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Alarm

Starting point: Main-Window.

How: **Alt+A** Open Alarm window.

(see also Main)

Alarm checking is enabled for any alarm if the 'On'-box is checked.



Here the 'Change of direction'

alarm is enabled.

An alarm event displays the text Alarm in the Main-window. And a sound will be heard if the systemsound is activated in the windows control-panel. Or if a sound-file is connected to the Asterisk event in the windows control-panel.

An alarm can be manually set to Active by checking the 'Active'-box. (If 'On'-box checked.)

The time between alarm-checkings may be changed by entering a new value in the edit-box to the right in the alarm window.

The wind alarms are prepared for later versions of this program since you can't receive any instrument values (yet).

The communication-GPS alarm requires Comm=On in the communication dialog window.

Important: Uncheck and check the alarm 'On'-box after any value changing.

Values in use can be read in the panel to the right if the mouse pointer is positioned over an edit-box.

Chart

Starting point: Main-Window.

How: **Alt+T** Open Chart overview window.

Always: Select a chart. (**Alt+M**).

The window is **resizable**. However tracks and other 'drawings' will disappear after resizing. The maximal size is the screen, or the chart itself if smaller than the screen. Scrollbars are automatically added.

Add a chart **detail** window by pressing the right mouse button and drag the mouse until the rectangle covers the wanted area. Release the mouse button. A **resizable** window will open. The detail window shows position and track parallel with the overview window. Set waypoints mode disables this function.

Mode (menu-item):

1. **Position** - if the position (see main window tab=Position) is inside the selected chart it will be displayed as a blinking plus. The size and blink-speed can be set in the Data window (Alt+D in the main window).
2. **Track** - if the position (see main window tab=Position) is inside the selected chart it will be displayed as a line.
3. **Set waypoints** - Every mouse-down event will generate a 'stamp' in the chart and the list of waypoints (max 100) will be updated. The waypoint after the one displayed in red color (waypoint window) will be added or changed. The list of waypoints can be saved to a file. The waypoints are used to plan a route and to minimize sailtime. See also: [Evaluate/Modify data \(optimization\)](#)
4. **Show waypoints** - display the waypoint 'stamps'.
5. **Search optimum** - Display two waypoints in the waypoints window. Press the mouse button and drag. A 'rubberband' will be seenable. Notice the time in the 'Search optimal cruise-point' window. Release the mouse at a minimal time. Add the point to the list of waypoints. The calculations include wind-, current-, and boat-data. Appropriate values must be set before this.
6. **Show log file** - If a log file is opened, and min (>0) and max values are set in the logbook-window, every log-book position inside the selected chart will be marked with an 'x'.

Communication (GPS)

Starting point: Main-Window.

How: **Alt+C** Open Comm. window.

Click to set any value.

Normally the GPS NMEA specification has correct default settings, but it can be changed to other sentences. The string position means position according to comma characters in the string.

Example NMEA string:

GPRMC,091508,A,5730.00,N,02000.00,E,008.3,315.5,

String position for latitude is 3.

The test string will correspond with the following values:

Latitude N 57°30.00. Longitude E 020°00.00. Speed 8.3 knots.

Course 315.5°

Data

Starting point: Main-Window.

How: **Alt+D** Open Data window.

Notebook. Click the tabs and read / write values.

Internal values are updated when the 'OK'-button is clicked.

Evaluate/Modify data

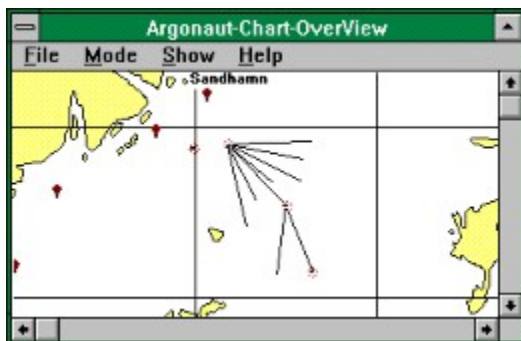
Starting point: Main-Window.

How: **Alt+T** followed by **Ctrl+E** Open Evaluate/Modify Data window.

Evaluate/Modify Data is used in the Set waypoint mode (Chart overview).

If the left mouse button is clicked in the chart window a new waypoint is added to the list of waypoints. Keep the mouse button pressed and drag the mouse: To display a line from the waypoint to the mouse pointer, and to change the Geographical (Geogr) direction in the Evaluate/Modify data window. Release the mouse button. (If you regret it, try the same with the right mouse button.) See picture below.

Set appropriate values in the Evaluate/Modify Data window. Click the Calc button to get result direction and speed (compensated for leeway and current) if the steering (course) is the value in the steer edit box. Click the Steer? button to let the computer calculate a course that will result in a direction as near the geographical as possible. (If possible at all.) Notice the speed and repeat for other geographical directions. This is a second way to find a optimal route. Compare Mode:Search optimum in the Chart window.



Introduction

ArgoNaut Navigator is a Windows program at first hand for mariners. But also for car-drivers.

The qualities are:

Alarms, GPS-communication, log-book, chart-overview, chart-detail, possible to use your own scanned charts, automatically change of displayed chart, sail-time calculation, optimization, and route-planning. Wind and current are included in the calculations according to the user input. Calculates also which direction to steer considering leeway and current.

Check every new chart , after placing its data into a MAP-file.

Select the chart. Open the position dialog-box (Ctrl+N), and drag the mouse to at least two known latitude positions and two known longitudes and compare the position in the position dialog box.

In the chart can be displayed position, track, waypoint and logbook positions.

Forms for position, distances and sail-time.

Can be used without GPS-equipment.

Log-book

Starting point: Main-Window.

How: **Alt+L** Open Log-book window.

Explanations:

1. Log Interval - every X minute a record will be added to a log-file.
2. Use button - open a dialog window and select a filename to use as log-file.
3. Open button - open an existing log-file and show records. Positions from the records in this file can be displayed in the chart overview window.

Main Window

What:

Select brief information about alarms, communication, log-book, position, datasource, speed and wind.

How:

Click one of the 'notebook' tabs.

What:

Open a secondary window.

How:

Click one of the menu items. Or press Alt+appropriate letter.

What:

Alarm Event.

How:

The panel to the right is coloured red, with text Alarm.

Sound, if systemsound activated in the windows control-panel.

What:

Exit program.

How:

Click the File+Exit menu items. Or press Alt+F and select Exit.

Prepare Program For Use

-1. Use the ArgoMap program to produce **MAP**-files (= files including information about and filepath to bitmap files). Possible to use your own scanned files. Or buy ready MAP and BMP-files from your program retailer.

0. **Start** ArgoNaut.exe.

2. Open the **data-source** dialog (Alt+S) and set appropriate values. Close the data-source dialog (Click the OK-button).

3. Open the comm dialog (Alt+C, If any datasource = GPS in step 2) Set appropriate values (**GPS communication = ON**). Select OK to close this dialog.

4. Open the chart window (Alt+T). And open the Select chart from MAP-file dialog (Ctrl+M). **Open a MAP-file and select a chart**. Set Auto select = ON to let the program select which chart to display. Close the dialog.

5. This step is necessary only for calculations and optimization. Open the Evaluate/Modify data dialog (Ctrl+E in the chart menu) and select **BoatData** to open the boatdata grid. Set values (select for example the default data sets for speed and leeway). Close the dialogs.

6. Set appropriate **Mode** (Alt+M in the chart menu).

ShortCuts

Window: Main

Ctrl+X Exit Program.

Window: Chart OverView

Ctrl+C Close current window.

Ctrl+D Distance window (press mouse button and drag).

Ctrl+E Evaluate/modify/optimize sailtime and steering.

Ctrl+I Distance window (insert values).

Ctrl+L Mode: Display log-file coordinates. (if any selected).

Ctrl+M Open the select chart from MAP-file dialog window.

Ctrl+N Position window (drag the mouse).

Ctrl+O Mode: Optimize sailtime between the two selected waypoints.

Ctrl+P Mode: Show position.

Ctrl+R Reload bitmap-file.

Ctrl+S SailTime window (drag the mouse).

Ctrl+T Mode: Show track.

Ctrl+V Mode: Show waypoints.

Ctrl+W Mode: Set waypoints.

Window: Waypoints.

Ctrl+C Close current window.

Ctrl+F7 Step 7 steps back in the waypoint list.

Shift+F7 Step 7 steps forward in the waypoint list.

Source (data)

Starting point: Main-Window.

How: **Alt+S** Open Source window.

Mode:

1. **via GPS**: values are updated according to the values set in the communication window.

2. **Manual**: Values are set when clicking the 'OK'-button.

Enter appropriate values in the edit boxes.

Wind and current(=stream) can also be set in the Evaluate/Modify dialog (open from chart overview) by clicking the **use** button.

Wind and current are used in the optimization and sailtime calculations.

Internal values are updated when the 'OK'-button is clicked.

Window Tree Structure

Main

Alarm

Chart

Detail

Distance

Distance geopoints

Evaluate/modify data

BoatData

Position

SailTime

Select Chart

Search Optimum

Waypoints

Communication

NMEA

Data

MapInfoBox

PenBox

ResourceBox

TimerBox

Log-Book

DataSource

Help

About

this

