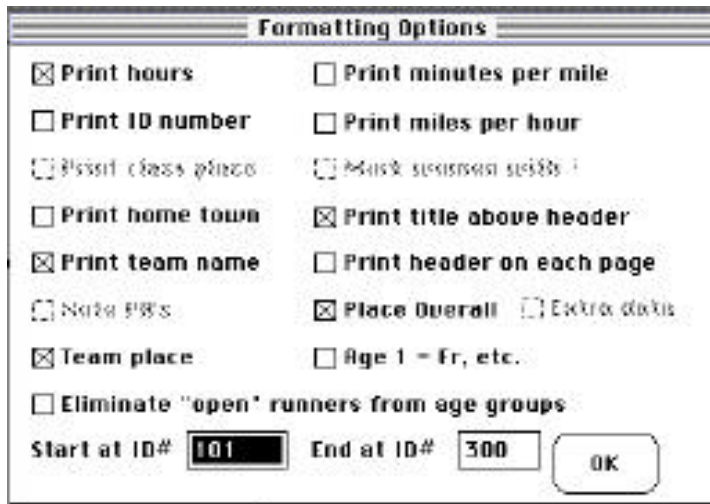
Then you are asked to name the “race/finish line.” What you input (if anything) will be printed at the top of various outputs. The default is based on the names of the meet folder (“Classic Lake CC”) and of the results folder you chose.

The display below now appears, showing the principal options of program RACEDAY. You can select one of these options by clicking on a button, or by pulling down one of the menus to the corresponding item, or by using the keyboard shortcut indicated in the menu (the shortcuts corresponding to the five buttons are ⌘F, ⌘T, ⌘S, ⌘P, and ⌘Q; e.g., to Quit press the “command” key ⌘ and “Q” simultaneously).

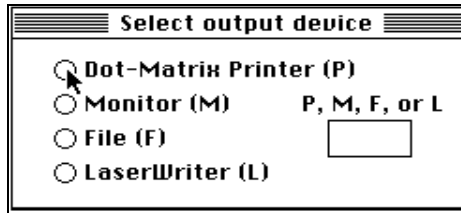


Pull down the File menu to “Print results” or press the command and P keys or click once on the “Print results” button. A dialog like the one on the next page appears, giving you a great deal of control over the format of the output. The “Team name” and “Team place” boxes are on by default. If, as is also the default, you ask for a title above the header, you will be asked for a

short weather report and the name of the results company, and then given an opportunity to print a three-line title (meet name, place, date) above the results; the default name is whatever you entered for a "finish line" name when you started RACEDAY.

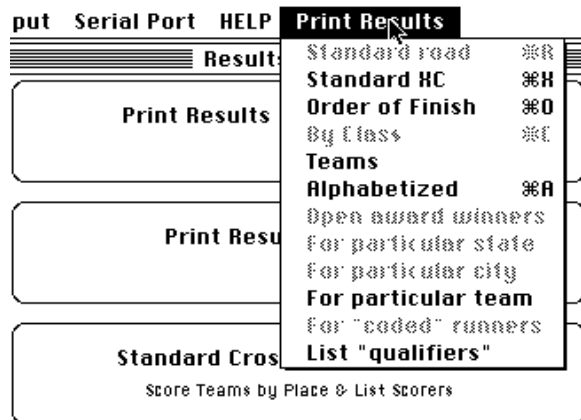


A dialog may now ask whether you want results printed to the whole second, to the next high tenth of a second, or to hundredths; click on whichever box you prefer. When you set up the files for a race, you can decide whether results will be printed to whole seconds only. You can change your mind by clicking on an item in the "Times" menu.



You are then asked to select an "output device." If you don't want a permanent record of the output, select the Monitor by typing "M" (or "m") or clicking on the Monitor button. If you are connected to an Imagewriter or compatible, selecting Dot-matrix printer (type "P" or "p") gives you the

output fastest. The "LaserWriter" option actually works for any device selected with the Chooser, including an Imagewriter, but takes longer than the "P" option (which does not work with a LaserWriter, by the way) on an Imagewriter. Select File for an output device (you will then be asked to name the file and to select a folder in which to store it) if you want to massage the output with a



word processor. If you select "LaserWriter" or "Monitor" as the output device, you may be asked whether you want to print the results "in multiple columns." Click that box on to see what they look like (great!).

A Print Results menu now appears at the right end of the menu bar and, unless you are printing to a "LaserWriter" (or other Chooser-selected device), a number of buttons appear on the screen.



The "Standard XC" item follows usual cross-country procedures, with selectable numbers of scorers and "bumpers," and unattached athletes and incomplete teams excluded from scoring. Try that option first. It will score the teams, listing the team places of their scorers and bumpers, the average time of the scorers, then (optionally) the

times of each team's scorers (and bumpers, too, if you click on the "... print them all" box) in order of the team's finish, and, if you leave on the "List results in order of finish" box, all the finishers in order of finish. Team affiliations are listed in the order of finish regardless of whether they figured in the scoring. The "JV division" option scores only runners who do not finish among the top seven for their team. If the meet is a qualifier for a championship of some sort, you can mark the teams and individuals who qualify if you wish.

The "Teams" option gives you additional options for scoring teams, the most interesting of which for cross country is a "Packing analysis," which graphically shows the time spread of each team's finishers.

If you elected to print the results to a "LaserWriter" (or whatever device is selected by the Chooser), you'll be asked if you want to "Print results now (LaserWriter is loaded)." To save you from having to repeatedly look at the formatting and output-device dialogs, the program assumes you will send results of several types in the same format to the printer. Because they will stay in the LaserWriter's memory until you stop filling it, you are given this opportunity to start printing what is currently in its memory so the race management can get on with the awards and/or post the results for the runners and coaches. Click the box on to print the results "now," or hit <return> to continue without printing them right away.

You may also want to experiment with the other choices available. To list the results for a particular team (in order of finish), you will identify the team by starting to type its name into a dialog box that appears. After you type one character, RACEDAY finds the first team in the TEAMS file that begins with

that character and displays it. If that's the one you want, hit <enter>. If not, input the second character. RACEDAY continues its search through its file of team names, displaying the first one that begins with the two characters you typed, etc. Note: This same procedure is used in the data entry program. Although for most cross country meets you input entries by team and so have to type the team name only once, the program assuming the next entrant to be a teammate of the last one you input, it can save a lot of time otherwise.

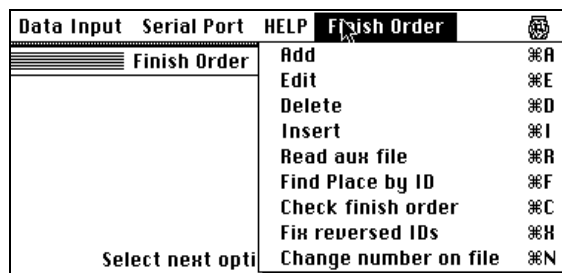
Another form of output useful in cross country is the "Qualifiers" item of the Print Results menu shown above. This allows you to list, in order of finish, the first N individuals plus all scoring and bumping members of the first M teams, where you specify N and M.

After you have done what you wish with the boys' results, you can switch to the girls' (or vice versa). Pull the Data Input menu down to "Get new results files" (⌘G). You are asked to name and then to locate the ORDER file associated with the next finish line/race. Put the mouse on the pop-up menu "Boys" and pull it down to "Classic Lake." The "Girls" folder now appears. Double-click on it and then hit <return> to open the already selected ORDER file.

Data Input

Because entering the data for a 80-runner race is a bit tedious for a demo, it has been done for you. To explore the data-entry process, you can, if you wish, remove all or part of what has been done and redo it.

The usual procedure is to start entering the ID numbers of the finishers as they are brought over (on spindles or stringers) from the finish line. Times (in order of finish) and select times (pairs of ID numbers and times for selected finishers) are entered later, or perhaps dumped into the computer from one of the various timing devices that are compatible with ARJ, as was the case for the meet whose results are used for this demo (see also the discussion below of using the computer as a timer, i.e., "F-key timing"). Then you would use the select times to check the finish order and times, make whatever corrections are found to be necessary, and print out the final results.



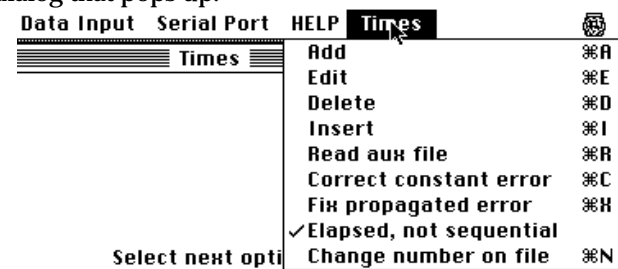
If RACEDAY is not already running, start it up as described above. To get a quick printout of the data that have been entered and that you will reenter, click on the "Finish Order" button or pull the Data Input menu down to "Finish Order." A Finish Order menu then appears on the right end of the menu bar and a new set of buttons show up on the screen. Select the "Check/Reset finish order" option and accept

the invitation to print out the results "in detail" by clicking on the box. The printout includes the runners' ID numbers and times, in order. The times at the far right are those recorded for certain runners as "select times;" an important check on the scoring is to have someone record ID numbers and times for "selected" runners - i.e., as often as possible. It also shows the spindle breaks; useful when you need to go back through the data to correct errors.

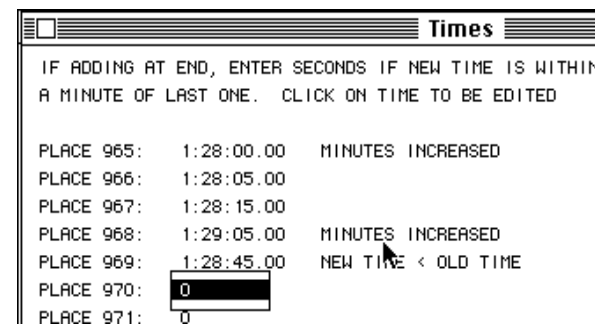
To allow you to simulate data entry, you can now delete some of the data that have been entered for you. You can delete them all if you like, but I'd suggest just deleting the last spindle. Pull the Finish Order menu down to "Delete" and specify the first and last places you want to wipe out.

Now pull the Finish Order menu down to "Add" or press ⌘A or click on the first button. Type in a few ID numbers, pressing <return>, <enter>, <tab> or the down arrow to get to the next one. Note what happens if you enter the same ID twice (since 81 IDs are already on file, it is likely that this will happen often), or if you choose an ID that was not assigned to a runner (try something between 300 and 310, for examples), or if you enter an ID outside the range of those that were assigned (1 to 300). In the case of an unassigned ID, if the runner's name, age and sex were written on the finish tag, you can insert those data on the spot in the dialog that pops up.

To check out the entry of times, pull the Data Input menu down to "Times" (or press the command and T keys; "⌘T" for short). A Times menu now appears on the right of the menu bar along with a couple of buttons. Pull the menu down to "Add" or press ⌘A or hit the first button. Accept the suggestion as to where to start adding (at the end of the existing file).



RACEDAY remembers the hours and minutes of the previous finisher, which speeds up the rate of data input. If the next finisher's time is less than a minute more than the last time recorded, you need only type in the seconds. If the seconds are less than the seconds part of the last time recorded, the program assumes that the minutes have increased by one, and beeps an acknowledgment. For example, the time for place 968 above was input by entering simply "5." When there is more than a minute between successive finishers, you type the minutes and seconds,



only; do not separate them with colons (this applies also to entering the time of the first finisher). To edit a time already entered, however, you do have to type in colons and everything.

After typing in each time, press <return>, <enter>, <tab> or the down arrow to get to the next one. Experiment with this process until you are totally bored; hit the <escape> key to terminate data entry.

Although entering times is quick and easy, this step can be eliminated if you have a Chronomix 737X, TimeMachine, or TimeTech timer. Those devices are computers themselves, and the data they collect can be dumped into the ARJ files by manipulating the Serial Port menu items.

They are expensive, however. If you have a laptop computer, and can operate it close to the finish line, you can use it to time the meet while you enter ID numbers. Pull the Times menu down to "F-Key timer." A dialog will ask you the race time at which you will start the timer. If you are able to start it with the gun, accept the default of "0:00:00.00" and hit the <enter>/<return> key at the gun. If not, bring a watch that was started with the gun over to the computer, pull the Times menu down to "F-Key timer," enter a time a little beyond the current race time, and <enter>/<return> when that time is reached. Once the timer is started, hitting the F1 or F12 key with which most modern laptops are equipped will cause a time to be added to the end of the TIMES file.

Select Time Checks	
Start at place	<input type="text" value="1"/>
Tolerance on times (seconds)	<input type="text" value="2"/>
Maximum frequency (runners/min)	<input type="text" value="100"/>
<input type="button" value="OK"/>	

is not for the faint at heart!)

IF ADDING AT END, ENTER SECONDS IF NEW TIME IS WITHIN A MINUTE OF LAST ONE. CLICK ON DATA TO BE EDITED. <ESC> TO QUIT.		
	ID	TIME
PLACE 218:	123	24:32
PLACE 219:	324	<input type="text" value="35"/>
PLACE 220:	0	:00
PLACE 221:	0	:00
PLACE 222:	0	:00

Pull down the Select Times menu that then appears to "Add" (or click on the "Add" button or type ⌘A). One moves through the data entry screen as with ID numbers and times, using the <tab> key. Just as in entering times, Raceday remembers the minutes and seconds of the last entry, so that, e.g., hitting <tab> after the entry "35" shown will result on a select time of 24:35 the runner with ID number 324.

In cross country accurate times are often not that important. In cases where they are, "select times" – times recorded along with the ID number of selected finishers – can be used to insure accuracy. They can also be used to detect (and correct) errors in the collection of ID numbers. (Caution: this part of the demo

Shift to the Select Times part of the program by pulling down the Data Input menu to that item or pressing ⌘S.

To see how select times are used, go to the Times part of the program (under the Data Input menu or Ctrl-T) and pull down the Times menu that now appears to "Edit" (Ctrl-E). Type "1" when asked where to start the editing. The display resembles the one in which you entered the times in the first place, the crucial difference

TIMES AT RIGHT ARE SELECT TIMES FOR RUNNERS RECORDED AT THAT PLACE. CLICK ON TIME TO BE EDITED. <ESC> TO QUIT.

PLACE 37:	17:58.66	
PLACE 38:	17:58.93	(18:00)
PLACE 39:	18:07.45	(18:08)
PLACE 40:	18:09.03	(18:09)
PLACE 41:	18:11.58	(18:12)
PLACE 42:	18:13.10	(18:14)
PLACE 43:	18:15.96	(18:16)
PLACE 44:	18:17.31	(18:18)
PLACE 45:	18:22.79	(18:24)
PLACE 46:	18:24.06	
PLACE 47:	18:25.72	(18:26)
PLACE 48:	18:31.86	
PLACE 49:	18:32.41	
PLACE 50:	18:33.16	(18:33)

being that the select times are also shown for those places (runners) for whom they were recorded. As shown at the right, the select times are enclosed in parentheses. For example, the 45th time recorded was apparently 18:22.79, whereas the time recorded by the select timer for the runner who finished in 45th place was 18:24.

The data in the demo are in good shape. So that you can see how select times help to get good results, put some errors into the file of times. Pick a time for the "timer" to miss; that is, delete one of the times already entered. Just click the mouse on it, pull down the Times menu to "Delete" (⌘D) and type a "1" into the dialog that asks how many times are to be deleted at that place. Pick another place where your "timer" is going to hit the button too often; click on it, pull down the Times menu to "Insert" (⌘I) and type a "1" into the dialog that asks how many times are to be inserted at that place. You can access times beyond the first few that are shown by clicking on the arrow at the bottom of the display, and backtrack by holding the shift key down while you click on that arrow.

Note that the times no longer correspond to the select times. The latter are associated with a runner's ID, and hence with a place in the order of finish. You should be able to see from the display how to correct the errors by inserting a time or deleting one there.

When you delete a time, you are asked if you would rather insert a "turkey" in the finish order instead. This allows for the possibility that your apparent extra time actually represent a missed runner. The default is to insert an extra finisher when you need to delete a single time, but to wipe out the times and leave the finish order alone when you delete more than one time.

For further enlightenment on the utility of select times, go back to the Finish Order part of the program (under the Data Input menu or ⌘F) and select the "Check" item, electing to print out results in the neighborhood of the places where you introduced errors. You'll see that the select times on the right side of the printout no longer match the individual times to their left.

Clearly, the more select times you have on file, the more accurate will be your results. For the meet whose results are used in the demo I had access to a TimeMachine, a device that stores times and select times and dumps them into the computer on request. As indicated above, such devices are about as expensive as a lap top computer. In their absence, F-key timing can be used. If you can bring a lap top to the finish line, start up F-key timing as described above (using an item under the Times menu) and go to the Select Times part of the program. Click on the "Add" button and accept the suggestion to "Input times automatically." After entering an ID number for a runner who is still approaching the finish line, hit <tab> when the runner crosses the line. This causes a select time to be entered for that runner.

Select times also help detect errors in the finish order. So let's make one. ID tags are usually collected at the end of the chute, whereas select times are recorded at the finish line. Runners may get out of order between the two points. Go

back to the Finish Order part of the program (under the Data Input menu or control-F) and pull the Finish Order menu down to "Fix reversed IDs" (⌘X). This item, which is actually used to fix a problem, can also be used to create one. Simply select a range of places in which the ID numbers will be reversed. To see what this does, shift to the Select Times part of the program by pulling down the Data Input menu to that item or pressing ⌘S. Pull down the Select Times menu that then appears to "Check times" (⌘C) or click on the "Check" button. Select the monitor for an output device and accept the defaults in the dialog at left. RaceDay now takes each ID-time pair in the select times file, looks for the place in the finish order of the runner with the ID part and in the times file for the places of the finishers whose times are within two seconds (if you accept the default "tolerance") of the times part. Set the "maximum frequency" to 2000 so the checking process doesn't quit on you. The pattern of complaints is typical for this type of error: a call for a massive insertion of times, followed by a string of "number found at" messages (with the places at which the numbers are found in decreasing order), and then a call for deleting a matching number of times.

Other errors you may wish to simulate include the "misplaced spindle syndrome." If the spindles were not used in the order they were numbered, some finishers are put in a block in front of where they should be. Again you can simulate the error by using the device that corrects it. Pull down the Finish Order menu (first type control-F to get it if it's not showing already) to "Move misplaced spindle." A dialog will ask you for the places of the beginning and end of the misplaced IDs (input their present places) and the ID number you want the data inserted before. After you create the error, go back to the Select Times part of the program. The "Check times" option will again call for massive insertions and deletions, but this time the "found at" messages will not start right after the first call for an insertion. In a real case, you would go back to printouts created as you enter each spindle of data (or the spindles themselves) to find the places that the spindle presently occupies, and the first ID number on the spindle the data should be put in front of.

The files on the demo disk are set up for the usual situation in which a number of separate races are run: boys/girls or men/women, varsity/JV, etc. Although one sometimes uses completely separate files for each race (when you want to have parallel sets of race numbers, e.g.), especially in the varsity/JV case it is convenient to put all the names in one ROSTER file and just to keep the results files separate. In such cases you do not have to quit and restart RACEDAY to switch from one race to the next; just pull the Data Input menu down to "Get new results files" (⌘G), as described above.

Apple Raceberry JaM has quite a few more neat features not covered in this brief "tutorial." If you send your output to a file, for example, you have several formats available, including tab delimited (useful when you intend to spruce up the output with a word processor), "newspaper" (basically AP format, which may be of enough interest to your local newspaper that they may let you modem the results into their computer for their agate sections), and "HTML" (Hyper Text Markup Language), the language of the Internet. Check out the multitude of results I have sent to my Web site <http://www.raceberryjam.com>. You can be sure I wouldn't have sent them all up if it weren't easy to prepare the files.

ID	Name	Age	Team
255	Jocelyn Guler	10	Burnsville
256	Siri Thompson	10	Burnsville
257	Jill Coleman	11	Chaska
258	Rachel Lane	11	Chaska
259	Jodi Olson	11	Chaska
260	Dawn Bickett	10	Chaska
261	Angell Bunnell	10	Chaska
262	April Hlavac	10	Chaska
263	Kari Jacobson	10	Chaska
264	Megan Miller	10	Chaska
265	Katie Rudd	10	Chaska
266	Marnie Albu	8	Chaska
267	Cathy Aune	12	Eagan
268	Kirsten Bland	12	Eagan
269	Tara Bringewatt	12	Eagan
270	Meagan Krepela	12	Eagan
271	Carrie Langstraat	12	Eagan
272	Angie Nelson	12	Eagan

Also, data entry is very easy, and facilitated by the ability to do on-screen proofreading. The name, age, sex (maybe) and team of the runners starting with the number you select are shown on a display like that at left. To scroll through the list, click on the arrow at the bottom; to scroll backwards, hold down the shift key as you click ("shift-click"). If any name, age or sex needs correcting, click on

it. A box appears about the item; correct the error in the usual way (click, drag, delete, type). You can use the <tab> and <return> keys and the up and down arrows to move around the display; you can also cut and paste.

Finally, you can avoid a lot of data input errors (or at least shift the blame for them to the team's coach!) and save a lot of time by getting the teams to email your entries. To check out what is required for email entry from the coach's end, go to <http://www.raceberryjam.com/hscsentryform.php3> and ask for an entry form. Apple Raceberry JaM has some neat tricks to make processing of such entries a breeze – even when the sender doesn't follow your directions exactly!