AMERICA'S CUP
A SAILING SIMULATOR

by
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When you purchase this package, you will actually receive three programs: (1) the public domain version of SmartBASIC2.0, (2) a fast loading version of the sailing simulator, and (3) the BASIC source code version of the sailing simulator.

To use the program, simply insert the digital data tape, pull reset, and then follow the prompts on the screen.

AMERICA'S CUP is a test of sailing skills and strategy in head-to-head racing. In playing the game, you may race both boats or you may test your skills against someone else.

To sail your boat, simply enter your heading in ordinary compass degrees (using the ADAM keyboard and pushing return after typing numbers):

     45 degrees = close-hauled to the northeast
     90 degrees = a beam reach to the east
   135 degrees = a broad reach to the southeast
   180 degrees = due south
   225 degrees = a broad reach to the southwest
   270 degrees = a beam reach to the west
   315 degrees = close-hauled to the northwest
   360 degrees = straight upwind (i.e., in irons)

Your sailboat will respond just like most real sailboats--slowest closehauled and fastest of a beam reach. The wind is coming from the north at somewhat variable speeds. By watching the wind messages at the bottom of the screen, you can adjust your tactics for oncoming puffs or lulls in the wind. You should be aware of some of the common hazards of sailing that are built into this program:

GETTING KNOCKED DOWN: A strong gust will sometimes capsize your boat and knock you far downwind. If you see a puff coming and you are sailing closehauled, you can avoid being capsized by "pinching"--i.e., pointing upwind to 35 degrees (or 325 degrees). If you are sailing on a broad enough reach, you can also avoid capsizing. However, on some tacks there may be nothing you can do and capsizing is inevitable. This makes the races much more exciting since the leading boat can always encounter a string of bad luck.

GETTING INTO COLLISIONS. When you collide with a buoy or another boat, you will be penalized by being blown down wind substantially. If your boat hits a buoy, you probably have not rounded and you should go back around it again. As in actual racing, it is up to the sailors themselves to enforce such rules (along with the starboard tack right of way).

GETTING INTO IRONS. If you try to point too far upwind or if you lose too much headway in tacking, your boat will go "into irons" and begin drifting downwind. You won't regain headway until your next move.

GETTING BLANKETED. As in real sailing, a boat that is upwind of you will partially block your wind and make you sail more slowly.

To start racing, you must set up your course by position your buoys as you are prompted to do so by the program. Since you can put the buoys anywhere on the screen, your actual races can be almost infinitely varied. However, I recommend that you keep the x-values for each buoy (i.e., the first value entered for each) between 30 and 210. Keep the y-values between 30 and 130.

I usually sail around the course in the conventional counter-clockwise manner, but as in real sailing, you can decide to follow any course that suits you. If you happen to sail off the screen (into the fog), keep a cool head and plot your course carefully. If you do, you should be able to bring your boat back onto the screen in one or two moves.

HAPPY SAILING!