OOD's RIGHT HAND

Yacht Race and Yacht Club Management Program for IBM PCs

Demonstration Version (V 2.72) - Valid for 1 Year

B.W. Systems

**Computer Programs from Sailors for Sailors
20 Strathalmond Green, Edinburgh, EH4 8AQ
Tel/Fax: 0131-339 3312
www.bwsys.co.uk
email: bruce@bwsys.co.uk**

Acknowledgements

Contents

How It All Started

Having been on the Port Edgar Yacht Club Committee for some years, I have seen the organisational problems of handling larger & larger regattas. Owing to the generosity of several sponsors, we had very successful Regattas, with 100-150 boats in each over the past 4 years. We were also involved with the 1995 , 1998 & 2004 East Coast Sailing Weeks at Granton, in conjunction with the Forth Yacht Clubs Association. This involved 1116 boat-starts. In all these events, there was the problem of producing the Winners List from the handicap fleet results before the competitors start to get restive.

Apart from these special occasions, we wished to encourage those of our members who consistently come in at the back of the fleet to do better & prevent the hotshots from becoming blasé. This can be done by a local rolling handicap system which drifts a boats handicap throughout the season so that with a little more effort the tail ender has a chance of winning whilst the expert has to try harder to maintain his supremacy. Our dinghy fleets are expanding rapidly, calling for a lot of computation on club nights.

It was desired to do all this without calling excessively on the services of the usual "Willing Horses" from the Committee. We therefore wanted a system of race result computation which was simple enough to be used by all boatowners when their turn came to be OOD, on a rota system. I am a yachtsman of 40 years experience & have been an electronics engineer even longer, so I looked at what was on the market. Nothing appeared to meet our requirements & since I run my own computer database consultancy, I wrote a program which has been in use at Port Edgar for 11 years . The driving requirements were as follows:-

Program Requirements for the OOD

1   Simple enough to be used by novice OOD's on a roster system.
2   One-finger keyboard operation possible.
3   Should not require a "Dongle", a hardware device used by some programs to avoid piracy.
4   Undemanding enough to be used on a low cost PC XT with a 20MB hard disc & 1MB of RAM. Such PCs cannot be used for WINDOWS programs & are thus cheaply obtainable second hand. This sentence was written some years ago and the same program now runs happily in Win XP machines.
5   Easily readable on a monochrome LCD screen on a portable PC to allow use on a Committee Boat or in Starters Box. (Our OOD has to carry the computer ¼ mile along a pier .)
6   Should give a full screen view of data instead of a small window revealing only a few lines.
7   Capable of "Real-Time" capturing of boats finishing times as they cross the line. This enables the race results to be printed out immediately the race has finished.
8   Capable of providing tyro OODs with audible/visible warnings of impending flag hoists/drops.
9   Capable of handling race entry as pre-entered list (Regattas) or "accept any boat crossing the line."
10   Capable of calculating Achieved Handicaps & the subsequent allocation of Rolling Handicaps during Club Races. Also capable of handling fixed handicaps for Open Races & Regattas.
11   Capable of handling Average Lap Time & Timegate races
12   Capable of showing the performance trend of a boats performance over a year, like a "School Record Card".

Advanced Features Required for Sailing Committee

1   Should provide a YR2 assessment of handicaps for submission to the RYA at the end of a year.
2   Capable of storing all boat/owner details including address, telephone number, subscription paid etc, to ease mailshots & other administration.
3   Capable of overriding race placings as result of protest or Yacht Materially Prejudiced.
4   Output of files to other computer for more detailed analysis.
5   Should provide assistance with next year's Race Calendar preparation.

The Solution for the OOD

The program automatically provides the OOD with all boats which have registered for a regatta. For a regular club night, however, the OOD is presented with a list of all eligible boats (from details existing in the

Calendar) & picks out the starters as he sees them on the water. All starters then are presented to him on the Race Monitor screen & the program automatically logs finishing time for a boat & augments the lap count by 1, when the OOD presses a function key. Anyone who has done OOD duty will know the feeling of panic which ensues when 6 yachts are bearing down on the line, with the sails of each yacht covering the sail number of the one behind. The program allows the OOD to press a function key when each boat is assessed to have crossed the line & a finishing time is logged for an unknown boat. It is up to the OOD & assistants to establish which boat was which & transfer these times to the correct boats.

It must be said, that in the heat of a regatta with 100+ boats, it is essential to have a squad of helpers with paper & pencil logging boat finishing times in case the keyboard operator cannot cope with the peak load. The operator should then be able to transfer all the times into the computer in the lull before the next panic.

If the start is from an inflatable dinghy, it will probably be deemed more practical to use paper & pencil until back in the clubhouse, whereupon the boats are selected by pointing at them on the screen & typing in the finishing times. You can write down all boats, Sigma 41s to Optimists on the same piece of paper & the computer will ensure that they are entered in the correct race. (Provided they are entered on the day of the race.)

Help for the Sailing Committee

Currently the program deals only with Portsmouth & IYRU Catamaran handicaps, but Clyde & Channel are being considered. The automatic calculation of Rolling handicaps & YR2 returns takes a great load off the Sailing Committee.

Facilities are provide to log all data on local club & visiting boats along with money received. This also helps the Treasurer.

The program incorporates a Calendar Generation facility which will ease the production of next years race calendar. For instance, if the Sailing Secretary schedules the politically important regattas to interlock with neighbouring clubs, the program will allow him to enter the remaining club series to fall on the correct days of the week which are not occupied by regattas. Blocks of races can be moved by days (or hours for regattas).

Technical Info

For those who are computer minded, the program is written in DOS FoxPro 2.6 & compiled as a stand alone EXE file. You do not need to buy a copy of FoxPro to let it run. All files are DBase format & can easily be interpreted by other commercial programs. The main files are CALENDAR, BOATS, PEOPLE & RACES, all relationally linked. Subsidiary files are DISCARDS which holds the discards & declared entries for series, ENTRIES holding the entries to past/future regattas and VARS.MEM holding the variables for any club. This last file allows you to enter the club name, fast/slow handicap limits, newspaper telephone numbers etc. A HELP file has now also been added. Beginners are presented with a simplified version of the program to counteract fright.

FoxPro is a very fast database which behaves like a WINDOWS program without needing WINDOWS. It thus avoids the very large overheads associated with WINDOWS & can run on a cheap computer. It can run very well as a full screen DOS program under Windows95/98, or from a desktop icon in XP.

Programming has been such that the OOD is presented with series of menus requiring a single key depression - S to select boats, -M to monitor races etc. When monitoring a race all commands are entered via hot function keys, ie f2 takes a yachts finish time.

Diverse Opinions

The main problem when writing this program was the wide range of opinions amongst my colleagues as to what a sailing program should contain. I have listened to all these opinions & tried to translate them into a not-excessively-complicated program. By incorporating Rolling Handicaps, Average Lap Times, Real Time Race Data Capture, Flag Warnings for the Tyro & Time Gate Starts, we have managed to spice up local racing.

How the System is Organised

There are 3 main datafiles **BOATS, PEOPLE** and **CALENDAR** which have to be filled in by the Sailing Committee before racing commences. BOATS contains details of all boats, clubs, handicaps, etc. PEOPLE contains details of their owners & Social members. CALENDAR contains all the race start times, events, venues, classes, series, classflags, timelimits, type of handicap & whether visitors are eligible. (SEE P29)

The OOD on the day does not have to touch these files unless a new yacht appears on the start line or he wants to alter a race's start time. He/she selects competitors from BOATS & adds them to the CURRENT file. This is a scratchpad file holding current races. The program undertakes checking to remove the OOD's errors before it clears the race results as correct. The OOD can then transfer the current race results to the main RACES file which archives the complete years races. The OOD cannot access RACES except for "todays" results. The Sailing Committee can, however, via a password. In this way, an inexperienced OOD cannot corrupt approved past races.

The system will not close the CURRENT file if any boats have blank finishing times. All finishing times must contain either a valid finish time (Time like 12:34:56 and Elapsed Time greater than zero) or an approved 3 character abbreviation:-

avg	Boat is awarded average points in series - say he helped another boat in distress.
bad	OOD ERROR - delete boat from race.
dnc	DID NOT COMPETE - Was not on start line before race.
dnf	DID NOT FINISH
dns	DID NOT START - Was on start line, but did not start.
dsq	DISQUALIFIED
hrs	BOAT ON LONG-DISTANCE RACE taking many hours/days (ie Banff-Stavanger)
ood	OOD DUTY - Gets Average points for Series.
ocs or pms	PREMATURE START
rsc	RESCUE BOAT DUTY - Gets Average points for Series.
ret or rtd	RETIRED

The OOD is thus forced to investigate any blank finish times & if this is done before leaving the start line, it reveals that a dinghy may have capsized . This contributes to race safety.

Once results are transferred from CURRENT to RACES, CURRENT is empty except for those boats who are away on a long distance race (like the Banff-Stavanger race). These are identified with 'hrs' in their finish times & can remain in CURRENT until the boats return in say 2 weeks, without disturbing local races in the intervening time. When a boat is originally copied to CURRENT at the start of a race, it is flagged with an asterisk in the BOATS file. This asterisk is deleted when the boat finishes the race. Thus any boat , including a long distance racer, which has not been checked over the finish line has its entry in BOATS flagged, again contributing to safety.

OOD's & Rescue Boat Crew get average points to repay them for missing a race, except when there are no finishers as when the wind failed. In that case, everyone including OOD & RESCUE gets DNF.

A race can be designated as running on average lap time, in which case the elapsed time is divided by laps before calculating the corrected time. Also it can be designated as a time gate start, where boats pick their own start times within say a 2 hour interval, attempting to make best use of wind & tide. A variation of timegate is a multiple leg "Round The Clubs" race where the boats are timed at several points round the course, thus splitting a race into several races, the finish time for one, being the start time of the next leg.

Handicaps can be designated as CLUB, OPEN, IYRU or ROLLING where OPEN is crudely Portsmouth Yardstick. Rolling handicaps track a boats performance smoothly & encourage club competition.

RYA-supplied Portsmouth Yardsticks are contained in the PORTSMTH file & these are provide a convenient reference when assessing local handicaps. CATFIGS contains IYRU catamaran ratings.

DISCARDS is a file containing the discard & declared entry rules for series.

VARS.MEM is a file of memory variables such as Handicap Limits, Club Name, Printout Headings etc.

The OOD can log finish times & laps into the (portable) computer at the start line, (by pressing f2 key or the Right Mouse Button) or write finishing times on paper & then key in the results after the race, The program can provide, before a race, a printout for the OOD of all the boats likely to take part in that race. This printout

facilitates manual recording at the start line. We recommend that the results are always written on paper as well as being keyed into a start-line computer, since the finish of a regatta with 100+ boats gets very hectic, people get in each others line of sight, some fool switches off the computer etc! You want 2 or 3 people recording finish times independently during the occasional 30 second panics. There is then time to compare notes during the next lull & update the computer. Often a number of boats cross the finish line nearly simultaneously, with the sail of each boat obscuring the sail number of the boat behind. The computer has a useful facility of being able to record the finishing times of these unknown boats (f3 key) so that the computer operator's colleagues can concentrate on recognising the boat names/sailnos. The f3-derived finish times can then be attributed to the correct boats later.

When both the computer operator & his helpers boob so that neither the computer record nor the paper record is complete, there is a Disaster Recovery Mode, (See P 21). Hopefully, this procedure plus the incomplete paper records should enable race results to be extracted from the worst OOD boobs! This kind of problem mainly occurs when running dinghy races on average lap times. It is amazing how often there is argument over whether a dinghy catamaran has done 3 or 4 laps. They shoot past so quickly.

Back in the clubhouse after the race, these problems are sorted out, hopefully, in a short time. If the data has been entered correctly at the start line, the printouts can be on the wall within 5 minutes including achieved handicaps & series results, assuming no protests.

RACES thereafter provides the basis for all the advanced computation & the preparation of YR2 assessments for the RYA.

As well providing the race results, ORH provides housekeeping facilities for the committee, like recording subscriptions, preparing mailing labels for contestants. The Sailing Secretary can create next years CALENDAR semi automatically by flowing in series on the same day of consecutive weeks etc. A test file NEXTYEAR is included to let the reader experiment with his own fixtures, ready for the following season.

Data Integrity

Since the use of tyro OODs, especially those who are initially computer-shy can cause datafile problems, great care has been taken over data integrity. At each switch-on, all files are checked for corruption, such as may happen if the computer is switched off when the program is still running. If a problem is found, the program attempts to repair the file headers & also reindex the files if indexes have been corrupted. Up to this point, procedures are automatic, but as a last resort, all the OODs key strokes are recorded in a LOG file, which can be interpreted by a computer-literate person. This DISASTER RECOVERY procedure is accessed via the ADMINISTRATION MENU, which requires a password & is therefore not accessible by the OOD.

It is recommended that floppy disc backups are made every day.

Using Multiple Computers

Problems were experienced on early versions of this program when using multiple computers on which data was entered concurrently. Originally the ID numbers for boats & people, (BID & ID) ran from 1 to 9999 on all computers which meant that the same ID's could be used for different boats & people on each computer, resulting in data loss when the files were merged and archived.

To overcome this, Version 1.95 was a major rewrite. The permissible computer numbers are now 1,2,3 & 9, where 9 is the master computer and 1,2,3 are slave computers used on the start lines. Each computer is allocated a range of ID nos & BID nos:-

Computer 9   0001 to 6999   Master Computer which archives data or as the sole computer in a small club

Computer 1   7000 to 7999   Normal Race computer

Computer 2   8000 to 8999   Extra computer if required for multiple start lines

Computer 3   9000 to 9999   Extra computer if required for multiple start lines

Thus the slaves have approximately 1000 numbers each which should easily last them for 1 year & the master has 7000 numbers. If a club is operating only 1 computer, then it will be number 9. It is assumed that the operator on the master computer will enter most of the new members/boats & regatta entries. A floppy from the Master will be used to RESTORE all data into the slaves at the beginning of a year. Subsequently all transfers between computers will use UPDATE. When you UPDATE, the program transfers only the records

which either:-

   a) Do not exist on the receiving computer OR

   b) Have a checksum different from that on the receiving computer.

   In this way new boats, people, can be entered on any computer and race details can also be processed on any computer. New Races however can reliably be added only on the Master computer. If a race is added on a slave, details must be added to the master computer ASAP, otherwise you will get the same RID allocated to more than 1 race.   When any computer is updated from any other, it will contain the sum of the records and these should be UPDATED into the master ASAP so that they can be archived. The SPRINGCLEAN routine from NEXTYEAR in ADMINISTRATION can transfer all slave-entered BIDs & IDs to the master range (1 to 6999) at the end of a year.

   The advantage of this system is that it is possible for operators on 4 computers to enter people & boats independently without duplicating BID or ID numbers. With previous versions of the program, new entries could be confused or lost. There is still a need, however, for the master computer operator to vet the lists to remove duplicates.

Flag Warning Assistance

   The OOD has an option of selecting flag warning assistance, if this is not beneath his dignity as an expert. There is a choice to select the old or new (2001) flag sequences. In either case, audible & visual warnings are given of which flags go up & which go down. There is a final 5 second audible countdown. When the old system is selected, computer data entry is frozen for the 30 seconds before a flag hoist/drop. As the 2001 system involves more flag movement, the keyboard is frozen only in the last 5 seconds. At all times the computer clock is at the top right corner of the screen.

   Currently there is an intermittent bug in this procedure which can crash the computer. It is therefore recommended that this option not be used & the default is OFF. When further reliability testing has been completed, you will be informed.

Navigating Round an ORH Screen

The Ground Rules are:-

- TAB or RETURN jumps 1 column to the RIGHT
- SHIFT TAB or SHIFT RETURN jumps 1 column to the LEFT
- The CURSOR ARROW keys move the cursor slowly in any direction
- CTrl-W (Ctrl & W pressed simultaneously) exits all screens.
- Pressing Q on any menu quits that menu & proceeds to the next lower level, until you exit the program.
- DO NOT switch off computer until you exit to the DOS prompt.
- Many of the Browse screens are split into two halves, the left giving a broad view & the right details.
- **A Mouse is NOT necessary, but :-**
- If you have a mouse, you can select any text by clicking with the left button on it.
- With a mouse you can drag a split screen by clicking on the 2 headed arrow at the bottom of the split. The   screen will return to its original form when you leave the screen & then reenter it.
- The Right Mouse Button duplicates the f2 key for entering a boats finish time or f4 for selecting a boat.

How The Help System Works

TO EXIT ANY SCREENS, including HELP, press Ctrl and W simultaneously (Henceforth noted as Ctrl_W)

TO SEE LIST OF OTHER TOPICS - Press T

TO SEE NEXT/PREVIOUS TOPIC - Press N/P

IF "SEE ALSO" BOX AT LEFT IS ACTIVE, Press S to move to that box, place cursor on topic of interest & press return to view.

HELP IS INVOKED DURING THE PROGRAM - by pressing 'H' from a menu or 'f1' within a browse screen. With the help provided, it is hoped that noone will require this handbook on a regular basis. Try feeling your way round the help screens. You can either use the SEE ALSO box or keep hitting N to select each topic in turn. With the List of topics in view, typing the first letter of a topic makes the cursor jump to it. This is also an easy way of jumping A to Z.

Demonstration Version of This Program

We do not believe in crippled demonstration programs. The demo version is fully operational for 1 year, at which point it will cease to work. Commercial versions have 12 months telephone support

Sailing Committees can use the demo version to plan next year's racing calendar & enter boat/members lists. Any effort expended thereon will not be wasted as the files will be useable in the commercial version. The demo program can for instance, do a full analysis of last years club results!

B.W. Systems software policy is that the user is allowed to load any one copy of the commercial software into 2 computers (say portable & desktop) so long as only 1 computer is in use at any time. In this sense the software is like a book which may be read by 1 person at a time. This enables a club to use a portable computer at the start line and a separate desktop machine for archiving & further analysis. The demo program can be freely distributed to anyone.

System Requirements & Installation

The program is written in DOS FoxPro & will work successfully in any PC operating system from DOS 5 to Win XP Professional. Old computers running Win 3.1 or earlier will operate better running the program from a DOS prompt. Win 98 through to WinXP operate happily from a Windows desktop icon.

Before You Start

If running DOS 5 through to Win ME, you MUST ENSURE that \config.sys requests adequate files & buffers. Suggested entries are :- FILES=60, BUFFERS=40. Also ensure that expanded memory is available. Have a line like:- DEVICE=C:\DOS\EMM386.EXE RAM 2048

If running WIN NT, WIN 2000, WIN XP, CONFIG.SYS does not control DOS parameters. Instead the FILES=60 & BUFFERS=40 lines MUST BE ADDED to the end of CONFIG.NT normally to be found in C:\windows\system32 (Search for file if necessary as WIN NT & WIN 2000 may be different.)

Install On Old Dos Machine

This procedure allows the use of any floppy drive & any hard disc.
FIRST Insert demo disc into floppy drive - say B: & then type B: & return.
SECOND decide hard disc on which you wish to install - say E:
Then INSTALL B: E: - installs from floppy B: to hard drive E:

Install On Windows 95

Windows 95 handles DOS programs better than 3.x but you must be careful as to how much conventional memory (under 640K) is available for installation. If the conventional memory falls much below 500K, the program may not install correctly from the command prompt. Windows 95 does not possess the MEMMAKER of DOS6 & appreciable memory can be eaten up by DOS drivers for IDE drive secondary channels, CDROMS, Iomega Tools etc. This can manifest itself as a crash or an "Insufficient Memory" message.
If this occurs, the best solution appears to be:-
1) Using Windows Explorer, delete directory \ORH & all its files.
2) Select START, then RUN & type "A:\INSTALL A: C:" if your floppy is A: & C: is your hard disc. Press return to reinstall - which should be successful as Windows 95 memory management should provide the requisite memory.
3) After quitting the program, in Windows Explorer right click on ORH.EXE in directory \ORH & drag a shortcut on to the desktop.
3) Right click on the shortcut & select PROPERTIES. Set the program to run in Full Screen.
The program should work correctly thereafter by double clicking the shortcut

Install on Win 98, Win NT, 2000 or XP

Use Windows Explore to copy DEMO.EXE into a directory \ORH, change to that
directory & then double click DEMO.EXE. Locate ORH.EXE & right-mouse-drag it on to the desktop & create a shortcut there.

Right mouse click on the shortcut & select PROPERTIES, then hunt for the following items which come under different headings according to Operating System:-
* CHANGE ICON - I use a Red Ruber Dinghy!
* Run FULL SCREEN or MAXIMIZED
* Memory (for Win 98) Select AUTO for all memory types.

Try It Yourself

This program is supplied to you with BOATS & PEOPLE containing all those who have taken part in 2004 Port Edgar races, less names & addresses.

CALENDAR contains all our 2004 events, the results of those raced being in RACES.

CURRENT is empty.

DISCARDS contains our rules

ENTRIES contains regatta entries

VARS.MEM contains variables you can modify to suit your club.

I suggest you experiment by modifying these figures. Later on you will see how to start with blank files & build your own system for next year. (See P22)

Install the program & run it as above. You will be launched into a series of 3 Help screens, describing the basic features of the program

See Page 34 for Summary of Menu Structures

Main Menu

Having quit the initial Help screens, the beginner lands in the Main Menu. The Advanced user also lands here, having bypassed the Help screens. They are presented with a number of options, each selectable by depressing a single key. The options available are:-

IMMEDIATELY YOU ARRIVE (I) - These are the things you do on arrival, like check today's races, print out boats list, synchronise helper's watch with computer etc.

STARTLINE OOD INPUT (S) - This is the option which is used most of the time by an OOD whilst looking after the boats on the water, like selecting starters, taking finish times & lap counts, calculating positions & documenting races.

OOD CALCULATE AFTER RACES (O) - Used by an OOD after races to produce the race results, series results, and the associated printouts including those for the newspapers.

QUIT TO DOS (Q) - As it says, this quits the program to the DOS PROMPT (C:>). DO NOT switch off the computer until you see the DOS prompt, otherwise data files may be corrupted.

ENROLMENT MENU (M) - Is used when enrolling boats for regattas. N.B. a REGATTA in our parlance is a prior-entered short-term event (say 2 days) where all boats enter beforehand & it is not likely that many boats will be DNCs (Did Not Competes). When boats are selected for a regatta event (in the Startline Menu) the whole list of pre-entered boats are loaded at the press of one key. In contrast, Club Series events lasting many weeks have a considerable number of DNCs & boats are selected for a race on a point-and-shoot basis as they pass the start line.

LABEL PRINT MENU (L) - Allows you to print Maiing Labels, with the selection criteria being based on either Boats or Members.

MISCELLANEOUS MENU (M) - Allows you to find out many interesting things about boats

Immediate Menu

(I) option of Main Menu
This contains all the things the OOD needs to do on arrival, before going to the startline.

OOD INFORMATION (O) - General infornation for OODs, mainly listing the standard abbreviations for FINTIME (finish time). You must ensure that no FINTIME is empty when you start to DOCUMENT the race.

EDIT ANY RACE IN CALENDAR (E) - This allows you to review the season's races, & in particular, today's

races. You may have to alter the start time of a delayed race. This can be done either from this screen or from the TODAYS UNSAILED RACES (T) option of the STARTLINE menu. This latter option is a subset of the (E) screen. The R field in both these screens is the RACED field which automatically changes from false to true when a race is documented. When it changed to true, the race disappears from the (T) screen wich means it is empty at the close of racing.

PRINT TODAY'S BOATS LIST (P) - Prints a best-guess of the boats likely to be racing, based on past races OR all boats who are eligible, based on members.

WATCH SYNCHRONISE (W) - Synchronises the computer clock to your helper's watch. This is much easier than attempting to change the time on the average wristwatch! Thereafter boats finishing times are automatically logged by pressing the f2 key in MONITOR RACES

HELP (H) - Help Screen

REGISTRATION LISTS (L) - Prints lists for the wall of the clubhouse listing all club members who are bost owners with the boat name, class, sail number & BID (Boat Ident Number). This list allows entrants to preregister before stating a race by writing the boatname, class,sail number & BID on a piece of paper. The BID eliminates confusion over boat identity which is often experienced in dinghy classes, especially where dinghies are hired from a marina - 3 helms have the same sail number!.

Start Line Menu

This is where the OOD spends most of his time whilst looking after races. The contents are:-

OOD INFORMATION (O) - General infornation for OODs, mainly listing the standard abbreviations for FINTIME (finish time). You must ensure that no FINTIME is empty when you start to DOCUMENT the race.

TODAYS UNSAILED RACES (T) - Shows all the unsailed races for today as defined in CALENDAR. The Raced (R) field in CALENDAR is false (.F.) for all these races. When running back-to-back races and a race from the first session cannot be raced owing to gales etc, it is essential to mark it as sailed (R =.T.) before you are allowed to select boats for the next session.

FLAG AUDIBLE WARNINGS (F) - The default state for this is OFF, as there is currently an intermittent bug which can crash the computer. It is recommended that this procedure not be used for an actual race until the problem has been solved. You will be informed when this has been done.

. When the problem is solved, you will find that the warnings toggle on/off every time the F key is pressed. When ON , your activities are suspended for 30 seconds before the flag movement, by a warning message & a count down beep over the last 5 seconds. This is an intelligent system & recognised from the CALENDAR whether races are starting on a 5 minute or a 3 minute schedule. You cannot set the inter race spacing to more than 5 minutes. If 2 races are spaced by more than 10 minutes, the second race attracts a separate preparatory 5/10 minute gun sequence. In other words, a spacing of more than 10 minutes turns following races into a new race group.In this state, the computer will give a 30 second audible/visual advance warning of any impending flag movements, showing which flags go up & which down.

HELP (H) - Provides access to the Help file.

SELECT TODAY's BOATS (S) - NB This is an UNAVAILABLE OPTION if there are no unsailed races on the day for that computer number. Allows you to select a boat for the race as it is seen at the start. The program automatically assigns the boat to the correct race based on the details entered by the committee in the BOATS & CALENDAR databases. The OOD has no choices to make. The only problem to arise would be incorrect entry by himself of a NEW BOATs details. Most problems can be resolved later by the OOD modifying the boat details in the BOATS option in the ENROLMENT menu or using the MODIFY RACES option in the OOD CALCULATE menu. It is important to make the corrections ASAP, otherwise the committe will have to modify the race via the password-protected ADMINISTRATION menu.

AUTOSELECT BOATS (A) - The AUTOSELECT option of STARTLINE is sometimes useful in back-to-back races in the same series as it will load all boats which have raced in previous races of that series. Surplus boats may then have to be deleted by typing "bad" as the finishtime.

MONITOR RACES (M) - Here the OOD logs all the lap finish times, preferably by using the f2 key (or the right mouse button). The computer fills in the time & lapcount automatically. If you do not catch a boat crossing the line on the computer, you can type the time from your assistants paper into the FINTIME column in the form 'hh mm ss'. There is a PRESELECT BOATS facility which allows you to preselect

boats via f4 & then bring them to the top of the screen via f8. In this way, if your spotter, using binoculars calls out boats sail numbers or name when they are a few hundred yards from the line, you can have them at the top of the screen ready to log their times when they cross the line. For regattas or other large races, it is highly recommended that you use a mouse as you can select one of the preselected boats with the left button & log its finish time with the right. In all cases have a helper logging TIMES ON PAPER in case of trouble. When the panic subsides, you can then copy the times into the computer. Remember, regattas consist of 15% panic & 85% boredom!

VIEW GENERAL RACE INFO (V) - Presents you with a count of the boats in each race so you can do a visual boatcount before the start. Below this is a read-only browse of the log file, showing all the presses of f2, logging successive laps for each boat. This is useful for resolving confusion over how many laps a catamaran has done. TIP - Even for nominal 1 lap race, boats often pass the start line several times, so it is helpful to treat each pass as a lap to ensure that you know when the PY=1200 handicap boat has finished the race, miles hehind the leader off 750 handicap. (If this happens frequently, consider using Average Lap Time Races)

CURRENT POSITIONS (C) - Calculates placings for your information only, to pass the hours in the OOD box. All calculations are subsequently done in the DOCUMENT RACES routine below.

WISHFUL WINNERS (W) - For real-time monitoring of races, this shows the hypothetical result of all yet-to-finish boats finishing NOW. A slow boat can win the race on handicap & this routine shows when this is no longer possible. It does not work well with Average Lap Time races, as it is impossible to predict when other boats will complete extra laps.

DOCUMENT RACES (D) - Calculates results & optionally backs up to floppy disc & prints all results including newspaper copy. You must do this between groups of races raced back-to back.

RETROSPECTIVE SELECT BOATS (R) - Used to select boats after the day of the race or after the back-to-back group has finished. Unlike Select Boats above, it selects boats for 1 race at a time only. It is much better to use Select Boats where possible as this automatically assigns the boat to the correct race in an evening when there are say 5 races.

QUIT TO MAIN MENU (Q) - Does as it says.

Select Boats Screen

If you press the f4 key with the cursor on a boat, an asterisk will appear in the "P" (Picked) column, indicating selection. If you select a non-acceptable boat like a dinghy for a yacht race or vice versa , a beep will sound, a message appear & the asterisk disappear. If you select the wrong boat, press f4 again, the asterisk disappears & the boat is no longer selected.

Rather than poke the cursor up & down to find the boats, the program offers 4 ways of searching for boats. Pressing f12, f11, f10 or f9 brings up a panel inviting you to enter the first few characters of the search item.

f12 followed by *sal* then return, finds BOATNAMES like "SALMON"

f11 followed by *son* then return, finds BOATCLASSES like "SONATA"

f10 followed by *k82* then return finds SAILNUMBERS beginning with "K82"

f9 followed by *82* then return finds all SAILNUMBERS CONTAINING "82" ie 7 boats!

Any of these methods would find Sonata, Salmon, GBR8229N. The last way f9, is useful when you can make out only a few consecutive characters on a curved or flapping sail. To see all boats again after f9, press f9 again but do not type in a sailnumber, only return.You will observe that f12, f11, f10 index the boats file on name, class & sailno respectively. There is a rather cramped aide-memoire in the top line of the screen after "Available Boats" summarising these keys - f12 N means " f12 indexes & searches on NAME" etc. **Pressing f1 gives a help screen describing these procedures.**

A recent addition is the **f6** key which lets you index on BID & search for a boat if you know its BID. This is useful when working with preregistered races using a Registration List. In this way confusion between hired dinghies is eliminated.

When the f2 key is pressed, you are asked to choose between a new owner & one who is already in your ADDRESS file. If an existing owner, you are presented with the Owners List. Having established the owner, you are requested to enter the boat details, starting from the Portsmouth Yardstick List. If in doubt, choose a near-equivalent class & sort out the mess after the race! If the boat is a catamaran, you are presented with

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a list of IYRU catamaran ratings if the catamaran is racing in a regatta. Lastly you are asked for the name & sail number. This system should make life easier as you are working from lists established by the committee, including handicaps, engine & keel configurations.

Having selected a few boats, exit to the Start Line Menu by pressing Ctrl_W & then **select M - Monitor Races.**

Monitor Races Screen

You should see all the boats you had selected on the last screen. The same searches are possible as in the last screen, using f12, f11, f10 & f9. Pressing f2 causes a boats finishing time to be entered & its lap count to be incremented by 1. To eliminate inaccuracies which might occur if you let your finger bounce on f2, the program ignores a second press until 10 seconds have elapsed. If you miss a boats finish, you can type in the finishing time later in the form 'hh:mm:ss', but it is easier to type 'hh mm ss' & the space is acceptable instead of a colon.

Anyone who has done OOD duty will know the feeling of panic which ensues when 6 yachts are bearing down on the line, with the sails of each yacht covering the sail number of the one behind. In such a case, pressing f3 logs the finishing time of an unknown boat against a blank boatname, until you can attribute that time to the correct boat. You then type the finish time into the correct boats finish time & delete the fintime for the blank boat record. This entry will subsequently be deleted by the program.

Other acceptable 3 character 'fintime' entries are:-

avg	Boat is to be awarded average points for series.
bad	OOD Error - Delete Boat from race.
dnc	DID NOT COMPETE - Boat did not appear on start line.
dnf	DID NOT FINISH
dns	DID NOT START
dsq	DISQUALIFIED
hrs	BOAT ON LONG-DISTANCE RACE taking many hours/days (ie Banff-Stavanger)
ood	OOD DUTY - Gets Average points for Series.
ocs or pms	PREMATURE START
rsc	RESCUE BOAT DUTY - Gets Average points for Series.
ret or rtd	RETIRED

Short Leeting If you have a large race with many screens of boats & you can identify the leaders before they reach the finish line using binoculars, locate them using f12 etc, then hit f4 on each. This "Short Leets" these boats & pressing f8 thereafter brings all Short Leeted boats to the top of the screen so they can be found quickly as they cross the finish line. Having timed a short-leeted boat, it drops to the bottom of the list for 5 minutes to ease clutter. This works whether you type in the time or use f2. Note that a boat does not have to be short leeted to move to the bottom of the screen when f8 is pressed after its fintime is altered manually. Also a boat which has been short leeted via f4, leaves the top of the list if not been timed within 10 minutes. This minimises clutter at the top of the screen due to misrecognition of approaching boats.

Pressing f1 gives a help screen on these procedures.

Up to this point you might have 6 classes racing simultaneously & mixed up on the same screen. This corresponds to what happens in practice- The OOD does not know if an Optimist or a Maxi Rater is to be the next boat over the line.

Current Positions Screen

If you exit to the start Line Menu via Ctrl_W, & then press C - Current Positions, the program sorts the mixed fleet of boats into their races & shows their positions in their own race. A corrected time of 999999.99 seconds implies that the boat has been eliminated from the race because of one of the above-mentioned 3 character abbreviations. A corrected time of 999999.90 seconds, however, implies an OOD error, typically:-

• You typed in a finish time not of form '12:34:56' - perhaps 'l2:34:56' - (L instead of 1)
• Elapsed time is negative - check fintime & findate (Finish Date)
• One of the 3 character abbreviations is wrong.
• If you ignore this warning, the DOCUMENT RACES option will force you to rectify the error, before it

will transfer the race(s) from CURRENT to RACES.

The f7 key will write 'hrs' to fintime for all yachts in a long distance race to save keying for say 50 yachts!

Wishful Winners Screen

For real-time monitoring of races, this shows the hypothetical result of all yet-to-finish boats finishing NOW. It is mainly of passing interest to the OOD and does not feature in the final results. A slow boat can win the race on handicap & this routine shows when this is no longer possible. It does not work well with Average Lap Time races, as it is impossible to predict when other boats will complete extra laps

Document Races Screen

When you are confident that no errors exist, select the D option, which will trap all errors as above. You are forced to confirm that the start time, handicap etc are correct before the results of the race are finally calculated. It is surprising how often OODs forget that they had to delay a race beyond its nominal start. If no errors exist, the races will be transferred from CURRENT to RACES, a floppy disc backup taken & the races printed out along with the sheet to go to the local newspaper.

The newly-documented races will be flagged as "RACED" in CALENDAR & the "Picked" field in BOATS unflagged as having completed the race, thus allowing you to select boats for the next batch of races that day. (Many clubs have morning & afternoon races & the program separates these.)

Retrospective Boats Select

When this option is taken, you are presented with a view of CALENDAR. If you place the cursor on a race & type Ctrl_W, you will be presented with a screen identical to the Select Boats Screen on the previous page. **The big difference** is that you select boats NOT for today's races but for the race you have just selected. The "S" option, in comparison, operates only on the day of the race, but selects boats for a batch of races.

New Boat Selection

Whilst in either Select Boats or Retrospective Boats Select, you can add a newcomer to the BOATS file by pressing the f2 key You are asked to choose between a new owner & one who is already in your PEOPLE file. In practice this can be difficult for an OOD who may not have a clue as to the helm. In this case allocate some innocuous name eg "Lark Sailor" to let you make further enquiries after the race. Having entered the owner, you are requested to enter the boat details. This is done by selecting the boat class from the Portsmouth Yardstick Table which appears on screen. The handicap is then automatically entered, along with the standard keel & engine configuration. If in you are unsure of the class, guess & sort out the mess after the race! If the boat is a dinghy catamaran, you are then asked whether it needs an IYRU rating & this is selected from the next screen. Again put in a near equivalent to let you run the race. Details can be altered later via the Enrolment Menu. Lastly you are asked to fill in boat name & sail number. If a Dinghy has no name, the program automatically replaces name by Class + Sailno.

For Regatta Enrolment, this procedure is also called up by the the N option of the ENROLMENT menu.

The Sailing Committee must check the accuracy of the BOATS file regularly as we have found much confusion caused by boats being sold, borrowing other boats sails, having different main/jib/spinnaker numbers etc. The worst problem is an OOD entering a boat a second time because he couldn't find it in the existing BOATS file. This, unless corrected, makes it likely that the wrong person gets the prize. Similarly, yacht details of engine & keel may be wrong & written confirmation must be obtained ASAP from the owner so that the default handicap can be corrected. Note that Rolling Handicaps let a boat/helm combination find its correct handicap level, no matter what is entered at this stage, at least for Club Races. The Open handicap,however, is important for open regattas etc.

Summary of OOD Procedures

The above Start Line Screens are all an OOD has to handle to be able to pin basic results sheets on the club notice board. He does not need to use the other menus for standard-preplanned races, except if he wishes to print the Series results to date, in which case he must access the OOD Calculate Menu below.

The basic OOD procedure is:-

Go To IMMEDIATE MENU

1   Collect or print OOD boat lists for the day
2   Read OOD Information (O)
3   Check Todays Races (E) - (later edit start time if race is postponed.)
4   Watch Synchronise (W) - So computer clock matches helper's watch.
HELP Is Available via H key

Go To START LINE MENU

6   Reread OOD Information if required.
7   Reread Todays Races if required. (Todays Races is edited version of EDIT CALENDAR)
8   Leave Flag Warnings (F) ON - This is default. (First flag movement is shown at right hand end of line)
9   Select Today's Boats (S) - If this is "Unavailable Option", there are no unsailed races today
10   Monitor Races (M) - Enter all finish times (via f2 or manually) & abbreviations such as dnf, rtd etc
11   Check Current Positions (C) to see if everything makes sense. There should be no blank finish times
12   If printer & floppy disc are available at Start, Document Races (D).
 NB you must document the first set of races in a back-to-back series, or you cannot select boats for the second series. The backup is optional during document, but should be done ASAP for safety.
13   If printer & floppy are in clubhouse, leave the documentation until you get back.
14   When in clubhouse you can print Series Results as well - See OOD CALCULATE MENU on next page.
The above section is written as though the computer is being used at the start line. If start is from a committee boat, using a paper list, wait until back in the clubhouse before typing in yacht details. (This takes more effort.)

OOD Calculate Menu

        This is accessed from the Main Menu by typing O & involves little OOD effort, being straight computation. It gives the following options:-

E   EDIT CALENDAR Identical to Start Line option
C   CURRENT POSITIONS Identical to Start Line option
D   DOCUMENT RACES Identical to Start Line option
H   HELP
A   ALL RACES BEFORE CURRENT View any 1 completed race including achieved handicaps etc. You
       can print it if desired.
S   SERIES RESULTS Calculate/Print results of Series. Only "DISCARDS" or "MOST FIRSTS" can now
       be selected (in the VARS routine of ADMIN MENU), but if a is not broken, the program reverts to the
       "LAST RACE" method for that tie only. Owing to an inherent limitation of FoxPro, the tiebreak procedure
       looks only at the first 9 DISCARDS or "MOST FIRSTS" places & then the first 6 "LAST RACES". The
       probability of this not resolving a tie is very low. The program complies with section A2.3 of the RYA
       Racing Rules of Sailing **EXCEPT** that discards are **not excluded** from LAST RACE tiebreaks
X   EXTRACT CHILD SERIES Allows you to select a particular class of boat from the last-calculated Series
       -Result. This enables you to select say Albacores or Sonatas from the last series, so that they can get a
       class prize as well as the handicap prize. NB this procedure does not tie-break well with Preference or
       Bonus point scoring.
P   PRINT ALL RACES FOR ONE DAY Either as hard copy or HTML
N   NEWSPAPER COPY PRINT Included in "Document Races" above. Gives first 4 in each race & includes
       the telephone/fax numbers of the local newspaper office.
W   WINNERS OF SERIES First 4 Winners of Series for Newspapers. This differs from above in that it is
       winners of series, NOT individual races.
M   MODIFY UNAPPROVED RACES - Modifies all unapproved race results after documentation, allowing
       ripple through of rolling handicaps.
F   FUTURE RACES OOD SHEETS Prints a batch of OOD sheets for fortcoming races. You can print up
       to 9 sheets per race and any number of days in advance.
R   REGATTA RESULTS (Print) - This is the"PANIC" button to summarise regatta results before the prizegiv-
       ing. It calculates all seies results & prepares the winners list. All this is done as a batch process.
B   BACKUP RACES TO FLOPPY - This is a repeat of that offered in DOCUMENT RACES

Advanced User Features

Race Options - For Committee

As will be explained later, it is possible to schedule races with the following options:-

Own Club Boats only
Local Boats (say within 10 miles)
National Boats (For Regattas)
Total Time
Average Lap Time
Time Gate Races & Round The Clubs Races.
Club/Open/Rolling Handicaps
Fast/Medium/Slow/All Dinghies
Catamaran/Trimaran Yacht or Dinghy
Fast/Medium/Slow/All Yachts
Day Keelboats
Class Races
Library Routines

All this is done by the Sailing Committee when they set up the CALENDAR & BOATS files & does not concern the OOD.

Enrolment Menu

This is accessed from the Main Menu by typing E & the options are :-

SELECT REGATTA (S) - Allows you to select a regatta from the CALENDAR database. When a regatta is selected, its name appears at the right hand side of that line & the f6 key then selects boats for that regatta (from the BOATS option)

LIST REGATTA ENTRANTS TO PRINT (L) - Prints regatta entrants to print in a variety of formats:-
a) Sail number order
b) Sail number within raceclass
c) Sail number within raceclass with each raceclass on a separate page

SHOW REGATTA TOTALS (T) - Shows the numbers of boats in each regatta class, with money paid & handicap. The second screen shows a list of boats in class-order. If a boat entered in a regatta wishes to change its raceclass, change RACECLASS in this screen **(NOT** boatclass as in the ENROL menu).

WITHOUT-BOAT MEMBER, ADD (W) - Adds a boatless member

BOAT NAME (B) - Browses boats & owners indexed on boatname. f4 finds a boat, f6 enters it for a regatta if a regatta has been selected (using S above). f10 can be used with care to delete a duplicate boat accidentally entered.

MEMBERS - NO BOAT (M) - Browses social/crew members indexed on surname. f4 finds a surname, f10 can be used with care to delete a duplicate member accidentally entered.

OWNERS NAME (O) - Browses boats & owners indexed on surname. f4 finds a surname, f6 enters it for a regatta if a regatta has been selected (using S above). f10 can be used with care to delete a duplicate member accidentally entered.

NEW BOAT AND/OR MEMBER, ADD (N) - You are asked to choose between a new owner & one who is already in your ADDRESS file. Having established the owner, you are requested to enter the boat details. You MUST enter adequate details to let you identify the boat after the race. Many dinghies have no name & in this case the program automatically enters Class + Sailno as the name eg "Laser 12345".

ADD NEW RACE (A) - Adds an unscheduled race for today.

This should be required only very rarely if the CALENDAR has been correctly prepared before the start of the season. A screen opens for your entry as shown below:-

----

RACE ID   Entered Automatically

Date	Entered Automatically as TODAY
VENUE	Entered Automatically as club waters
EVENT	"Joe Soap Trophy" etc
Calendar Class	Ensure you stick EXACTLY to standard abbreviations given on the screen. **DO NOT** ENTER "F.Yacht" or "F YACHT" instead of "F Yacht" etc
Class Flag	"D" etc
Start Time	"15:30" etc
Time Limit	"17:30" etc
Extension	"00:30" etc
Course	"abcfjl" etc
HC_UL	Leave blank unless a regatta race
SPEC	'a' for Average Lap, 't' for Timegate
Hcap System	o/i/r for OPEN/IYRU/ROLLING
Visitors	0/1/2
Computer	Normally 1

If the race is not for today, edit the date in EDIT CALENDAR afterwards.

HANDICAP DETAILS (H) - See Main Help
YARDSTICKS PY & IYRU (Y) - See Main Help
DUPLICATE BOAT SEARCH (D) - Similar to the BOAT NAME screen above, but it attempts to find duplicated boats, based on sail number.

N.B. **To enter a boat for a regatta, first select the Regatta via the "S" option, then locate the boat in the Boat Name option & press f6. This will reveal a screen of its details into which you add class & fee. If the boat is not already in the computer, add it via the "N" option. You first have to change the computer DOS date to match that of the race concerned in CALENDAR.**

Label Print Menu

(L) OPTION OF MAIN MENU - You are asked whether you wish to prepare address labels based on selection of Boats or Members or print an existing print file. Thereafter you are presented with a menu allowing you to select standard combinations of boats/members. If you select Boats, Sail Numbers are added to the labels, which is convenient if you wish to sell the labels to a photographer so that he can send photographs to the owners. It is also normally used to send out regatta entry forms, (based on "REGATTA" option) thus ensuring multiple entry forms are sent to a household where more than one family member has a boat. If you select "ALL CLUB BOATS", however, some individuals may receive multiple mailings. If you select Members, no sail numbers are added as some people own more than one boat. Thus only one form is sent to each member, even if he/she owns ten boats . This is usually what is required for club subscription requests, reminders to defaulters, AGM notices etc. The menu includes a MANUAL SELECT (M) to add or subtract from any previous selection. You can then view the overall selection using (V) & print it via (P). This version of the program allows you to print to sticky labels or to a file for use by another program. With labels, you are given the choice of printing to EPSON type sprocket fed labels or Avery 7160 labels, 21 to an A4 page. If you print to a file it can be Dbase, Comma Separated Variable, or SDF (System Data Format). The last type is straight ASCII with constant length fields. The other 2 are delimited. Most word processors or spreadsheets can import all 3 types. These files are called MEMBERS with extensions of DBF, TXT or SDF. **NOTE** This menu provides a convenient way of viewing selections of boats using varying criteria.

Each time you print a selection, the program prepares a .prn print file including all the printer control codes. This can be reprinted if you choose the "print file" option or you can give the file to someone else to print on the same type of printer using the DOS command **PRINT /B PRINTFIL.PRN PRN**

Miscellaneous Menu

(M) OPTION OF MAIN MENU

BOAT PERFORMANCE OVER YEAR (B) - This is a "School Record Card" of each boat's performance over the year. Its main use is to allow the committee to adjust the boat's handicap. No print facilities are provided but a crude printout can be obtained via the computer's PRINTSCREEN key.

EXISTING HANDICAPS (E) - Provides read-only access to the actual handicaps of boats in your fleet, showing OPEN (ohp), CLUB or CRUISER (chp), ROLLING (rhp) & IYRU CATS (ihp). Of course, ihp applies only to catamarans & does not feature in the rolling handicap calculations. When catamarans are racing in handicap fleets, they operate on Portsmouth & are included in the RHP calculations.

YARDSTICKS - PY & IYRU YARDSTICKS (Y) - Provides read- only access to Portsmouth Yardsticks & IYRU Catamaran Ratings to allow OOD to enter the correct figures for a new boat.

CALCULATE YR2 ASSESSMENT (C) - Generates YR2 returns on all classes with more than 2 races to their credit, excluding:-

a)   catamarans racing to IYRU handicaps.

b)   boats whose achieved handicaps are outside the slow/fast capping limits set in the VARIABLES option of the ADMINISTRATON MENU. Typically, these are +/- 5%

You are given the option of calculating the assessment based on CLUB boats (distance = 0), LOCAL boats (distance = 1), NATIONAL boats (distance = 2), or all boats including SOLD. The calculation incorporates the Crew Skill Factor from the BOATS database, if you have enough information to fill it in! The default value for CSF is zero. The Standard Deviation is also calculated. See sample print on page 28. (Calculated in 2 seconds on a Pentium 133 computer or 2 minutes on an old 286)

STERNCHASE START TIMES (S) - Calculates start times for Sternchases based on the latest prior race results. There are 2 methods using either fixed start/finish times or 100 minutes for a PY=1000 boat. The CLASS field in CALENDAR now determines the form of printout you obtain. If class contains "Yacht" you get Yachts only ; If class contains "Dinghy" you get Dinghies only; If class contains neither of above - eg "All", "D&Y" or is blank, you get Yachts & Dinghies.

EXPORT RACES TO FLOPPY (X) - This exports all races to floppy disc as one DBASE (.dbf) file. It allows the race results to be analysed in another program of your choice, should this be necessary. Hopefully the OOD's Right Hand should do most of what you require.

ALL SERIES RESULTS TO FILE (A) - Prepares a file of all series results to aid in prize allocation.

OVERALL CHAMPIONS (O) - Calculates the club chamions for both Dinghies & Yachts, based on the assumption that you should reward prowess and consistency. A High Scoring system is adopted in which the program summates the number of boats beaten throughout the season. Only races in which the boat achieves a place are considered. Note that the ADMIN MENU holds a procedure to modify this to allow recompense for OOD Duties etc.

AdministrationMenu

(Requires Password)

(A) OPTION OF MAIN MENU - Password for Demonstration Version is 'Demo'

This is for use by the Sailing Committee & is not accessed by the OOD.

PACK BATABASES (P) - Packs all databases, ie removes all those records marked for deletion (diamond in left hand margin). Several procedures pack automatically, but this procedure is included for general housekeeping.

MODIFY ANY RACE (M) - Recalculates the placings of any race in the calendar. This is usually made necessary by the results of a delayed protest committee. Since a rolling handicap potentially rolls through all subsequent races, modifying boat's placings, PEYC have decided in this procedure to recalculate the race concerned but freeze rolling handicaps at their initially calculated values to avoid confusion & acrimony amongst contestants. The exception is if no yacht in that race has raced in a subsequent race. It is then safe to modify the rolling handicaps.

EXISTING HANDICAPS (E) - Shows all handicaps; Portsmouth (Including Portsmouth Status), Club, IYRU & Rolling of all boats who have raced at the club, including visitors. These are editable. The usual search facilities on boatname, boatclass & sailno are provided.

AMEND ROLLING HANDICAPS - This modified the ROLLING HANDICAP in BOATS and the previous race.

CLUB SUBSCRIPTIONS, ADD (C) - Shows all those members who have not paid membership fees. When you log a subsciption against a member, his name disappears from the list.

RACE FEES, ADD (F) - Presents you with a list of boats. The letters a to z inclusive can be entered in the SUBSCRIPTN field with the following meanings:-

a - The boat has paid a block subscription for all normal races in the coming season.

b thru r - The boat has paid for series b thru r contained within the block subscription. Ie he has elected not to enter all races.

s thru z - The boat has entered for special races not covered by the block subscription. These could be Winter Frostbite etc.

Thus entries 'az' mean he has paid block subscription & entered for Frostbite. 'cde' means he has entered series c,d,e only. The letters can be entered in any order & if you enter the sum paid after the letters eg "az35.50" for £35.50, the program displays the total fees collected. The 'r' limit is programmable via the V option of the ADMINISTRATION menu.

SEE P31 for CALENDAR file structure.

LIBRARY MENU (L) - Analagous to Windows File Manager. Enables you to copy data file sets to/from libraries (sub-directories). Each library can store data files for a separate year or Visitor's Regatta, each with its own Scoring System & Boats list.

VARIABLES MODIFY (V) - Enables the club to set up its own preferences, including handicap limits & scoring system.

IMPORT YARDSTICKS FROM FLOPPY (Y) - Potentially allows you to import Portsmouth Yardsticks from a floppy disc supplied by RYA. Until the program gets their official backing, you will have to key in updates manually. You can also update the IYRU catamaran ratings manually.

UPDATE FILES FROM FLOPPY (U) - Allows you to update the data files on any computer via a backup floppy disc from any other computer. This procedure imports only those boats, people, races & calendar race details not in the receiving computer or those which are present but have a different checksum. A checksum is a field derived from other fields in that record to detect differences.Hopefully OOD's boobs are thus filtered out. If you are amalgamating backup discs from differing computer numbers, ALWAYS use this procedure.

RESTORE ALL FILES FROM FLOPPY (R) - Overwrites all data & variables files from a backup floppy disc. All mistakes are thus reproduced & if you are so unfortunate as to restore from a floppy containing only files for computer "N", you lose details of races from all other computers. Despite this, if you have a guaranteed good floppy, use this procedure to synchronise the contents of 2 computers. The main use is to ensure that a portable computer on the startline contains the latest file issue.

NEXT YEARS PROGRAMMES (N) - Used by the sailing secretary to prepare next year's programme. Saves tedious typing in the preparation of new CALENDAR, BOATS & PEOPLE files. See Next Years Programmes for details.

ZAP CURRENT SELECTION (Z) - Erases CURRENT contents & resets selected boats flags. Used only by committee when doing dummy runs on regattas etc.

DISASTER RECOVERY (D) - Hopefully never needed. It tries to recover data from OOD's boobs, power failure etc. Together with a file repair facility at startup, it gives the best possible chance of recreating files & ascertaining the number of laps done by each boat. See Disaster Recovery for more details.

OVERALL CHAMPION (O) - This is the same as the O option in the CALCULATE MENU, except that, being password protected, it gives the Committee an option to add bonuses to boats who have given up time to officiate in Regattas. Typically these bonuses would be half the number of boats in the races missed.

Next Years Programmes

This is a Sub Menu reached from the Adminstration Menu by typing "N", this allows you to generate next years racing program. The program has a file called NEXTYEAR which is the advance planning for next year's sailing calendar (CALENDAR). Work on NEXTYEAR can start while this year's races are still being run. You can create NEXTYEAR from scratch (as you must on the first occasion) or modify a copy of this year's

calendar. When you take a copy, there is the option to slip the dates by a year +- about a month to synchronise with tides & other clubs regattas etc.

Having established the basic file, the program allows you to add new races, new series of races, regatta races etc spaced by preselected intervals, at the press of 1 key. If races clash, you can slip the remainder of the series by 'y' days. The options are:-

BROWSE NEXTYEAR (B) - This browses NEXTYEAR & allows all the operations listed above.

NEW NEXTYEAR FROM SCRATCH (N) - Leaves you with a blank file, which you then buildup from scratch.

COPY CALENDAR TO NEXTYEAR (C) - This uses existing calendar as a model. If a slip is specified, many of next year's dates will be correct without typing.

REPLACE CALENDAR with NEXTYEAR (R) - Does what it says, having backed up this year's calendar.

SPRINGCLEAN BOATS & PEOPLE (S) - This weeds out empty ID numbers resulting from departed people & boats & compresses the files ready for the next season. NOT TO BE USED MID SEASON as it would corrupt the race results. It is intended that ths routine will be modified to transfer all slave-entered BIDs & IDs to the master range (1 to 6999) at the end of a year. This version wil be released early in 1998.

ZAP PEOPLE/BOATS/ENTRIES/RACES (Z) - Backs up these files, then replaces them with empty files ready for next year. Having zapped the old NEXTYEAR file & reentered the NEXTYEAR program, you are presented with a screen asking you the start & end dates for your new calendar, & the days of the week on which you regularly sail. Very few clubs sail regularly on 7 days per week, so this limits the file size. Having entered that information, add the politically important races like regattas, meetings with other clubs etc, using f3, f4, f5, f6 as convenient. All races will have date, dow entered, plus venue='Your Yacht Club' (PEYC in DEMO) & computer=1 automatically. You can change the venue manually if the race is at another club.

NB As the above operations could cause chaos, the second stage password is required before files can be zapped or replaced.

The Browse screen (B above) is where most of the editing is done. It has a lot of facilities, controlled by the hot function keys f1 to f10, listed at the top of the screen.

f1   shows a help screen.

f2   adds an extra day into the calendar.

f3   adds a race to a day.

f4   adds a race, 5 minutes after the time of the race under the cursor. SPEC & HC_UL, Timelimit & Extension are duplicated.

f5   adds the next "x" races in a series, each "y" days after the previous race. All variables are duplicated as with f4 & the series number is increased by 1 each time.

f6   adds the next "x" races in a series or regatta on the same day, each "y" minutes after the previous race & the series number is increased by 1 each time.

Thus f5 & f6 are similar but f6 spaces races over 1 day instead of days/weeks.

f7   slips all races of a series from the cursor down by "y"days, to avoid a clash with another event. The series races above the cursor stay where they are. ("y" can be + or -)

f8   shows only races matching that under the cursor, ie filters out all other races. Pressing it again lets you see all races. The top line of the screen shows the next action of f8.

f9   changes index between date & class & back again. The top line of the screen shows the next action of f9.

Library Routines

OPTION (L) in ADMINISTRATION MENU

This is a sub-menu offering a method of handling libraries (sub-directories) of data files, so that you can separate this years races, last years races, important open regattas etc. The options are:-

LIST LIBRARIES (L) does just that.

CREATE NEW LIBRARY (C)

DELETE LIBRARY (D)

NEW NAME FOR LIBRARY(N)

BACKUP TO HOME LIBRARY (B) - backs up working data to the HOME library for that data. The HOME

library is specified in the memo file VARS.MEM & is set by the SET CLUB VARIABLES routine, below. It is VERY IMPORTANT to set this variable correctly to avoid overwriting the wrong data.

RESTORE FROM ANY LIBRARY (R) - copies data files from any library into the work area. See LIBRARY ROUTINES in Help file for a discussion.

Set Club Variables

OPTION (V) in ADMINISTRATION MENU

This is a long series of screens which setup variables to suit the club's requirements.

FIRST SCREEN

1   Normal password & Special password to allow replacement of data files by next years files
2   Upper handicap limits for Fast & Medium Yachts & Dinghies. N.B. enter MEDIUM=FAST if no MEDIUM class as the MEDIUM limit is also the lower limit for the SLOW class N.B. ** N.B. ** N.B.
3   Fraction by which rolling handicaps are updated
4   Percentage capping limits for fast & slow performers
5   Computer Number - usually 9 for the MASTER & 1/2/3 for slaves.
6   HOME library directory for that data. Typically RACES97 or REGATTA3.
6   Local Club Initials
7   Race Results Header Lines (3)
8   Newspaper Results Header Lines (3)
9   Sponsors Message Footer Lines (2)

SECOND SCREEN

1   Floppy drive letter like A:
2   Printer Port in use
3   Insert extra printer form feed if required (for EPSONs)
4   Include Club Number (CN) boats in rolling handicap calculations
5   Instructions on where to leave backup discs

THIRD SCREEN

Defines the printer in use. You have a choice of EPSON, HP or CANON BJ10SX. Place the cursor on the printer of your choice. The table columns hold the escape codes for these printers, less the escape character. The codes are respectively for :-

1   Reset
2   4 character left margin
3   11 character left margin
4   10 characters per inch
5   17 characters per inch

There are 2 blank rows for addition of your own printer. Enter the ASCII codes, not HEX or DECIMAL. With Epson printers, you may have to specify the extra form feed from the second screen.

FOURTH SCREEN

This tabulates the number of races started (12 max) against:

1   Discards for normal series
2   Discards if 'Regatta' is in Event field (Regdisc)
3   Minimum number of races to qualify (Minqual)

FIFTH SCREEN

This defines the points system to be used. It contains the figures for RYA PLACE POINTS & PREFER-ENCE POINTS & has space for 3 Specials of your own choice.

The columns P_1 to P_7 contain the points to be allocated to 1st to 7th place. All placings above 7th add 1 point per place.

SIXTH SCREEN

Defines the Series Scoring System to be used for any Series. All Series will use the default scoring unless the name of that series is in the left hand SERIES column. The PID is the points syatem ID from the previous screen. You can select the Tiebreak procedure (Ties) to be Discards or Most Firsts. You then have 3 pairs of columns for DNS,DSQ & DNC yachts. The B part of the pair can be Q/R/T for Qualifiers/Race Entries/Total Entries. The ADD CONSTANT A is typically 1 for DNS/DNF/PMS/RTD, 2 for DSQ and 3 for DNC.

Disaster Menu

The program uses the belt, braces & safety pins philosophy. At startup it checks & attempts to repair all data files. When the OOD is working at the startline with the CURRENT file, it takes a copy to the SAFE file every time he returns to the startline menu. It also logs boat details & finish time for every depression of the f2 or f4 keys into the LOG file. The disaster recovery procedures utilise this redundant information to attempt to find the truth. Most problems are likely to occur if the computer power fails or if it is switched off in the middle of the program.

The options are :-

BACKUP RACES TO FLOPPY (B) - This is the same backup procedure as that contained in the OOD CALCULATE menu.

CURRENT POSITIONS (C) - A repeat of the procedure already contained in STARTLINE & OOD CALCULATE menus. Shows boats placings before you have documented the races.

VIEW LOG FILE (V) -shows the log file contents for information only.

TRY SAFETY FILE (T) - Shows the SAFETY file contents to let you see if they are better than the CURRENT file entries.

USE SAFETY FILE AS CURRENT (U) - Overwrites the CURRENT file by the SAFETY file.

LOG FILE PRINT (L) - Prints the log file for study, if you think that would help.

RECREATE "CURRENT" from LOG (R) - Allows you to analyse the LOG file to find the lap times for each boat. You select the last relevant entry for each boat & the system can then recreate the CURRENT file for the data.

REMEMBER THAT A PAPER LIST IN PARALLEL WITH THE COMPUTER OPERATION IS INDISPENSABLE IN RESOLVING PANIC-INDUCED CONFUSION!

The IMMEDIATE MENU contains a procedure to preprint suitable lists of boats.

Reindex Files Option of Main Menu

Occasionally an index file gets corrupted, giving vague symptoms. Try this option if the program misbehaves. The program will delete all index files. Thereafter, the files will be reindexed & the problem should disappear.

Loading Your Own Files

When you have finished experimenting with the sample files supplied, you will have to enter your own data. This is a Committee task & does not affect OODs. The biggest jobs are entering the first Calendar & Club Boats. In future years, the Calendar can be copied via the NEXTYEAR facility whilst the Boats & People files do not change quickly.

Club Variables

These must be filled in before touching BOATS, PEOPLE or CALENDAR. See P 19 for a description. From the Main Menu, select A for the Administration Menu & type in the default password "Demo" then return. This takes you into the Administration Menu. Select V for the Variables screen then return.

In the first screen of variables type in the Initials of your local club. **THIS IS MANDATORY.**

Also type in the maximum number of boats reserved for your club. A suggestion is 699, leaving 300 for visiting boats at regattas. This must not be altered, once set, as this would upset the Boat Identification Numbers (BIDs) allocated to each boat & thus give prizes to the wrong boat!

You should also type in the highest Portsmouth Handicap Numbers for Fast & Medium Yachts & Dinghies, if known at this stage. If no Medium class exists, its handicap limit should be equal to the Fast limit. These limits must be entered before races start as they control the selection of boats for all races.

The HC_UL field in CALENDAR allows these to be overruled for any one race, to eliminate start line overcrowding of any class. See Page 31.

The remaining screens need to be addressed before racing starts as they affect Print Headers, Floppy drive used for backups, Printer Port, & Series Calculation parameters.

Boats

When you are sure you want to clean out the demonstration files & load your own, select Administration Menu (Password "Demo"), then NEXTYEAR (N) then ZAP RACES/ENTRIES/BOATS (Z), which backs-up, then cleans out these files ready to receive new data.

Entry of boats is time-consuming, especially if names, addresses, telephone numbers are included. It is done via the NEW BOATS option on the ENROL MENU. If you already have details of members & boats in other PC files, B W Systems may be able to translate them for you. Your entries can be checked later & edited by selecting the Browse (B) option in the enrol menu. You can modify everything except the BID on this screen. **NOTE it is essential to enter "K" prefix sail numbers as "GBR" numbers. The program will look for GBR even if you ask it to look for K. This overcomes the problem of boats having a GBR main but K spinnaker etc!**

Calendar

From the Administration Menu (Password Demo), choose the NEXTYEAR (N) option. If you are starting from scratch, choose the NEW NEXTYEAR FROM SCRATCH (N) option from the sub menu. You will be asked to Proceed or Abort & then to enter dates of first & last race, plus the days of the week on which you normally race. This will generate a skeleton calendar for the year. Function keys f1 shows a help screen and f2 thru f9 have the uses described on P17 & in the help file. These keys save a lot of typing by adding in extra days, races 5 minites later on 1 day, series races at the same time of day spaced by say 1 week They also permit slipping series forwards or backwards in time to avoid clashes. Keys f8 & f9 allow viewing of races of 1 series in isolation from the rest to let you check if you have inserted all of say the Slow Yachts-Autumn Series.

Before using f2 thru f7, you should enter all the fields in the race which is to be copied by the function key as these fields will also appear in the copies, saving much effort.

See the Calendar file structure on P31 for explanations of the fields. The only awkward field is HC_UL which overrides the handicap limits set up in the first VARIABLES screen. Suppose a club normally sets the upper handicap limits for yachts in VARIABLES to:-

FAST   1000, MEDIUM 1100, meaning that yachts from handicap 1101 upwards are SLOW yachts. then finds that at a regatta, there are too many fast yachts. It wishes to lower the FAST upper limit to 990 but this transfers yachts to the MEDIUM class, so the upper limit for this should be lowered to 1060. Hopefully, this does not transfer too many boats to the SLOW class. This can be done by entering values for HC_UL of the races in question:-

F Yacht   990
M Yacht 1060
S Yacht   1060

Note the allocation of figures. The 990 is interpreted by the program as the upper handicap limit for fast yachts, whereas the 1060 is interpreted as the boundary of medium yachts & slow yachts.

If there are no medium yachts, and we wish the upper FAST limit still to be 990, we have:-

F Yacht   990
M Yacht   990
S Yacht   990

The same logic applies to the settings of the hanicap limits in the SET VARIABLES routine.

When you are sure the contents of NEXTYEAR represent the required sailing programme, exit to the NEXTYEAR menu & choose the R option. You will be asked if you really want to replace CALENDAR with NEXTYEAR so enter the second stage password "1995Files" - note capital "F". This will copy calendar to cal_old, nextyear to calendar.

If, however, you subsequently wish to add a few races, you can add a race for TODAY ONLY by using the "A" option in either the ENROLMENT MENU. By using the EDIT ("E") option in the IMMEDIATE or ENROLMENT MENUS you can then change the date to whatsoever you like.

Collecting Money

Some owners are reluctant to pay club & racing fees. The Cp field in PEOPLE logs payment of the owners Club Subscription. This is changed via the C option of the ADMINISTRATION MENU. The first screen of this option shows only the defaulters, whereas the second screen shows all members.

Race Groups

Race series in CALENDAR can be grouped with other like series for the purposes of charging race fees. You could have the GP field in CALENDAR annotated as:-

b   Easter Series
c   A Series
d   B Series
c   Monday A Series
d   Monday B Series
e   Night Series
z   Frostbite Series

If a boat pays a block subscription, "a" is entered, covering race groups up b thru r inclusive. This leaves s thru z to cover extra races such as Frostbite Series, Charity Benefits etc for which extra charges can be made. The default limit covered by the block subscription is 'r', but this is programmable via the VARIABLES option in the ADMINISTRATION menu.

The SUBSCRIPTN field in BOATS logs the fees they have paid. You enter the group lettrs above, for the groups entered or 'a' for a block subscription. A Boat having SUBSCRIPTN = az (or za, order does not matter) would have a block entry for all standard races, plus the Frostbite series. One having SUBSCRIPTN = 'cd' would be entered for the Monday series only. If an owner has not paid his club subscription or his race fee has not been paid, the program prints a '$' or a '*' opposite the defaulter's boat on the race results sheet .A recent optional addition to the facilities is,to segregate those who have not paid fees under a heading "Those underneath may not have paid fees". We find that this works wonders! The offenders are then excluded from the Series Results. In other words a boat is not precluded from entering a race before fees are paid, but cannot get a prize.

Regattas do not work this way. It is assumed that the pre- entered boat has paid its entry fee. The Regatta Totals option in the Enrolment Menu tallies regatta receipts.

Dealing with Regattas

General Tips

- Boat selection in regattas works differently from normal races. When a boat is entered for a regatta in the ENROL MENU, it is allocated a raceclass & this class is unaffected by subsequent changes of handicap limits. To change the raceclass for an entered boat, go to the SHOW REGATTA TOTALS (T) option in the ENROL MENU, having selected the relevant regatta with the S option. Move through the subsequent screens until you find the list of boats and raceclasses. It is then a simple matter of editing the raceclass field from say 'F Dinghy' to 'M Dinghy' or 'F Yacht' to 'Cruiser'etc. Be careful to use only the standard classes with the first letter of each word capitalised & do not put a full stop after 'F' for fast etc. DO NOT type things like 'F. Yacht' or 'F YACHT'. These raceclasses must match the boat classes in the CALENDAR file.
- As races often slip during regattas, because of light winds etc, it may be that not all scheduled races are completed. In this case, ensure that all unraced races are given unique start times after those races that are to count. Failure to do this can upset the Discards routine in the Series Calculation.
- Remember to mark early unraced races to be cancelled as raced. Failure to do this means that they will be selected instead of the subsequent race for the same class
- Always enter the sailnumber prefix such as GBR when searching for a boat. There is no problem if you are dealing solely with a Laser fleet, but the addition of keelboats means that without a prefix you may land in trouble with duplicate boatsor no boat at all. It is not necessary to enter suffixes such as the "T" of 1235T.
- Remember that all "K" Sailnumbers are listed as "GBR" and the program will find GBR1035 when you ask it to find K1035
- Use a mouse if it is available. It greatly speeds up selecting & timing boats, using the right button.

Using Multiple Start Lines

In large regattas, it is common to have more than one start line, say yachts from a pier & dinghies from a committee boat. These start lines are designated 1, 2 etc & the same number used for the computer allocated to the race. All entries for all start lines are recorded in one computer (the master). This computer can then print out lists of all boats separated into sheets for the respective start lines 1,2,3 etc.

If you possess multiple computers

At the same time as the above printouts the master computer can produce backup floppy discs for the other computers & these discs are then loaded into the other computers using the **RESTORE option** of the ADMIN menu. At this stage all computers hold a complete copy of the master databases. Each computer then has its Computer No in the VARS option of the ADMIN MENU set to the number of its start line. It can then be used to enter all the finish times for the races at its own start line. Results can be printed out from a printer attached to each computer. This is the quickest way to produce results if the hardware is available.

If you have only one computer

The master computer is then the only one & you have to set its computer number to that of each start line in turn. This means that only one startline can be monitored in real time, ie with the finish times logged with the f2 key. The other start lines have to log results on paper only & these results must be typed manually into the master computer, after setting its computer number to the relevant value. This obviously takes longer than using multiple computers. **NB you need to set the computer number to a specific value only while entering finish times & DOCUMENTING the races.** After the results are documented, you can deal with all races from all start lines, resolving errors, settling Protest Results, YMP's etc using any computer number.

The Final Panic

Whether you have one or many computers, it is usually best to combine all results into the MASTER computer after DOCUMENTATION, using the UPDATE option of the ADMIN MENU.

N.B. DO NOT USE THE RESTORE OPTION as this will overwrite all existing files. The Update

option adds only the races not already in the master computer & so you get the sum of all races from all start lines. You can then deal with all races from all start lines, resolving errors, settling Protest Results, YMP's etc & finally print out all the overall regatta results as a batch process using the REGATTA RESULTS option of the Miscellaneous Menu. This saves time when everyone is awaiting the prizegiving.

Reminders

Take frequent backups between stages to allow for human or machine error. See Regatta Tips on Page 25.

Past The Basics

Series & Regatta Numbering & Scoring.

Series & Regattas must be entered as a generic event followed by a space and then a number (1 to 12). For instance ECSW Regatta 1 to ECSW Regatta 6. It is not possible to score series with more than 12 races.

The SERIES option in the OOD CALCULATE menu then evaluates the overall series results based on the entries in the Fourth, Fifth & Sixth screens of Set Variables. These set Discards/Place or Preference Points/ Scoring System for DNC, RTD etc. They require a password for access.

Time Gate Starts

For these, identified by CALENDAR.SPEC= T, the start time for individual boats equals BSTARTinstead of START. In Monitor Races, the f2 key or right mouse button logs bstart & increases laps until laps =55. This allows boats to dither on the start line & each crossing is recorded. When you are sure the boat has started type laps=55 after which f2 or right mouse button logs FINTIME. Alternatively, BSTART & FINTIME can be typed in manually after the race.

Such races add extra spice by using the skippers judgement of forthcoming wind & tide to ensure minimum elapsed time, round the downtide mark & back. In non-tidal waters, there would not normally be the same excitement.

Round The Clubs Races

These are a special case of timegate races, where times are taken when yachts pass several intermediate buoys, thus providing multiple races within the overall race. Currently, all times must be typed in manually with the exception of the overall start & finish times which are at the original start line. If there is sufficient interest, it would be possible to modify the program to copy the finish time of the Nth race to the start of the $(N+1)^{th}$ race.

Boat Selection

The program automatically places boats in the correct race, based on Date, Boatclass, Raceclass and Handicap. For ordinary club races where the OOD accepts any boat arriving on the start line, the f4 key selects the boat & loads it into CURRENT. At Port Edgar we normally have F Yacht, S Yacht and Dinghy races at 5 minute intervals on Wednesday evenings. The Monitor Race screen shows all these boats indexed on Boatname, Boatclass or Sail number, allocated to the correct race (RID).

The OOD can also use Retrospective Select Boats to select for any one race, even one which has already been documented.

When dealing with Series races after the first race of a series, the Autoselect Boats can save much time. If the 5th of a series has races for Fast/Slow Yachts, Dinghies & Catamarans, totalling say 100 boats, they are all entered with one keypress. Inevitably some of these will not be present so you then type "BAD" for missing boats as the finish time & these boats will be deselected.

For Regattas or pre-entered series, the situation is different. The boats are preselected by loading into the ENTRIES database, from the ENROL menu, along with their Raceclass, which may not be obvious. For instance a 1 Tonner may enter as a Family Cruiser, having a handicap adjustment for not using a spinnaker. This is a use for a boats Club Handicap - as its cruiser handicap. On the day of the regatta, all boats in that regatta are loaded from ENTRIES into the correct raceclass in CURRENT automatically when the "S" key is pressed.

Race Handicap Capping

There has been much argument over the best way of adjusting Rolling handicaps. The program tries to ignore violent random swings in performance. If a boat delivers a result which would take it over the capping limit the "C" column of the race results sheet shows "s" or "f" & the handicap does not change. If a boat with "s" returns another very slow performance in the next race, the "s" changes to "S" & capping takes place. "F"

& "f" are similarly related for fast performances. The rolling handicap of a boat with a completely random performance, ie getting "s" & "f" alternately, does not change.

Rolling Handicaps

The New Handicap is by default taken to be 0.15 way between a boats existing handicap & that achieved in the last race. This is similar to the YR2 suggested method where the adjustment is made after every 4th race, but our method facilitates programming. It is suggested that no boats handicap is allowed to move more than 5% away   from the original handicap, ie it is capped. If ACHHC lies outside the capping limits the new value of NEWHC is ¼ way between the old value & the capping limit. Thus the new value can never actually reach either capping limit, to which it tends asymptotically. We consider it impossible for any devious sailor to attempt to sail so that he attains a beneficial handicap for any one race! The good sailors will have to keep trying to ensure that a back-of-fleet sailor does not win the race on rolling handicap. The said back-of-fleet sailor knows that if he tries harder he has a chance & so does not get disheartened. The result should be better performance all round when the fleet revert to open handicaps for an open regatta.

Amending Rolling Handicaps

This should rarely be necessary - usually after a Trial Number boat has achieved a handicap far removed from the original estimate.Amendments to Rolling Handicaps are not easy as unlike OHP & IHP, a rolling handicap race is normally based on NEWHC in the previous rolling handicap race. If, however, there is no such race, BOATS.CHP is used. In either case,BOATS.RHP contains the new handicap for reference only. BOATS. RHP is never used in computations, unlike OHP & IHP.

When any handicap is changed, all unapproved races are altered, plus any races thereafter. It is therfore necessary to approve any races which must not be affected by the change.

To make the modifications easier, a special routine has been included in the ADMIN MENU. This starts by asking you to approve races as in the"Modify Unapproved Races" routine, selects the boat, allows you to modify the handicaps & then recalculates all unapproved races. In this way, a regatta entrant who queries his assigned handicap can have it modified & the changes ripple through all races in the regatta. These races are regarded as provisional until approved.

Approved Races

All races are unapproved for 10 days after documentation unless manually approved via the M option of the CALCULATE menu. The results of unapproved races are regarded as provisional. This allows for late decisions by protest committees to affect subsequent races & hence the series results for regattas or back-to-back races where OODs are unde pressure.

Unapproved races use OPEN & IYRU handicaps from the BOATS file, whereas approved races use the handicaps from the RACES file. Thus approved races store the handicaps pertaining at the time of the race, despite subsequent modifications. The OPEN & IYRU handicaps of a boatcan be modified via the E option of the ADMIN MENU & will affect all unapproved races for that boat.

Next Years Handicaps

If you are modifying handicaps at the start of the year, ensure that BOATS.CHP is set to the desired starting value ofthe rolling handicap. The ZAP procedure in NEXTYEAR copies RHP to CHP automatically, so that the rolling handicap calculations work after last year's RACES file is zapped.

Rectifying Errors in Races

The OOD can update an UNAPPROVED race using the "M" option in OOD Calculate Menu. Anyone who knows the password can update **any** race from the "M" option in the ADMINISTRATION menu.

A discrepancy in a race, whether resulting from OOD error or protest committee decision, should be rectified as soon as possible to avoid problems with rolling Handicaps. If rectification is delayed until a second race has been sailed, it is impossible to update the rolling handicap from the first race without affecting the rolling

handicaps & hence result of the second race. As this would be generally unacceptable to the contestants, the program does not update a rolling handicap from an approved race if any boat in it has raced in a subsequent race. It will, however, update the positions.

A common cause of discrepancies is the OOD forgetting to change the CALENDAR START when a race is delayed. Another is a boat being awarded average points by a protest committee.

If an OOD enters the wrong boat in a race, the steps are:-

1   Select correct boat via SELECT BOATS (or RETROSPECTIVE SELECT , if race has been document-
      ed)
2   Remove incorrect boat by entering "BAD" as finish time in MONITOR RACE screen if race has not been
      documented, MODIFY TODAYS RACE if documented, or MODIFY ANY RACE screen if race is not
      TODAY'S.
3   If incorrect bost is a duplicate, remove it via f10 of BOATS screen of ENROLMENT menu.
4   If boats owner is duplicate, remove via f10 of OWNERS screen of ENROLMENT menu.

      NB steps 3 & 4 are to reduce confusion, they do not affect race results.

      An alternate method which is often quicker, is to use the ENROLMENT Menu - BOATS to find the BID's for the correct & incorect boats. Note them on paper. Then use MODIFY RACES, find the incorrect boat in the race & then change its BID to the correct number. DO NOT attempt to change the boat name.

OOD's Right Hand Demo - B. W. Systems - Tel/Fax 0131-339 3312

Sample Printouts

Print routines are written for Hewlett Packard Laser/Deskjet, Canon & Epson FX80 family Printers. When the Deskjet driver is used with Laserjet printers, you may get an eror message "Printer Not Ready -Retry -Yes/No". If you select YES, the program will continue.

Below are sample printouts -

From OOD Calculate Menu
Port Edgar Yacht Club Race Results

Date of Race 17/06/96   **OOD: Margaret Tait**

Race No 80   **Monday Experienced A Series 6**   **Dinghy**

Start 19 16   **Rolling Handicaps Used**   **S.C.T. = 00:10:36.15**

Boatname	Boatclass	Sail No	HCap	Finish	Elapsed	Laps	Corrected	Place	Achd Hcp	PI	New Hcp	C	A	PY
Laser 80883	Laser	80883	1072	20:10:05	00:54:05	5	10:05.4	1	1020	-57	1062	F		PY
Tamarisk II	Laser	107045	1109	20:12:19	00:56:19	5	10:09.4	2	1062	-15	1100			PY
Gnilias	Laser	123007	1093	20:11:53	00:55:53	5	10:13.5	3	1054	-23	1085			PY
Rum & Coke	Dart 18	5504	789	20:13:16	00:57:16	7	10:22.1	4	772	-26	786			PY
Disco 4000	Laser 4000	4149	891	20:11:56	00:55:56	6	10:27.8	5	879	-27	889			RN
Major Palpitations	Hurricane 5.9	232	697	20:07:05	00:51:05	7	10:28.2	6	688	-3	695			PY
Sea Cadet	Bosun	8	1196	20:07:02	00:51:02	4	10:40.1	7	1203	7	1197			RN*
Skald	Dart 15 Sprint	1291	909	20:14:17	00:58:17	6	10:41.2	8	916	36	910			PY
Rubha Ruadh	420	42869	1089	20:14:15	00:58:15	5	10:41.9	9	1099	13	1091			SY
Catalina	Hurricane 5.9	231	721	20:10:43	00:54:43	7	10:50.5	10	737	46	722	S	N	PY
Top o'the Morning	Topper	7	1290	20:13:02	00:57:02	4	11:03.2	11	1345	57	1301			PY$*
Blue Tack	Europe	GBR275	1126	20:07:02	00:51:02	4	11:19.8	12	1203	58	1126	s		SY
Just For Starters	Enterprise	19960	1127	20:07:43	00:51:43	4	11:28.3	13	1219	103	1127	s	N	PY$
B of S	Wayfarer	W2	1126	20:11:25	00:55:25	4	12:18.2	14	1307	208	1132	S	N	PY$*
Buzz 472	Buzz	472	1008	20:19:18	01:03:18	5	12:33.6	15	1194	187	1008	s	N	RN
Paladin	GP 14	392	1136	20:15:20	00:59:20	4	13:03.5	16	1399	273	1145	S	N	PY
Minna	Whilly Boat	????????	1129	20:13:57	00:57:57	2	25:39.9	17	2733	1604	1140	S	N	TN$
Whalesong	Catapult	2089	871	rtd	00:00:00	0	46:40.0	999	871	0	871	s	N	RN
Bubbleboat	Hornet	2082	975	rtd	00:00:00	0	46:40.0	999	975	0	975		N	SY*
Sozo	Hornet	713	975	dns	00:00:00	0	46:40.0	999	975	0	975		N	SY*

Any comments/queries on the above results should be written below & signed.
Please do not modify the results yourself. The Sailing Committe will do this if the case merits.

NOTES:-

Achd Hcp - is the achieved handicap, based on the RYA YR2 Procedure, modified to include CN yachts.

PI - is the Performance Index, ie the number of Portsmouth Points difference between Achieved Handicap & Open Handicap.

New HCap - is the handicap obtained by adding a fraction of (Achieved-Rolling) to the Rolling Handicap.

This fraction is currently 0.20.

This New Handicap will be the future Rolling Handicap for that boat.

C - Lower case "f" or "s" imply the yacht has hit the capping limit for the first time & no handicap change results.

Upper case implies that a boat has fit the limit at least twice in succession & NewHcap has been CAPPED as "F" fast (-5%), or "S" slow (+5%).

A - indicates whether a boats figures have been used in the assessment of the rest of the fleet. "N" indicates No.

PY - Handicap Status; PY,SY,RN,CN or TN.

A "$" at the right hand side indicates we have no record of club fees having been paid.

A "*" at the right hand side indicates we have no record of race fees having been paid.

Printed at 22:20:11 on 16/09/96

****

* NB   As Series is incomplete, some of the these boats may not qualify!   *
*   DNC Points may be artificially low if few boats have qualified.   *

****

Race=3 of 7, Entrants=16, Qualifiers=13, Discards=1, Best 2 Races Count
Scoring is Place Points, Tie Break by Discards

BOATNAME	PLACE	ENT	FINPTS	PT1	PT2	PT3	PT4	PT5	PT6	PT7	PT8	PT9	PT10	PT11	PT12
Takitimu	1	3	1.5	0.75	0.75	8	0	0	0	0	0	0	0	0	0
Layla	2	3	4	2	2	10	0	0	0	0	0	0	0	0	0
Fracas	3	3	8	3	5	7	0	0	0	0	0	0	0	0	0
Roundabout	4	3	8	6	7	2	0	0	0	0	0	0	0	0	0
Alouette	5	2	9.5	10	3	6.5	0	0	0	0	0	0	0	0	0
Rhett Butler	6	3	11	15	8	3	0	0	0	0	0	0	0	0	0
Demonstrator	7	3	12	8	6	6	0	0	0	0	0	0	0	0	0
Redskin	8	2	12	7	13	5	0	0	0	0	0	0	0	0	0
Shoki	9	2	13	9	4	13	0	0	0	0	0	0	0	0	0
Orient Express	10	2	13.75	13	13	0.75	0	0	0	0	0	0	0	0	0
DUG	11	2	15	4	13	11	0	0	0	0	0	0	0	0	0
Abso$*%*?lutely	12	2	17	14	13	4	0	0	0	0	0	0	0	0	0
Disc Drive	13	3	18	11	9	9	0	0	0	0	0	0	0	0	0
Slippi Jin	999	1	18	5	13	13	0	0	0	0	0	0	0	0	0
Highpointer	999	1	25	12	13	13	0	0	0	0	0	0	0	0	0
Midnight Cowboy	999	1	26	16	13	13	0	0	0	0	0	0	0	0	0

Place is the final place in the series. - 999 implies boat has not qualified.
Ent is the number of races entered by any boat.
Finpts are the total points for series.
Pt1, Pt2 etc, are the points for the first, second etc races of the series.
Points=99 are given to an OOD or rescue crew until he has competed in 1 race.
Printed at 11:39:07 on 26/11/95

From Miscellaneous Menu

The following RYA YR2 Assessment was calculated in 2 minutes on a slow 286 computer & 1 second on a 450MHz Pentium

....

RYA Assessment for All Boats inc. SOLD with more than 2 Races at 26/06/1999
If a boat's Achieved Handicap in a race differs by more than +5 or -5 % from its Open Handicap, that race is not used in this assessment.
Crew Skill Factors are used where these are known.

Stat/Eng/Kl		Class	No in Class	No of Races	Open HC	Revised HC	Std Devn
CN	IB2F	1Tonner	1	9	785	773	19.33
CN	IB2F	Benetau 39	1	8	797	789	12.64
CN	IB2F	Davidson 36	1	13	860	850	22.2
CN	IB2F	DB2	1	26	882	880	17.56
CN	1BFF	Etap 28i	1	12	1004	1000	19.81
CN	IB3F	Eygthene 24	1	10	1098	1101	25.37
CN	IB2F	First 30 ES	1	18	931	926	21.17
CN	1BFF	First 35	1	11	892	884	12.68
CN	OBF	H Boat	3	5	1014	1019	28.58
CN	OBF	Hunter 707	1	17	893	890	15.28

CN	IB2F	Mirage 28	1	15	1109	1098	31.7
CN	IB2F	SunKiss	1	16	846	851	20
PY		Albacore	6	10	1068	1062	17.21
PY	OBF	Albin Express	1	2	947	969	10.5
PY		Dart 15 Sprint	4	8	880	893	26.44
PY		Dart 18	5	9	798	788	19.61
PY		Enterprise	8	6	1116	1130	26.07
PY		Fireball	8	14	991	988	41.85
PY		Hobie 16	3	11	802	788	22.12
PY		Hurricane 5.9	6	16	691	692	22.72
PY	OBF	Impala	3	21	943	950	26.27
PY		Laser	22	91	1077	1080	78.7
PY		Laser II	14	14	1031	1038	33.62
PY	OBF	Ruffian 23	1	8	1060	1081	22.59
PY	IB2F	Sigma 33	3	15	927	947	12.38
PY	OBF	Sonata	5	39	1038	1051	34.03
PY		Topper	30	18	1288	1298	43.78
PY		Wayfarer	12	12	1099	1123	21.46
PY	OBF	Yeoman	5	4	1107	1115	18.85
RN	405		2	11	1090	1090	26.11
RN		Buzz	1	4	1007	1016	15.03
RN		Dart 15 Sprint	1	3	880	904	20.51
RN		ISO	6	2	926	926	18
RN	IB22K	Kings Cruiser 29	1	4	1084	1095	13.1
RN		Laser 4000	2	9	906	897	30.04
RN		Laser Radial	7	2	1099	1130	8.5
RN		Wanderer	11	11	1129	1147	34.6
SY		420	10	4	1086	1102	22.16
SY	OBR	E Boat	12	34	1048	1048	37.14
SY		Europe	2	5	1210	1112	16.84
SY	1BFF	Golden Shamrock	1	3	962	986	5.72
SY		Hornet	3	8	975	989	30.88
SY	OBF	Hunter 701	5	7	1094	1089	30.07
SY	OBF	Hunter 707	1	4	893	898	28.73
SY	OB2K	Pandora Internationa	1	4	1174	1157	11.78
TN	IB2F	Benetau First 25	1	3	1080	1083	19.51
TN		Fireflyofsorts	1	2	1298	1296	1
TN	IB2F	First 28	1	4	1013	994	22.94
TN	OB2K	Horizon 23	2	2	1207	1248	14
TN	IB2F	Hustler SJ30	1	4	937	944	11.61
TN	IB2F	Jaguar 27	1	2	1068	1047	8
TN	IB22K	Roberts 27	1	2	1070	1059	13.5
TN		Topper Sport 14	1	3	1050	1080	8.38
TN	IB2F	Tucker 31	1	3	1170	1168	30.63

This makes prepation of YR2 returns easy!

Troubleshooting

Boat Not Selected for Race

The most common complaint is that a boat is not selected for the correct race or not at all. There are a number of possible reasons:-

- Calendar Class not one of the standard forms like Yacht, F Yacht, S Dinghy (**NB Singular NOT Plural**)
- Calendar Vis not correct value - You cannot enter National Boats if Vis=0
- Boats Dngy or Boats Hull does not match race - You cannot enter a monohull in a catamaran race.
- Boats Handicaps entered incorrectly.
- Any mis-spelling, including an accidental space before a word.
- Computer No does not match that seen in CALENDAR EDIT. Modify from the (V) Option in ADMIN MENU
- Corrupted Index File - See REINDEX FILES Below.

Vague Problems

Vague problems are sometimes encountered including :-

- Non-selection of boats as in the last paragraph
- Cursor keeps shooting to bottom of boats list.
- Error Message like "Index File Not Found" or "Index does not match file"

These are caused by a corrupted index file. To rectify this, quit to the Main Menu & take the **REINDEX FILES** option (R). This will delete the index files, regenerate them & restart the program. It is a good idea to do this periodically as a form of housekeeping. The file size will be reduced & the program made faster.

Explanation of File Structures

CALENDAR & NEXTYEAR

These have the same structure:-

Field	Field Name	Type	Width	Dec	USAGE
1	DATE	Date	10		03/04/1999 etc
2	DOW	Character	3		Mon, Tue, Wed etc
3	CLASS	Character	20		All/Yacht/Dinghy/F.Yacht etc
4	EVENT	Character	34		Spring Series 3 etc NOTE all series/Regattas end with a number!!
5	START	Character	5		13:05 etc
6	RID	Numeric	3		Race Index Number - Inserted automatically.
7	Gp	Character	1		Race Group for Fee Allocation
8	COURSE	Character	9		Slow/Fast/Trophy etc . For information only.
9	OOD	Character	30		OOD's name etc
10	VENUE	Character	11		PEYC for DEMO
11	SPEC	Character	1		A= Average Lap System used, T= Timegate Race
12	HC	Character	1		C=Club, O=Open, R=Rolling, I=IYRU Catamaran
13	HC_UL	Numeric	4		Overrides upper handicap limits in VARS.MEM for 1 day's racing only.
14	HC_METH	Character	1		Reserved for future use with Clyde, CHA etc Handicap Systems
15	VIS	Numeric	1		0=No Visitors Allowed, 1=Local Boats, 2=Nationwide
16	FLAG	Character	10		Class Flag
17	TIMELIMIT	Character	5		15:00 etc.
18	EXTENSION	Character	5		00:45 etc. Applies if 1 boat finishes inside timelimit.
19	COMPUTER	Numeric	1		Usually 1 (2&3 used for extra start lines and 9 for Master).
20	MEMO	Memo	10		For noting weather conditions, protests etc, at time of race.
21	APP	Logical	1		.T. = Approved, .F. = Unapproved
22	R	Logical	1		.T.=Raced, .F.=Not Yet Raced
23	P	Logical	1		.T. = Printed, .F. = Not Yet Printed
24	SCT	Numeric	9	2	Standard Corrected Time for Race. Inserted by program after race.
25	CHECK	Character	15		Checkstring

NB. as stated above, all Series/Regattas **MUST** end with a space followed by a number (1 to 12) for the series calculations to work. The Nextyear program will enter these automatically.

The Memo field, No 20, can be opened in a number of screens by pressing f12 & closed by Ctrl_W.

Points to note are that:-

- The RID (Race Index Number) is a unique serial number 1-999 for that race. It is assigned automatically by the program.
- SPEC = A designates an Average Lap time race, whereas =T designates a Timegate race.
- Memo is for recording events at race-time. Weather, Protests, Tide etc. You could type a large book, if required.
- HC_UL is used to override a high limit handicap for 1 race only to equalise entries in Fast/Medium/Slow classes.
- HC records the handicap rules applying to the race. C=club, O= open, R=rolling.
- VIS shows whether visitors are eligible for the race. 0=None, 1=Local (From Clubs near you), 2=National Boats.
- R is RACED. .T. =raced, .F.=not raced yet. (.T. is TRUE/YES, .F. is FALSE/NO)
- FLAG is the Class Flag for the race. This is repeated by the Flag Warning Procedure.
- TIMELIMIT is just that.
- EXTENSION applies to the timelimit if any boat in that race has finished. Boats outside Timelimit+extension will get the equivalent of a "DNF" finishing time, although their actual finish will be preserved.
- COMPUTERmust match the computer number programmed into your computer. It will normally be 1, but a large regatta might require 2 or 3 computers at differing start lines. This facility allows you allocate simultaneous starts to differing computers/start lines.
- SCT is the standard corrected time for that race, inserted automatically by the computer after it has calculated the results.
- Checkstring to detect modifications/errors. (Not same type of checksum as files on next page).

BOATS

The structure of BOATS is:-

Field	Field Name	Type	Width	Dec	Usage
1	BOATNAME	Character	20		
2	BOATCLASS	Character	20		
3	SAILNO	Character	8		*Always use prefix Letters. Be careful of K12345 changing to GBR12345*
4	DNGY	Logical	1		*.T. if boat is a dinghy, otherwise blank or .F.*
5	H	Character	1		*Hull Type - Catamaran/Trimaran/Day Keelboat - C/T/K*
6	BID	Numeric	4		*Boats ID - Unique Boat Serial Number , inserted automatically by program.*
7	DISTANCE	Numeric	1		*Boat Status, 0=Club, 1=Local, 2=National, 3=Sold - New Owner.*
8	CREWNAME	Character	30		*Crew Name is printed along with owner in Newspaper Results.*
9	OHP	Numeric	4		*Open Handicap - Crudely Portsmouth Yardstick*
10	OHSTAT	Character	2		*Open Handicap Status of Boat , PY, SY, RN, CN, TN as per YR2 booklet*
11	CHP	Numeric	4		*Club/Cruiser Handicap, Fixed*
12	RHP	Numeric	4		*Rolling Handicap - Recalculated automatically after every race*
13	IHP	Numeric	4		*IYRU Catamaran Reting (*100)*
14	CSF	Numeric	2		*Crew Skill Factor - Difficult to evaluate!*
15	ENG	Character	3		*Type of Engine as per Portsmouth Yardstick*
16	KL	Character	2		*Type of Keel as per Portsmouth Yardstick*
17	DEVIATIONS	Character	30		*Deviations from Class rules*
18	SUBSCRIPTN	Character	26		*Race Fee Subscriptions Paid*
19	P	Logical	1		*Boat selected for race*
20	S	Logical	1		*Boat selected for other purposes, say Regatta printout.*
21	Boatmemo	Memo	10		*Typically "Co-Owner Jim Murray"*
22	ID	Numeric	4		*Owners ID*
23	Beaten	Numeric	6		*Number of Boats beaten throughout season.*
24	Berth	Character	6		*Used for Regatta administration, but not by standard program*
25	Check	Character	5		*Checksum for detecting modifications/errors*

NOTE The above 'distance' field ties closely with the 'vis' field of the CALENDAR to establish whether a boat is eligible for a given race. If distance=3, it is "so far away" that it can never take part in a race. It has been sold & has either left the club or is still sailing at the club with a new owner. If it ever sails again at the club, it must be reentered as a new boat, with a new serial number (Boat ID - BID - Field 6 above). If this is not done, the Series Points will be allocated to the wrong owner. Take care to track boat sales.

PEOPLE

The structure of PEOPLE is :-

Field	Field Name	Type	Width	Dec	Usage
1	FIRSTNAME	Character	20		*Next 8 fields obvious*
2	SURNAME	Character	28		
3	ADDRESS1	Character	30		
4	ADDRESS2	Character	30		
5	ADDRESS3	Character	30		
6	ADDRESS4	Character	30		
7	POSTCODE	Character	9		
8	HOMETEL	Character	20		
9	WORKTEL	Character	20		
10	MOBILE	Character	20		
11	EMAIL	character	40		
12	CLUB	Character	10		
13	MEMBER	Character	6		*Club Membership Class*
14	CP	Logical	1		*CLUB PAID - Paid Club Fees, .T. =Yes, .F. or blank=No*
15	S	Logical	1		*Selected for Mailing Labels or other purpose*
16	ID	Numeric	4		*Owners ID*
17	MANMEMO	Memo	10		*Typically " Part Owner SEA BREEZE"*
18	SID	Numeric	5		*Club Subscription ID Number*
19	CHECK	Character	5		*Checksum for detecting modifications/errors*

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You see that the 2 memo fields MANMEMO & BOATMEMO are used amongst other things to track co-owners & syndicates. Syndicates can be awkward, especially when someone does not get the recognition he thinks he deserves.

RACES

The structure of the RACES file is as follows:-

Field	Field Name	Type	Width	Dec	Usage
1	RID	Numeric	3		Race Index No - See CALENDAR
2	DATE	Date	10		Start Date of race
3	BID	Numeric	4		Boat Index No - See BOATS
4	FINTIME	Character	8		Finishing Time
5	FINDATE	Date	8		Finish Date
6	LAPS	Numeric	2		Laps - Elapsed will be divided by laps for Average Lap Time Races
7	ELAPSED	Numeric	7		Elapsed Time
8	CORRECTED	Numeric	9	2	Corrected Time= Elapsed converted via handicap
9	HCAP	Numeric	4		Club, Open or Rolling Handicap according to race. One decimal place
10	PLACE	Numeric	3		Place (position) in race
11	STDCORR	Numeric	9	2	Standard Corrected Time of boat in that race.
12	OHSTAT	Character	2		PY, SY, RN, CN, TN
13	A	Character	1		=A if Boat was used in assessment of SCT (See CALENDAR)
14	ACHHC	Numeric	4		Achieved Handicap
15	PRFDX	Numeric	4		Performance Index=ACHHC-OHP (Number of Portsmouth Points Difference)
16	NEWHC	Numeric	4		New Handicap for next Rolling Handicap Race.
17	C	Character	1		CAPPED; S=Slow cap, F= Fast cap (Capping at +/- 5% Portsmouth Points)
18	START	Character	8		Start Time; Same as CALENDAR START
19	BSTART	Character	8		Same as START , except for timegates where it is individual boat start time.
20	PTS	Numeric	5	2	Points allocated from Series Calculation
21	OV_PTS	Numeric	5	2	Allows for Committee Intervention to override points after Protests etc
22	OHP	Numeric	4		Open Handicap at time of race.
23	IHP	Numeric	4		IYRU (Catamaran) Handicap at time of race.
24	CHECK	Character	5		Checksum for detecting modifications/errors

The 4 files CALENDAR, BOATS, PEOPLE & RACES are relationally coupled via ID, RID & BID so that when the OOD views his RACES screens, he can see the relevant details from BOATS & CALENDAR as well. In this way, the physical size of the files is kept to a minimum.

There are other databases which are handled by the program & with which the user should never need to interface:-

CATFIGS   IYRU Ratings
COMPARE   Will be a lookup table for CHA etc handicaps
CURRENT   Scratch file holding current races
DISCARDS   Discard lookup table
ENTRIES   Regatta entries
FOXUSER   Program variables
LOG   Logfile for Disaster recovery
NEXTYEAR   Next years calendar
ORHHELP   Help file
POINTS Lookup table for Points Systems
PORTSMTH   PY Yardsticks
PRINTERS   Printer codes
SAFE   Duplicate of last CURRENT
SCORING   Lookup for DSQ, RTD etc points
SERIES Results of last Series calculation

All these have .DBF extensions. Memo files have .FPT extensions.
Any file with a .TXT extension, like RACES.TXT, SERIES.TXT is an ASCII file showing the last race or series calculation. Users can edit them in Word Processors.

Handicap Conversions

The following have been used, where OLD & NEW refer to the RYA, PY yardsticks based on 100 & 1000

Menu Structure

```
                        Main Menu

        Immediately You Arrive -------- I
        Start Line OOD Input----------- S
        OOD Calculate After Races---- O
        Help ----------------------------- H
        Quit To DOS --------------------- Q
        Reindex Files -------------------- R
        Enrolment Menu---------------- E
        Label Print Menu---------------- L
        Miscellaneous Menu ----------- M
        Administration Menu ---------- A
```

```
              Immediate Menu
    OOD Information ---------- O
    Edit any Race in Calendar  E
    Print Today's Boats List --- P
    Watch Synchronise--------- W
    Help ------------------------- H
    Latest Registration Lists--- L
    Quit to Main Menu--------- Q
```

```
              Start Line Menu
    OOD Information ---------- O
    Today's Unsailed Races --- T
    Flag Audible Warnings ---- F
    Help ------------------------- H
    Select Today's Boats ------- S
    Autoselect Races ----------- A
    Monitor Races -------------- M
    View General Race Info --- V
    Current Positions ----------- C
    Wishful Winners------------ W
    Document Races------------ D
    Retrospective Select Boats  R
    Quit to Main Menu--------- Q
```

```
              Calculate Menu
    Edit Calendar --------------- E
    Current Positions ----------- C
    Document Races------------ D
    Help ------------------------- H
    Any Race (View/Print) ---- A
    Series Results --------------- S
    Extract Child Series-------- X
    Print All Races for 1 Day-- P
    Newspaper Results --------- N
    Winners of Series----------- W
    Modify  Unapproved Races M
    Regatta Results - Print----- R
    Backup to Floppy ---------- B
    Quit to Main Menu--------- Q
```

The menus on this page are the only ones required by the casual user taking his turn on an OOD roster.

The Immediate Menu contains the items which require attention immediately the OOD arrives before the race.

Most of an OOD's time is spent in the Start Line Menu, Selecting Boats & then in MONITOR RACES, where finish & lap times are recorded.

The CALCULATE menu is also used by the OOD for routine printouts & Documenting a race. Boats & data for all races are first entred in a CURRENT file. Documenting checks the Current file for errors, calculates places, backs up to floppy disc, and then moves the CURRENT file contents into the RACES file, where they are kept all year. Documenting also prints out the results of current races & a newspaper summary. You can obtain extra printouts from the A, P, N, W options of the Calculate menu.

The S option allows you to view and print the results of a Series or Regatta to date and the O option shows the progress towards the overall club championship, based on the number of boats beaten throughout the year.

If you have made a mistake in a race's data & discover it after documentation, but before the race is approved, you can rectify it by the Modify (M) option.
Races are unapproved for 10 days after the day of the race unless approved manually via the above (M) option. This allows rectification of regatta mistakes before publishing the final results. Changes ripple-through all unapproved races.

To modify results of approved races , use the M option in the Administration Menu - see opposite page. There is no ripple-through in approved races.

Menu Structure - Continued

Enrolment Menu

Select Regatta--------------- S
List Regatta Entrants to Print-L
Show Regatta Totals ------- T
Add Boatless Member ----- W
Boat Name ------------------ B
Members- Social/crew----- M
Owners Name--------------- O
New Boat &/or Member--- N
Add New Race-------------- A
Existing Handicaps--------- E
Yardsticks - PY &IYRU--- Y
Duplicate Boat Search ----- D
Help ------------------------ H
Quit to Main Menu--------- Q
Password to allow Editing P

Label Print Menu - Boats

Select All Own Club Boats C
Neighbouring Club Boats - N
Select Worldwide Boats --- W
Past Regatta Entrants ------ R
Manual Select/Deselect---- M
View Selected Items ------- V
Help ------------------------ H
Print Selected Items -------- P
Quit to Main Menu--------- Q

Label Print Menu - Members

Subscription Defaulters---- D
Paid Up Club Members---- Y
All Own Club Members --- O
Manual Select/Deselect---- M
View Selected Items ------- V
Help ------------------------ H
Print Selected Items -------- P
Quit to Main Menu--------- Q

Miscellaneous Menu

Boat Performance over Year-B
Existing Handicaps--------- E
Yardsticks - PY & IYRU -- Y
Calculate YR2 Assessment C
Sternchase Start Times ---- S
Export Races to Floppy---- X
All Series Results to File -- A
Overall Champions--------- O
Help ------------------------ H
Quit to Main Menu--------- Q

Administration Menu and its Sub-Menus

Administration Menu

Pack Databases ------------- P
Modify Any Race ---------- M
Existing Handicaps--------- E
Amend Handicaps---------- A
Club Subscriptions - Add-- C
Help ------------------------ H
Quit to Main Menu--------- Q
Library Menu --------------- L
Variables - Modify --------- V
Import Yardsticks ---------- Y
Update Files from Floppy - U
Restore Files from Floppy R
Next Years Programmes--- N
ZAP Current Selection----- Z
Disaster Recovery ---------- D
Overall Champion---------- O
(OOD Corrections For)

Library Menu

List Libraries---------------- L
Create New Library -------- N
Delete Library ------------- D
New Name for Library ---- N
Backup to Home Library -- B
Restore from any Library - R
Help ------------------------ H
Quit to Main Menu--------- Q

Nextyear Menu

Browse Nextyear ---------- B
New Nextyear from scratchN
Copy Calendar to Nextyear C
Replace Calendar --------- R
Springclean Boats / People S
Zap People/Boats/Races--- Z
Help ------------------------ H
Quit------------------------- Q

Disaster Menu

Quit to Main Menu--------- Q
Backup to Floppy ---------- B
Current Positions ----------- C
View Log File--------------- V
Try Safety File ------------- T
Use Safety File as Current U
Log File Print --------------- L
Recreate Current from Log R

Variables Menu

This is a series of screens to set up all variables required by the program, including:-
Club Name
Sponsors
Handicap Limits
Scoring Parameters
Printer Details
Printer Port & Floppy letter
Other Options

OOD's RIGHT HAND

Yacht Race and Yacht Club Management Program for IBM PCs

Feedback from Other Clubs

B.W. Systems will be glad to receive suggestions from clubs as to their requirements since this program was initially built round the requirements of Port Edgar Yacht Club. If there is sufficient demand, these suggestions will be incorporated in upgrades. In particular, please inform us if you are interested in an add-on unit to sound external horns at the start of a race.

Projected Improvements

These are being considered:-

- CHCAP, Clyde & others handicap systems if there is enough demand.