

Euronav Polar file specification (polar.ppd file)

Introduction

Polar files are used by the sailing functions for the storing of performance data for a particular boat.

There is a single active polar file "Sail\\Polar.ppd". Functions are available for the user to backup and restore this file.

Specification

The polar.ppd is in a simple ASCII text file format and contains one or more sail plans

Each sail plan has a name terminated with a comma – for example:

Default,

There then follows a sequence of data for each wind speed (for which data has been gathered)

6.00,45.00, is the 6 kt wind with a tack angle of 45

Below this is the sequence of wind angle (kts) and the associated boat speed (kts)

The sequence is all on a single line and is terminated by a –1

45.00,4.96,50.00,5.35,60.00,5.86,-1

This is repeated for the required number of wind speeds

The last entry is terminated with a –2 rather than a –1 to indicate the end of the sail plan.

The next sail plan name follows on the next line (if any).

Note:

The terminating –1 or –2 may or may not be on the same line, so when reading the data ignore CR\LF combinations.

Data values are specified as

Wind kts

Boat speed kts

Angle degrees

Format - Following repeated as required where <> is a data field

```

<PLAN NAME>
<Wind Speed>,< tacking angle>
<wind angle>, <boat speed>, .....<wind angle>, <boat speed> -1
<Wind Speed>,< tacking angle>
<wind angle>, <boat speed>, .....<wind angle>, <boat speed> -1
...
<Wind Speed>,< Tacking angle>
<wind angle>, <boat speed>, .....<wind angle>, <boat speed> -2
.....
<PLAN NAME>
<Wind Speed>,< tacking angle>
<wind angle>, <boat speed>, .....<wind angle>, <boat speed> -1
<Wind Speed>,< tacking angle>
<wind angle>, <boat speed>, .....<wind angle>, <boat speed> -1
...
<Wind Speed>,< Tacking angle>
<wind angle>, <boat speed>, .....<wind angle>, <boat speed> -2

```

Sample data below

Default,	// sail plan name
6.00,45.00,	// wind speed and tacking angle for following wind angle boat speed
45.00,4.96,50.00,5.35,60.00,5.86,-1	// wind angle, boat speed pairs terminated by a -1
8.00,42.00,	// next set of wind angle/boat speed
44.20,5.74,52.00,6.39,60.00,6.78,-1	
10.00,41.00,	
43.10,6.21,52.00,6.86,60.00,7.19,-1	
12.00,40.00,	
41.70,6.43,52.00,7.11,60.00,7.42,-1	
20.00,40.00,	
40.00,6.72,52.00,7.48,60.00,7.79,-2	// last sequence in this sailplan is terminated with a -2
Light wind,	// next sailpan
5.00,45.00,	
45.00,2.00,90.00,3.00,120.00,5.00,-1	
7.00,40.00,	
40.00,3.00,90.00,60.00,-1	
35.00,45.00,	
35.00,1.00,90.00,3.00,-2	