Southport Yacht Club Inc. - Power Boat Committee

PISCES RUN SHEET PROGRAM
Using Pisces - Some Important Aspects (& tips)

The details below outline SOME important aspects which may not be obvious when first using Pisces. These aspects are extracts from the Pisces 'Helps'. Please print these details and study.

Read in conjunction with the comprehensive program 'Helps' which can be viewed (and printed) throughout Pisces. More useful information can be gleaned from the 'Helps'. A complete Users Guide (ie. the 'Helps' combined) can be printed using the main (start-up) form <Help> <USERS GUIDE> menu options.

A) DATA FILES (outlining the affects of upgrades)

*NOTE re Upgrades: Files flagged '**' below may be overwritten with upgrades. Run Sheet (R/Sht) files are never overwritten with upgrades. To avoid losing USER data for certain files, see **Notes 1 & 2** below.*

Data Files Names - Event Designation Codes:

Committee supplied Event courses are given a code. This becomes the base name for the course data files eg. (note the two dashes).

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SO-A-0
     ^ Revision number (changed to 1,2 etc if the course is modified).
   ^ Series (mainly A, B or C - series are rotated each season).
 ^^ Event name acronym or abbreviation (in this example, SO = Southport Open).
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If the revision number is raised by the Committee (ie. from 0 to 1 etc.), on upgrading the old data files are archived, but the old Run Sheet file is copied and renamed to be part of the new revised set. Thus the previous R/Sht is kept but will need to be modified in the R/Sht Editor to suit the revisions.

Master Files: Stored in the Pisces program folder.

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PISCE1.DAT   - Control Parameters and Season/Event data.    **
PISCE2.DAT   - Vessel name, speed and offset times data.
PISCE3.DAT   - Current logged on Event code(s).             **
PISCE4.DAT   - Current season Event codes.                  **
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Table Files: Stored in the Pisces program folder.

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PisceS.TBL   - Pisces W/pnt Table.   (See Note 1 below)     **
PisceU.TBL   - User W/pnt Table.     (     ditto     )
PisceL.TBL   - Landmark Table.                             **
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Event Files: Stored in a Pisces program sub-folder 'DATA' eg.

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SO-A-0.DAT   - Coded instructions.  (See Note 2 below)     **
SO-A-0C.DAT  - The course lat/longs.                       **
SO-A-0RS.DAT - Standard  R/Sht.     (See Note 3 below)
SO-A-0AS.DAT - Auxiliary R/Sht.     (     ditto     )
SO-A-0??.??? - Temporary files.
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Notes:

1. *The PisceS.TBL (waypoint landmark/beacons) file is usually overwritten with upgrades. User waypoints should be added to the USER w/pnt file PisceU.TBL which is not overwritten - use the main form <TABLES/UTILS> <Show/Edit Pisces Landmark/Beacon Table> <User> menu options to edit and add your own w/pnts.*

2. *If a user wants to modify the Event instructions for their own purpose, it should be 'duplicated' first - see the 'DUPLICATING INSTRUCTIONS' section under.*

3. *Pisces supports two R/Shts for each Event (code). One can be used as a standard LOG R/Sht and the other for a GPS R/Sht (say). See the 'RUN SHEETS' section below for details.*

**   *These files may be overwritten with upgrades – see Notes 1 & 2 above.*

B) PLOT NAVIGATION & Manipulation

When a plot is displayed, if not already done so, click the {Help} button, {Print} and study. Many operations which may not be obvious will be explained.

C) DUPLICATING Instructions (and modifying for own use)

Committee Event files (with the 6 alphanumeric designation code ??-?-? - note the two(2) dashes) may be overwritten with upgrades. Before modifying instructions for your own use, ALWAYS make a duplicate to work on which will remain intact. It is best to create a 'child' set of files with a code designation emanating from the 'parent' eg. for say SO-A-1, use say SO-Aa1 (the second dash is changed to any letter of the alphabet).

Duplication of Events is made easy within PISCES. First, log onto the course you wish to duplicate with the [Events] button. Click the [Instr'ns] button, then the <File><Duplicate Instructions/Run Sheet> menu options and 'Yes' (twice) to the prompts. The say SO-A-1 is duplicated as SO-Aa1 and applied. If the letter 'a' is already used, 'b' will be chosen, and so on.

Note: To delete unwanted duplications, click the [Events] button, select the Event and then click {Delete}.
Committee Events (ie. with the two dashes in the Event code) cannot be deleted using this option.

D) CONVERTING ARCS in the Instructions to STRAIGHT LINE Segments

For practical purposes, large arcs in open water events are normally converted to a series of straight lines as it difficult to navigate a curve. This conversion can be laborious if done manually.

The conversion of large arcs to straight lines (as a duplication of the Event Instructions with extra T/Pnts along the arc) can be easily done from Pisces. Click the [Instr'ns] button, then the <File> <Duplicate Instructions with Arcs as Straight Lines)> menu options, and 'Yes' to the prompt. The new separate Event is assigned a 'child' code emanating from the original Event code as explained in the '*DUPLICATING INSTRUCTIONS*' section above.

The default straight line segments length is around 400m and the number of segments is the nearest integer value when the arc length is divided by 400m. However, the number of segments can be changed by specifying a different value to the default 400m as detailed below:-

1. Arcs in the Pisces Instructions are specified in coded form eg.
    120A.4/180

2. In the ORIGINAL Committee Instructions (access with the [Instr'ns] button), place a SEMICOLON at the very end of the ARC coding(s), followed by a segment length value eg.
    120A.4/180 *;300*   OR   120A.4/180 *;.162* (the spaces before the semicolon are optional)
    Note: A value >=10 is treated as metres, <10 as NM. Calculated straight line lengths will be near the value
    specified, and will be only the same if the entered value divides exactly into the arc length.

3. Now click the <File><Duplicate Instructions with Arcs as Straight Lines> menu options and 'Yes' to the prompt (to APPLY the new duplicate Event).

4. To show the lat/longs for the new intermediate arc T/Pnts, click the [Instr'ns] button, then click the <File> <Show/Print/Plot Instructions> menu options. This is required for GPS Events so the T/Pnt lat/longs can plugged into the GPS. Note that the intermediate T/Pnts are slightly bulged out radially so that the sum of the straight line segment lengths equals the original arc length.

Note: To delete unwanted duplications, click the [Events] button, select the Event and then click {Delete}.
Committee Events (ie. with the two dashes in the Event code) cannot be deleted using this option.

E) RUN SHEETS (R/Shts)

The Turning Point (T/Pnt) R/Sht

Pisces initially generates a T/Pnt R/Sht to which the user adds w/pnts to build up their own working R/Sht. This R/Sht will remain intact and can be reused later when the course is repeated. However if you wish to rebuild the T/Pnt R/Sht (not normal), use the <RUN SHEET> <Re-build the T/Pnt Run Sheet from the Course> menu options.

Standard and Auxiliary R/Shts

Each event has a 'Standard' or a 'Auxiliary' R/Sht. Press Ctrl+R (hold down 'Ctrl' and tap 'R') from the main form to flip from one to the other. If the Auxiliary R/Sht is selected, it shows up in red on the screen. Editing and printing R/Shts are done separately for each of the two R/Shts.

Best practice is to use the Standard R/Sht for Log Event waypoints and the Auxiliary R/Sht for the GPS Event 'distance to go' vs times.

Pisces Plots for Route Maps & Measuring Waypoint Distances

Log Event waypoint (w/pnt) distances can be measured from the Pisces course plots which negates plotting the course on the maritime charts. The Pisces plots use the Pisces Landmark/Beacon Table which is relatively up to date. Pisces plots are also used for the route maps (which are embellished by the user with aiming points etc.).

To print a <u>plot for measuring</u>, follow these steps:-

1. Click the [Instr'ns] button and then {PlotCrse} to display the course.   The plot from here (only) shows rulers at the borders - lat/long at the left and bottom respectively and metres at the right (1NM = 1852m).
2. Click {Fine} to show a fine lined course and w/pnts as x-hairs (click   {Standard} to flip back).
3. Click {HIGHRes} and then {Enlarged..}. The plot may still fit to the screen width in this mode especially for wide squat monitors, however when printing to A4 paper, multiple pages (tiling) should occur horizontally giving a larger plot than the 'Fit Screen..' option. For squatter courses, landscaping of the paper may occur automatically.
4. Click {PRINT} then {Fit Plot to Multiple Pages - With Overlap}. Enter the recommended maximum overlap value when prompted, and click 'OK'.
5. To MEASURE distances between w/pnts, see the separate document 'Log Events – Measuring Plots'.

To print a <u>plot for the Route Map</u>, follow these steps:-

1. Click the [PlotCrse] button to display the course.
2. Click {Standard} to show the thick lined course (ie. *if {Fine} displayed*).
3. Click {HIGHRes} and then {Fit Screen Width or Height}. The printout will fit to the paper width (or height).
4. Click {PRINT} then {Fit Plot to Multiple Pages - With Overlap}. Enter a overlap value when prompted (optional), and click 'OK'.

GPS 'Distance to Go/Next' R/Shts

A 'Distance to Go *(or Next)*' R/Sht simply consists of a series of distances and times with NO w/pnt info. It can be automatically generated by Pisces. During the Event, the printed R/Sht is compared with the actual GPS 'Distance to Go *(or Next)*' display whereby it can be quickly determined if the vessel is early/late whilst progressing along the course.   Follow these steps:-

1. If not already pointing to the 'Auxiliary' R/Sht (indicated in red), press Ctrl+R from the main screen form to flip over to it. This is not mandatory, but is a good habit to get into – reserve 'Standard' R/Shts for Log Events.
2. Select the <u>menu</u> options, <RUN SHEET> <Build an Incremented R/Sht (for GPS Events)>.
3. Insert the increment value. A default of **-.05** NM *(note the minus sign)* is presented which is a typical value for slower boats. Faster boats may prefer **-.1** NM *(again, note the minus sign)* Click OK to build the R/Sht.
4. The R/Sht will be displayed via the R/Sht editor. Note the decreasing distance (down to zero) to the T/Pnt in each leg. When the GPS 'distance to go' display value flicks to one of these distances, the R/Sht time can be read and compared with the real time clock. If the CLOCK time is LATER than the R/Sht time, the vessel is LATE by the difference.
5. Enter the vessel's speed & start time in the R/Sht editor before printing.

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Copying R/Shts *(the method similarly applies to copying the Instructions)*

To copy R/Shts from one event to another within Pisces, follow these steps:-
   1.Click [Event] and select the event you wish to copy ***from***. (the event may be in the 'Archived Data' folder).
   2.Click [EditRsh] then <Edit> {Copy (all data)}.
   3.Click [Event] and select the event you wish to copy ***to***.
   4.Click [EditRsh] then <Edit> {Paste (all data)} – an 'overwrite' prompt will appear – click yes.

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Backing Up R/Shts

Building Log Event R/Shts entails a lot of work and backing up R/Shts is a must in case your hard disk crashes. Also if a new computer is purchased, previous Log Event R/Shts will need to be restored to it. Pisces supports BACKING UP R/Shts (and also the Master data files, Active Event files and Table files). Follow these steps:-

1. Click <File><Set Default Backup/Restore Drive> <u>if not already set</u>. Select the drive from the list. Ensure the memory stick is inserted before running Pisces - click {Refresh} if not. Pisces does NOT support burning CD's (but this can be done easily from Windows). Drive selection is only done once (unless changing drives) as the selection is remembered.

2. Click <File><BACK UP Data to Drive ?:\>{All Run Sheets *(Standard or Aux)*} and follow the instructions. Only backup the 'Aux' R/Shts if one has been used for a Log Event ie. with manually inserted w/pnts. GPS R/Shts (normally 'Aux' as detailed above) don't need to be backed up as they can be regenerated at any time.

F) USING MWSnap

MWSnap is a freely available program downloaded from the Internet. It is used to select a part of a Pisces plot and blow it up to a much larger size.

Note:- Instead of downloading from the Internet, the downloaded MWSnap.exe install zip file is included on the Pisces CD. To install, run (double click) the zip file and follow the instructions. MWSnap will finally appear as a desktop icon.

To use MWSnap with Pisces, follow these steps:-

1. Run the MWSnap desktop icon and MINIMISE with the [_] button - do NOT close with the [X] button - it must remain resident. Another small MWSnap icon will then appear in the Task Bar at the bottom right of the screen.

2. Run Pisces as normal and access the desired plot. The default plot size is <HIGHRes><Fit Screen Width or Height> - change to <Enlarged> if desired (may not make a difference for wide screens). Now Click <Fine> to show the course as fine lines & beacons etc with X-hairs (click <Standard> to flip back).

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3. Navigate the Pisces plot to show the desired area to blow up.

4. Click the MWSnap icon in the Task Bar at the bottom. Click <Any rect. area>   and <Snap fixed rectangle> & finally MINIMISE with the [_] button to revert back to the plot (DON'T CLOSE with [X]),   ***OR .....***
      NOTE: <u>Alternatively (as a SHORTCUT for the above)</u>, from the Pisces plot use the hot keys Ctrl+Shift+A
          (ie. hold down the Ctrl & Shift keys <u>together</u> and tap A once).

5. A small MWSnap preview window (ignore) and a navigable X-Hair will appear.   Move the X-Hair with the mouse to the TOP LEFT of the desired area to blow up (snap) and CLICK (optionally release the mouse button). Then move the X-Hair to the BOTTOM RIGHT of the desired snap (shown within rectangular dotted lines) and again CLICK. MWSnap will open with the snap displayed.
      NOTE: It is best (but not necessary) to snap a rectangle with the similar aspect ratio to a A4 sheet of paper (either
          vertically or horizontally) as the {Fit to Page} option is used when printing (see the next step).

6. Click the <Print> icon at the top, select {Fit to Page} if not already set, change {Portrait/Landscape} if applic. & {Print}. Finally MINIMISE with the[_] button - DON'T CLOSE with [X] - keep MWSnap resident. If MWSnap is inadvertently closed, repeat Step 1.

7. Repeats steps 3 to 6 for further blow ups.

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   See the MWSnap Help for further details.