Table of Contents

- *WARNING* -

!

Float Plan was designed for planning purposes only.   Float Plan will produce
accurate   results depending on the accuracy of the data you put into it, but the
data you use may not reflect what you actually encounter while executing the
plan.   You are always ultimately responsible for keeping up with
the changing conditions and the effect they will have on your
plan.

About Float Plan for Windows

Float Plan was designed by PGS Digital Solutions to provide the marine navigator with a tool to quickly and easily plan trips over any portion of water in the world.   It was designed to operate primarily as a dead reckoning pre-planning tool, but can be used to some degree as your plan is being executed.   Refer to How Float Plan Works which explains in detail what data Float Plan uses and how and in what order the navigational calculations are performed.

Float Plan is a shareware product and requires registration if you intend to use it.   Registration authorizes you to receive product support plus, once your registration is received, you will be sent a 12-page pamphlet guiding you through a sample session with Float Plan.   To register your copy, read the file named README.TXT that accompanied this program.

See also

How Float Plan Works

Product Support

       If you are having problems running or understanding Float Plan, and you are a registered user, you have the right to receive the necessary help from PGS Digital Solutions to solve those problems.   If PGS Digital Solutions cannot satisfy you to the appropriate degree, your money will be refunded promptly.

       If their are any modifications, deletions, or additions you would like to see made to Float Plan, PGS Digital Solutions would like to know about them.

For help or suggestions, contact:

                        PGS Digital Solutions

71D Woods Hollow
Clifton Park, NY 12065
(518) 371-7584

NOTE: *For faster service*, you can contact PGS Digital Solutions via
CompuServe at user address **71371,1075**

How Do I.....?

Float Plan Commands

New Plan | Load Plan
Save Plan | Save Plan As.....
Print | Exit
Calc | Accept
Delay Option | Enter Add Mode
Enter Edit Mode | Delete Point
Insert Point | Replicate Data
Set Sail Mode | Set Motor Mode
Add Waypoint to File | Recall a Waypoint
Set Default Data | Set Starting Date/Time
Set Starting Fuel | Calendar
Calculator | Control Panel
Help

Float Plan Data Fields

PNT
DESCRIPTION
LATITUDE
LONGITUDE
VARIATION
CURRENT
M
GPH/WD
Be
Di (DISTANCE)
BSp
ASp
LEG TIME
CUM TIME
FUEL USED
FUEL RMNG

How Float Plan Works

This section gives you a general introduction into how Float Plan works. You are encouraged to read this section then, sitting down in front of your computer, run through the sample session provided with this program.

When you first started Float Plan, your main operating screen's data input window already contained the information for your start point. The data for this point is maintained in Float Plan's default data. You have the option of accepting this data as is or editing it to better suit your desires (you can change Float Plan's default data by selecting the "*Options - Set Default Data*" menu item on the main screen menu bar.

When you press **ACCEPT (F3)**, the data for the start point will be entered in the route list window and you will be set up to insert the data for your next point.

When you start a new point, some data is automatically provided for you so you won't have to keep entering the same data for all your points. As a minimum, you would want to enter a description for your point, and the proper latitude, longitude, and magnetic variation. You have the option of changing the other (non-calculated) data fields as well.

Float Plan's data field types, instructions for using the many Float Plan commands and other issues are all covered in various sections of Float Plan's On-Line Help System (OLHS). You are encouraged to scan through all of the sections to develop a familiarity with the on-line help system so that you can easily refer to the needed sections when required.

When you are finished entering the data for a point, you are required to press **Calc (F2)** to instruct Float Plan to perform its calculations. Once you review the results of the calculations and decide to accept the point into your route, you press **ACCEPT (F3)**. The data for the point will be entered in the route list window and the data input window will be reset to start another point. If you study the sample session provided with Float Plan for Windows, all of this will become clear. What follows now is an explanation of what Float Plan does when it performs its calculations.

FLOAT PLAN FOR WINDOWS CALCULATIONS

1.   The first calculation made is a distance-bearing calculation using great circle route methods.   Float Plan looks at the previous point's latitude and longitude as well as the current point's latitude and longitude, then calculates the distance (**Di**) between the two points and a true bearing (**Be**).

2.   Float Plan takes the magnetic variation from the previous point's data and applies it to the calculated bearing - resulting in a magnetic bearing (**Be**) for you to follow to the current point.

3.   Float Plan then looks at the "current" data you have supplied for the point.   If there is no current, Float Plan proceeds to the next calculation.   If you have supplied current data,   Float Plan uses standard trigonometric functions to adjust your required bearing to the point.   Float Plan then calculates a new relative speed (**ASp**) based on results of the above calculations and the boat speed   (**BSp**) you provide.

4.   If you have established your point in the sail mode (i.e. you are going to sail to your point and not motor), Float Plan looks at the leeway figure you have established in your default data. If you have no leeway figure or it is zero, Float Plan moves on to the next calculation.   If there is a maximum leeway figure provided, Float Plan compares the calculated bearing with the wind information you have entered for the point.   Float Plan takes the figures and enters them in a formula derived from a 3-dimensional logarithmic graph relating wind speed with angle to the wind and a percent-of-leeway figure derived from various sources.   The resulting calculation is applied to the bearing (**Be**) required to get you to your point.

The concept of leeway is confusing to some people.   It is the "sideways" movement a boat experiences when sailing into the wind.   Leeway varies based on hull design, sail configuration, wind speed, angle to the wind, as well as other factors.   The number you elect to use as your maximum leeway will probably be a guess, as few people know what the number is actually supposed to be for their particular vessel.   Some leeway figures have been observed as high as 10 degrees, but some experts say leeway will rarely exceed 8 degrees.

5.   The next calculation Float Plan makes again only applies if you are in the sail mode.   Float Plan compares the bearing required to get you to your current point with the direction the

wind is coming from.   It the boat's heading is within 45 degrees of the wind, Float Plan assumes you will have to tack to the point.   Float Plan then "builds" a tacking pattern for your boat to get to the point and determines the *actual* distance you will have to travel.

6.   Float Plan now calculates the time required to get to the point using the **distance = rate x time formula** (or **time = distance/rate**).   The calculated time (**Leg Time**) is then added to the previous point's cumulative time to determine the cumulative time (**Cum Time**) for the current point.

7.   Lastly, Float plan determines the fuel required to get to the point (if in the motor mode) using the GPH figure you provide (**fuel = time x GPH**).   The fuel figure (**Fuel Used**) is subtracted from the previous point's remaining fuel figure to determine the current point's fuel remaining figure (**Fuel Rmng**).

Start a New Route

To start a new route:

1. Press **New**, Click the "*Files - New Plan*" menu item, or press **<Ctrl>+N**

2. You will be asked if you want to save the current route first   (if any editing
     had been done to it since its last save).

3. The route list window will clear and Float Plan's default data will be placed
     in the data input window for the start point of the new route.

4. Press **ACCEPT (F3)** to accept the start point information if it is correct.

5. The start point data will be entered in the route list window and the data
     input window will be set up to accept your first point's data.

Add a Point to the Route

To add a point to your route:

    1. Click on the Add Mode Check box, click on the "*Actions - Enter Add*
       Mode" menu item, or press **F4**.

    2. The Add Mode Check box will have an "X" appear in it and the data input
       window will be set up to accept data for the new point.

Edit a Point in a Route

To edit a point in your route:

1. Click on the point in the route list window you desire to edit.   The Add Mode
Check box should not have an "X" in it.

2. The data for the point you chose will be placed in the data input window
where you can edit it as desired.

3. When finished editing, press Calc (F2) to instruct Float Plan to perform the
necessary calculations, then press ACCEPT (F3) to update the point in the
route list window.

4. Float Plan will automatically recalculate all of the data in your route to reflect
the changes you made.

Change a Point's Sail/Motor Mode

To change a point's mode to sail or motor:

1. Locate the Sail Mode/Motor Mode Options Box located in the data input
window.

2. To change the operating mode, click on the small circle located next to the
mode you desire.

Insert a Line in a Route

To insert a line in your route:

1. Highlight (Click on) the point you want to insert a new line *before*in the
route list window.

2. Press **Insert**, Click the "*Actions - Insert Line*" menu item, or press
\<Ctrl\>+I.

3. Three blank lines will appear where you want to insert the new
point. The
data input window will reset to allow you to enter data for the
point you want
to insert.

4. Enter the data for the inserted point, then press **Calc (F2)**.

5. Press **ACCEPT (F3)** to accept the data into the route list window.
Float
Plan will recalculate the route data to reflect the new point.

Delete a Line from a Route

To delete a line from your route:

1. Highlight (Click on) the point you want to delete in the route list window.

2. Press **Delete**, Click the "*Actions - Delete Line*" menu item, or press **\<Ctrl\>+D**.

3. The point's data will be deleted and Float Plan will perform a recalculation
    of the rest of the route to reflect the deletion.

Replicate Route Data

1. Click on the point in the route list window you desire to edit.

2. The data for the point you chose will be placed in the data input window
where you can change it as desired.

3. If you change the boat speed, current, GPH, or wind information and want
the same information to be changed in all subsequent points, place the cursor
in the appropriate data input window field.

4. Change the data as desired then press **R**, Click the "*Actions - Replicate*
Data" menu item, or press **\<Ctrl\>+R**.

5. The data for each subsequent point will be changed and Float Plan will
perform a recalculation to reflect the data change.

Enter a Delay in a Route

1. You can enter a delay in your route either in a new point or after inserting a
point somewhere in your route.   You cannot enter a delay for your start point,
nor can you enter two delays in a row or change an established point into a
delay point.

2. After you have inserted a line in your route or are adding a new point, press
Delay, click the "*Actions - Delay Option*" menu item, or press **<Ctrl>+E**.
You will be presented with the Float Plan Delay Window.

3.   You can now enter data for three items relating to the delay point: remarks,
delay time, and fuel taken on during the delay.

4.   The remarks data field is available for your use to identify the delay's
purpose.   Any 15 character entry is allowed

5.   The length of delay tells Float Plan how long you want the delay to be and
is written in DDDD:HH:MM (days, hours, and minutes) format.

6.   The fuel data field allows you to enter the number of gallons of fuel you
plan to take on during the delay.   If you plan on expending fuel during the
delay instead of taking it on (i.e. for charging your batteries) , you must
enter the number as a negative value.

7.   Press **OK** when you are satisfied with your data.   Float Plan will
automatically perform the necessary calculations and insert the delay data
in the route list window.

Set/Reset a Route Starting Time/Date

1. Should you elect to change the starting date and/or time of your route, click
on the "*Options - Set Starting Date/Time*" menu item or press **<Ctrl>+B**.

2. You will be presented with a window where you can change the starting
date and time.

3. Enter the new starting date and starting time in the appropriate data fields
then press **OK**.

4. Float Plan will adjust the starting date and time and recalculate the estimated
dates and times of arrival (ETAs) for the rest of the route.

Set/Reset a Route Starting Fuel

1. Should you elect to change the starting fuel of your route (other than what
   is provided by the default data) click on the "*Options - Set Starting Fuel*"
   menu item or press **<Ctrl>+F**.

2. You will be presented with a window where you can change the starting
   fuel amount.

3. Enter the new starting fuel amount then press OK.

4. Float Plan will change the starting fuel in your start point then recalculate
   the fuel data for the rest of the route.

Set Float Plan Default Data

1. You can change your default data (the data that is used to establish your start point) at any time, but the changed default data will not affect your route currently being planned.   The changes will not be evident until you start a new route.   The one exception to this rule is the maximum leeway data field. The change to this field takes effect immediately.   See <u>How Float Plan Works</u> for a discussion of the maximum leeway figure.

2. To change your default data, click on the "*Options - Set Default Data*" menu item, or press **<Ctrl>+T**.   You will be presented with Float Plan's Default Data window.

3.   The rules for entering data in the default data window are the same as entering data in the data input window.   The exception is the maximum leeway data field.   You may enter any number (up to 99).   See <u>Float Plan Data Fields</u> for the proper format, units, and examples for each data item.

4.   Press OK   when you are satisfied with your default data.

Load a Route from the Disk

To load a previously saved route from your disk:

1. Press **Load**, Click the "*Files - Load Plan*" menu item, or press **\<Ctrl\>+L**.

2. You will be asked if you want to save the current route first   (if any editing
      had been done to it since it's last save).

3. You will be presented with a window allowing you to specify the route
      you want to load.   Select the desired route from the files list box or type
      in the name of the file.

4. Press **OK** to load the saved route.

   5. The route will be loaded into Float Plan's route list window and the data
         input window will be set up with data for a new point.

Save a Route to the Disk

To save a route to your disk:

1. Press **Save**, Click the "*Files - Save Plan*" menu item, or press **<Ctrl>+S**.

2. If you have not previously saved the route you will be presented with a
    window allowing you specify the filename for your route to be saved as.
    Enter a legal DOS filename, then press **OK**

3. If the file had been previously saved, Float Plan will simple write the route
    to your disk and no other action is required on your part.

NOTE: If the file had been previously saved to your disk, the name of the file
    will appear in Float Plan's title bar located at the
top of the screen.

Save a Route Under a Different Name

To save a route to your disk under a different filename:

    1. Press **Save As**, Click the "*Files - Save Plan As.....*" menu item, or press
       <Ctrl>+V.

    2. You will be presented with a window allowing you specify the filename
       you want to save your route as. Enter a legal DOS filename, then press
       OK.

Add a Waypoint to the Waypoint Data File

1. Float Plan will add a waypoint to its waypoint data file when you press

WA, click the "*Waypoints - Add a Waypoint to File*" menu item, or

press **<Ctrl>+A**.

2. The data that is added is dependent on what you have in the description,

latitude, longitude, and variation data fields in the data input window.   If

you do not have a description, Float Plan will notify you that a description

is required before the waypoint can be added.

Delete and Edit a Waypoint

To delete or edit a waypoint:

1. Press **WR**, Click the "*Waypoints - Recall a Waypoint*" menu item, or
   press   **<Ctrl>+W**.

2. You will be presented with Float Plan's Waypoint Data window. To delete
   or edit the waypoint, first highlight the desired waypoint (click on it with the
   mouse).

3. To delete the waypoint, press **Delete**.

4. When the waypoint was highlighted, the data for the waypoint was inserted
   in the text edit boxes located above the waypoint list window. To edit the
   data, place the cursor in the appropriate text box and make your changes,
   then press   **Update**.

   5. When you are finished editing the waypoint data base, press
Exit.

Recall a Waypoint from the Waypoint Data File

To recall a waypoint from the waypoint data file:

1. Press **WR**, Click the "*Waypoints - Recall a Waypoint*" menu item, or

press **<Ctrl>+W**.

2. You will be presented with Float Plan's Waypoint Data window. Select

the waypoint you want to insert in the data input window text boxes by

clicking on the desired waypoint with your mouse.

3. Press **Recall**. The description, latitude, longitude, and related variation

will be entered in the appropriate boxes in the data input window on the

main operating screen.

4. When you are finished, press **Exit**.

NOTE: There are two alternate methods for recalling a waypoint:

1. Double click on the desired waypoint in the Waypoint Data window.

2. In the description field in the main operating screen's data input

window, type the description of the desired waypoint. The waypoint's

related data will automatically be inserted in their respective fields.

Print a Route

To print your route on your printer:

1. Press **Print**, Click the "*Files - Print*" menu item, or press **<Ctrl>+P**.

2. You will be presented with a window providing you with some information
about your route (total fuel used, total distance, and final ETA).

3. Ensure your printer is on, on-line, and loaded with paper, then press
Print.

Calculate Float Plan Data

1. You instruct Float Plan to calculate data by pressing **Calc (F2)**, click on

the   "*Actions - Calc*" menu item, or press **F2**.

 NOTE: Before you can add a point's data (or edited data) into the route list

window, you must instruct Float Plan to perform its calculations

using the procedures in step 1.   After the calculations are made and

you are satisfied with them, press **ACCEPT (F3)**.

Convert Lat/Long Coordinates

1. Float Plan normally uses latitude and longitude in the format
    N0DDMM.MM (DD for degrees, MM.MM for minutes and
    hundredths of minutes).   Unfortunately, many of the maps you
will use
    provide these coordinates in the N0DDMM:SS format (DD for
    degrees, MM for minutes and SS for seconds).

2. You can convert your coordinates in the latitude and longitude
data fields
    from the N0DDMM:SS format to the N0DDMM.MM format by
    entering your data in the respective latitude or longitude data
fields in
    the N0DDMM:SS format, then move the cursor (highlight) to
another
    field.

3. When you move the cursor from the respective data field (after
entering
    the data) Float Plan will perform the conversion.   The results of
the
    conversion will be displayed in the respective data field.

New Plan

This command allows you to begin planning a new route.   If you have not saved your current route and changes have been made, Float Plan will ask you if you want to save it first, then clear the route list window and insert the default data as your first point in the data input window.

See "How do I...Start a new route".

Load Plan

This command allows you to load a route you have previously saved to your disk.   If you have made changes to the route you are currently working on and have not saved it, Float Plan will ask you if you want to save it before loading the new route.

After activating the command, Float Plan will clear then load the selected route in the route list window.   The data input window will bet set up to accept data for a new point to add to the route.

See "How do I....load a route from the disk".

Save Plan

Save **\<Ctrl\>+S**

This command allows you to save your route to your disk. If the route has not been previously saved, you will be asked to supply a filename to save the route under.

See "How do I....save a route to the disk".

Save Plan As.....

If you want to save your route to your disk under a different filename than what was previously specified, yet retain the original saved route, you use this command. You will be asked to supply a legal DOS filename for the new file.

See "How do I....save a route under a different name".

Print

This command brings up the Float Plan Printer window. This window contains the total fuel used, total distance traveled and the estimated time of arrival at your final point.

Pressing the **Print** button will cause the route to be printed on your printer.

See "How do I.....print a route".

Exit

This command terminates Float Plan.   If you have not previously saved your route and changes have been made, Float Plan will ask you if you want to save your route before the program is terminated.

Calc

When you enter data in the data input window, you must instruct Float Plan to perform the necessary calculations before you can insert the data into the route list window.

See "How do I....calculate Float Plan data".

Accept

After you have entered or edited your data in the data input window and invoked the Float Plan "Calc" command, activating this command will cause the data to be accepted into the route list window.

Delay Option

You can enter a delay in your route to account for refueling stops, overnight stays, or any other reason of your choosing. You can enter a delay on a new line in your route or you can insert a line anywhere else in your route.

You cannot edit an existing point in your route and convert it to a delay point, nor can you use your start point as a delay point, nor can you enter two delays in a row.

When entering a delay in your route, you can specify a description, length of the delay, and an amount of fuel taken on (or used).

See "How do I....Enter a delay in a route".

Enter Add Mode

Add Mode   **F4**

      Clicking on the Add Mode check box, when there is no "X" in it, will cause an "X" to appear and place you in the add mode. The data input window will be set up to accept data for a new point for your route.

Enter Edit Mode

Add Mode   **F5**

       Clicking on the Add Mode check box, when there is an "X" in it, will cause the "X" to go away and place you in the edit mode.   The point that is currently highlighted in the route list window will be placed in the data input window for you to edit as desired.

Delete Point

This command allows you to delete a point from your route. The route will automatically be recalculated after the deletion.

See "How do I....delete a line from a route".

Insert Point

This command allows you to insert a point in your route.

See "How do I....insert a line in a route".

Replicate Data

This command allows you to repeat the contents of a point data field to the subsequent points in your route.   After you place the data highlight over the field you want to replicate, and enter the appropriate data, invoking this command will effect the changes then force an automatic recalculation of all calculated data.

See "How do I.....replicate route data".

NOTE: Only the current, boat speed (BSp), and GPH/WD data fields can be replicated

Set Sail Mode

F6

Invoking this command changes the operating mode from the motor mode to the sail mode.   The "GPH" data field in the data input window will change to "Wind" and be set with a value of "000/00".

Set Motor Mode

Invoking this command changes the operating mode from the sail mode to the motor mode.   The "Wind" data field in the data input window will change to "GPH" (for gallons per hour) and be set with the GPH supplied in the default data.

Add Waypoint to Waypoint Data File

This command allows you to add a waypoint to your waypoint data file.   The waypoint data file contains a description, latitude, longitude, and variation for each point you want to maintain a record of.   You can recall the point information and insert it into your route where desired.

See "How do I.....add a waypoint to the waypoint data file".

Recall a Waypoint

This command allows you to recall a waypoint's information from the waypoint data file and insert it into your route.   The waypoint data file contains a description, latitude, longitude, and variation for each point you want to maintain a record of.

See "How do I....recall a waypoint from the waypoint data file".

Set Default Data

<Ctrl>+T

This command brings up the Float Plan Default data window.   In this window you are given the opportunity to change your default data, which is used primarily to establish your start point data.

See "How do I....set Float Plan default data".

Set Starting Date/Time

This command will bring up the Float Plan Start Time window.   It allows you to specify a new starting date and time for your route.

See "How do I...set/reset the route starting time/date".

Set Starting Fuel

This command will bring up the Float Plan Starting Fuel Window.   It allows you to change your route starting fuel amount from what was provided by the default data.

See "How do I.....set/reset a route starting fuel".

Calendar

F8

This command allows you direct access to the Windows Calendar.

Calculator

This command allows you direct access to Windows Calculator.

Control Panel

This command allows you direct access to Windows Control Panel.

Help

This command allows you to invoke Float Plan's On-Line Help System (OLHS).

PNT

PNT, which stands for 'point', is an alphanumerical designator for the respective point. The first character can begin with a 'S' for start point, 'P' for just point or 'D' for Delay point.   The second two numbers represent the actual sequence of the point in your route.   You cannot edit this field - the proper alphanumeric designator will always be calculated for you.

DESCRIPTION

This field describes the point you are working on (or your default description).   It is comprised of any 15 characters of your choosing and is fully editable.

EXAMPLE: Bluewater Bay   **FORMAT: 15 characters**

LATITUDE

This field contains the latitude for your point.   You enter either an 'N' for North or 'S' for South latitude followed by the degrees, minutes and hundredths of minutes of latitude.

EXAMPLE: N02945.45   **FORMAT: N0DDMM.MM**

Alternatively,   you can use the N0DDMM:SS format, where ".MM" is replaced with ":SS" for seconds.   If you enter your latitude in this format, you must leave the data field (i.e. move the cursor to the longitude field) before you invoke the Calc command.   Float Plan will perform the conversion and re-enter the data in the N0DDMM.MM format.

EXAMPLE: N02945:30   **FORMAT: N0DDMM:SS**

LONGITUDE

This field contains the longitude for your point. You enter either an 'E'
for East or 'W' for West longitude followed by the degrees, minutes, and hundredths of minutes of longitude.

EXAMPLE: E12545.45   **FORMAT: EDDDMM.MM**

Alternatively,   you can use the EDDDMM:SS format, where ".MM" is replaced with ":SS" for seconds.   If you enter your latitude in this format, you must leave the data field (i.e. move the cursor to the longitude field) before you invoke the Calc command.   Float Plan will perform the conversion and re-enter the data in the EDDDMM.MM format.

EXAMPLE: E12545:30   **FORMAT: EDDDMM:SS**

VARIATION

This field contains the magnetic variation associated with the latitude and longitude of the point.   Enter an 'E' for East or 'W' for West variation, followed by the appropriate numbers of degrees magnetic variation.   Leaving this field blank, or 'W000' will result in true bearing being calculated instead of magnetic bearing.

EXAMPLE: W002   **FORMAT: WDDD**   **UNITS: degrees**

CURRENT

This field contains the "current" bearing and speed you expect to encounter while proceeding from the last point to the point your are currently working on.   Enter the magnetic bearing that the current is moving towards and the expected speed.

EXAMPLE: 154/03   FORMAT: DDD/K.K   UNITS: degrees/knots

M
(Mode)

This field contains either an 'M' or an 'S'.   If you plan to motor to the point you are currently working on, then enter an 'M'.   If you are going to sail to it, enter an 'S'.

EXAMPLE: M

GPH/WD
(Gallons per Hour/Wind)

The contents of this field depend on which mode you are planning the leg for.   If you are motoring, this field contains the rate at which you expect your engine to consume fuel (GPH).

EXAMPLE: 3.4   FORMAT: GGGGGGG.G   UNITS: gallons per hour

If you are sailing, this field contains the expected winds you will encounter from the last point to the current point.   Enter the magnetic direction the wind is coming from and the expected speed.

EXAMPLE: 154/10   FORMAT: DDD/KK   UNITS: degrees/knots

Be
(Bearing)

This field contain the bearing you must maintain to reach the current point.   It accounts for all factors, including current, variation, and leeway (if appropriate).   It is a calculated field - you cannot edit it.

EXAMPLE: 143   **FORMAT: DDD**   **UNITS: degrees**

Di
(DISTANCE)

This field contains the distance between the last point and the point you are working on.   It is a calculated field - you cannot edit it.

EXAMPLE: 1235.6   **FORMAT: MMMMMMM.M**

UNITS: nautical miles

BSp
(Boat Speed)

This field contains the speed you expect your boat to travel through the water. This is not speed-made-good, but relative speed to the water.   This is the speed you expect to see on your knotmeter, not your LORAN.

EXAMPLE: 15.4   **FORMAT: KK.K**   **UNITS: knots**

ASp
(Actual Boat Speed)

This field contains your calculated speed-made-good, or the speed your boat will move over the surface of the earth.   It is a calculated field - you cannot edit it.

EXAMPLE: 23.5   **FORMAT: KK.K**   **UNITS: knots**

LEG TIME

This is the calculated time it will take to get from your last point to the current point.   It is a calculated field - you cannot edit it (see "How Float Plan Works" for an explanation of how this field is calculated).

EXAMPLE: 0001:02:10   **FORMAT: DDDD:HH:MM**

UNITS: days, hours, and minutes

CUM TIME
(Cumulative Time)

This is the calculated cumulative time of your route, calculated point by point.

EXAMPLE: 0004:22:09   **FORMAT: DDDD:HH:MM**

UNITS: days, hours, and minutes

FUEL USED

This is the calculated amount of fuel you would consume while proceeding from your last point to the current point.   It is a calculated field - you cannot edit it.

EXAMPLE: 12.6   FORMAT: GGGGGGG.G   UNITS: gallons

FUEL RMNG
(Fuel Remaining)

This is the calculated amount of fuel you should expect to have remaining when reaching your current point.   It is a calculated field - you cannot edit it.

EXAMPLE: 234.6   FORMAT: GGGGGGG.G   UNITS: gallons