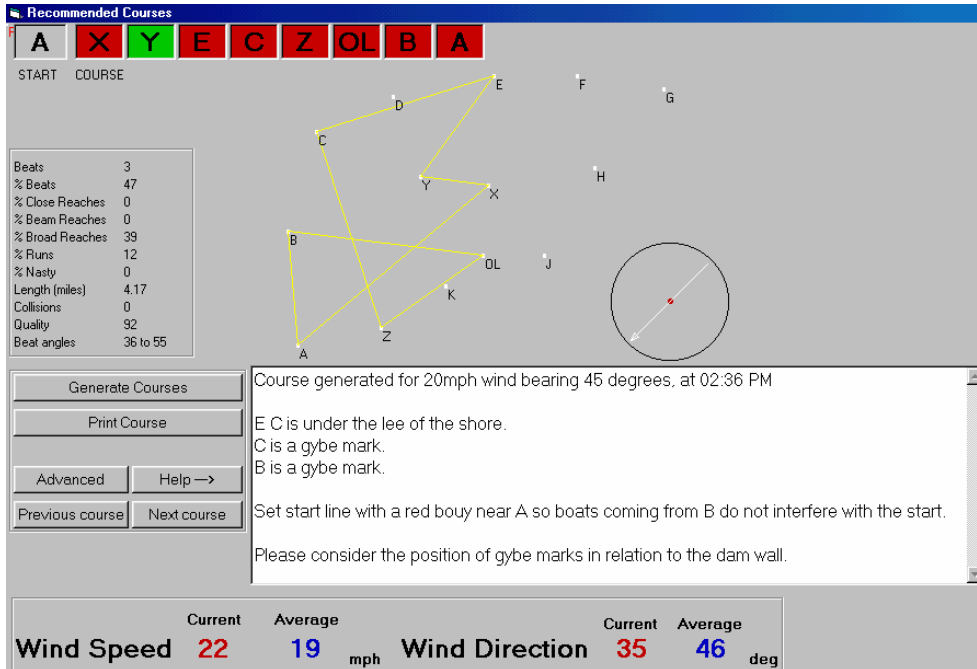

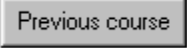



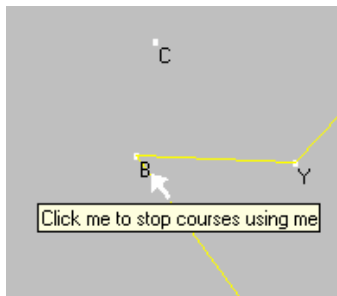
GUIDE TO USING THE COURSE GENERATING SOFTWARE


The software should be running on the computer in the end office. You may need to waggle the mouse about to wake the computer up, or you may need to turn the screen on (using the button on the screen, NOT the one on the PC). If the software is running, you will see something similar to this, if not then start it up via START button.

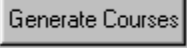


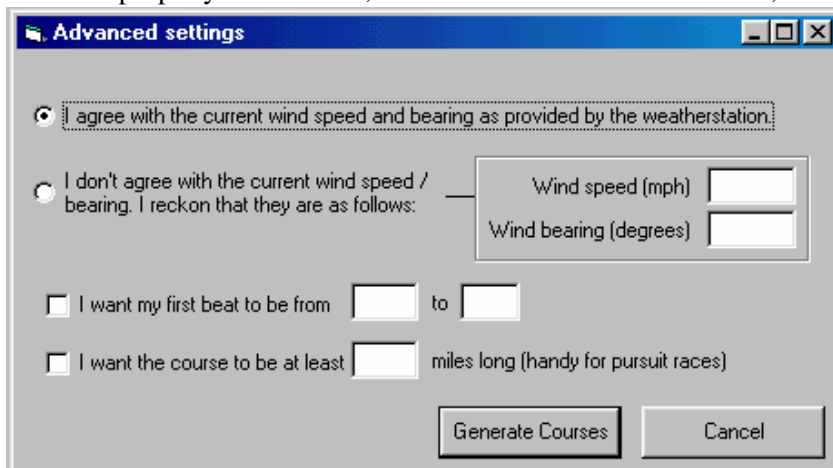
The course displayed will be the first of a range of courses which are suitable for the current conditions. You can step forwards and backwards through the courses by clicking on  and  respectively.

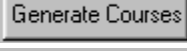

Courses are generated once per hour automatically, but you can force the computer to generate courses for the current wind conditions *now* by clicking on .



If certain marks are unavailable to you due to having sunk, drifted away or being used by an open meeting, you will need to inform the computer of this. Click on the mark letter for each mark that is not available. Clicking once will change the colour to **red**, clicking again will return the mark letter to black. Marks which are **red** will not be used by the computer when courses are next generated. When you have finished selecting or de-selecting marks, click on  to create courses suitable for the marks available.

If the courses you are being offered are not suitable for the current conditions, click on . Then, if the courses are still unsuitable, it will probably be because the weatherstation is not reporting the wind speed or direction properly. In this case, click on the **ADVANCED** button, which will show you this form:



You can now officially disagree with the weatherstation readings and enter your own. You can also force the first beat to be between any two marks of your choice if you so desire and/or set a minimum length of course. Click  to make it happen, or  if you change your mind.

Some points to bear in mind

The courses presented to you will have been generated based on the average wind speed and direction some time in the last hour or so. It is more sensible to click on the GENERATE COURSES button 10 minutes before you go afloat and use a course from this new selection, than to rely on something that may be a bit out of date. You can print your selected course out onto paper to take afloat with you by clicking on the PRINT COURSE button. The printout will also suggest a couple of courses which are suitable for a 20 degree windshift in either direction.

The software displays instantaneous wind speed and bearing, as well as average values for the last half hour. The average values are used for course generation, unless you override the weather-station by using the ADVANCED button as explained earlier.

When you go afloat, take a burgee and a hand-bearing compass and check that the first beat that the computer suggested is reasonably accurate. A 10 degree discrepancy won't bother anyone, but 30 or more degrees will make you very unpopular. If you find yourself in this position, you may be able to use one of the '20 degree windshift' courses, or try to get somebody back in the OD box on the radio, tell them the genuine wind bearing and get them to load up some new courses for you. Or just make up your own, following as best you can the style of the computer generated course that you took out with you.

How it works

The software rarely generates its own courses (a time consuming business), preferring to select from a database of over 120,000 pre-generated courses. This database takes about 3 days for a reasonably fast computer to create and holds every permutation of course available for our fixed marks. The only courses excluded from this database are those which don't use OL or which would give a hooked finish through OL. When you click on the GENERATE COURSES button, you are offered the courses from the database which start with a beat suitable for the current wind direction, and which are a sensible length for the wind strength. If you severely limit the number of marks available for the course, the system will endeavour to generate some extra courses by dropping a red buoy at various places.

The courses are graded for 'Quality' using a set of rules dependant on the current wind strength, and are offered to you with the highest quality first. The quality of a course is subjective, but there are a few points which most sailors agree to be desirable, and a number which are undesirable. The software uses these criteria to award a quality rating to the courses:

Desirable	Undesirable
Dead runs in lightish winds	Fetches and biased beats
Beam reaches in moderate conditions	Broad reaches in light airs (too boring)
Broad reaches in a blow	Close reaches in a blow (hard work, no fun)
More than one beat	Dead runs in a blow (a slight bias is much safer)
	Any leg under the lee of a shore

This means that you will be presented with courses which are generally tolerable to most sailors, and you get the ultimate choice as to which one is the best for the current conditions. You are recommended to examine at least the first three courses that the system offers you, before making a choice. You will need to make your own judgment on the suitability of courses based on a number of factors that the software ignores, including the proximity of gybe marks to dam walls, and the density of boats in any part of the lake.

Because the software has an up to date map of the marks, and a good mean value for wind speed and bearing, it is far more likely to be able to set a decent course than the average OD equipped with a bent burgee and a looming start deadline. The expert OD will doubtless have his or her own ideas about course setting, but will probably want to examine the computer's ideas before making a decision.