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1. GENERAL INFORMATION ABOUT TRANSAS ISAILOR APP.

Transas iSailor is the free navigational application for iPhones and iPads intended for use on boats and yachts.

1.1. OS REQUIREMENTS

Transas iSailor version **1.6.0** and higher operates on devices with Apple iOS 6.1.3 and higher, app is ready for the iOS 7. Our current users with old devices, like iPad 1 with iOS 5.x.x, can only use the **Transas iSailor** version 1.5.4 from **AppStore** for restore function.

1.2. POSITIONING BY IOS LOCATION SERVICES

Transas iSailor determines location using Apple's internal "**iOS Location Service**". The app can receive a signal about current geographic position from the cell towers, internal Apple's "Assisted GPS" or external Bluetooth GPS which can work via iOS internal location service as well.

iPhone: While being out of range of cell towers, the device defines the position using GPS. iPhone 4, iPhone 4S, iPhone 5C, iPhone 5S, iPhone 6 and iPhone 6 Plus are by default equipped with internal "Assisted GPS" unit, which is compatible with iSailor.

iPad: There are two new models of an iPad:

1. **iPad Wi-Fi** or **iPad mini Wi-Fi** (without integrated "Assisted GPS" unit. Compatible with iSailor, but always requires an additional external GPS receiver, Bluetooth or NMEA via Wi-Fi in future versions).
2. **iPad Wi-Fi + Cellular** or **iPad mini Wi-Fi + Cellular** (with the built-in "Assisted GPS" unit. Compatible with iSailor).

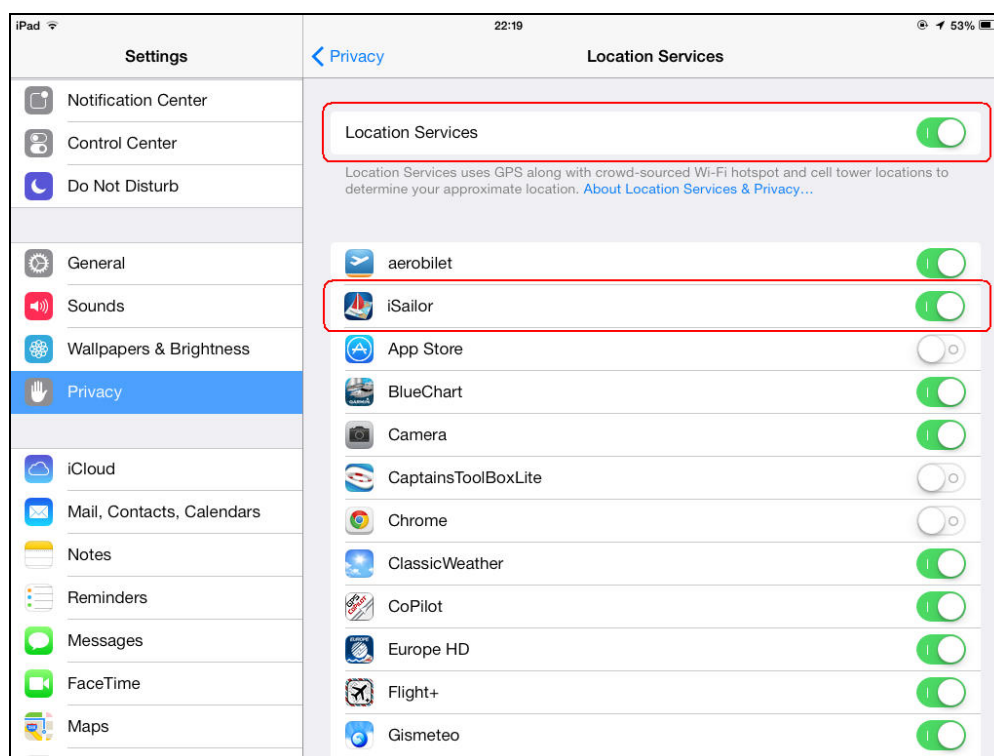
If you have an **iPad Wi-Fi** model you still may run iSailor on it as internal location service in this device is available. In this case you have to use any external GPS devices such as:

<http://gps.dualav.com/explore-by-lifestyle/marine/>

<http://bad-elf.com/pages/be-gps-1000-detail>

<http://www.gns-gmbh.com/index.php?id=194&L=1>

<https://buy.garmin.com/en-US/US/in-the-air/portable-gps/glo-for-aviation/prod109826.html> etc



ATTENTION!

Please switch on the "**Location Services**" for the "**iSailor**" app on your device!

Note: Sometimes after the installation of iSailor app on device, information about iSailor is unavailable in the list of apps in **Location Services**. In this case it is necessary to Power OFF the device. After switching ON please check information about iSailor app in the "**Location Services**" list again.

Additional important information:

Assisted GPS (A-GPS or AGPS) is a very fast system which can improve the startup performance or "cold startup" of the device with integrated GPS satellite-based positioning system. But in some cases a new devices need to be up to 30 min. (in average 15-25 min.) under the clear sky at first time to receive "almanac" and other information directly from GPS satellites. Work of internal GPS unit in iPad device inside of the ship, boat, etc. depends on the individual material properties of the hull, which in some cases can block the radio signals from GPS satellites on the path to the Apple's device.

1.3. POSITIONING BY NMEA GPS VIA WI-FI

NMEA GPS via Wi-Fi will be supported in the next versions of the Transas iSailor 1.6.x generation. Following NMEA sentences are implemented: **\$xxGGA**, **\$xxGLL**, **\$xxRMC** and **\$xxVTG**.

1.4. POSITIONING BY AIS CLASS B VIA WI-FI

Refer to the **Chapter 14 "AIS Class B Transponder or Receiver"** below.

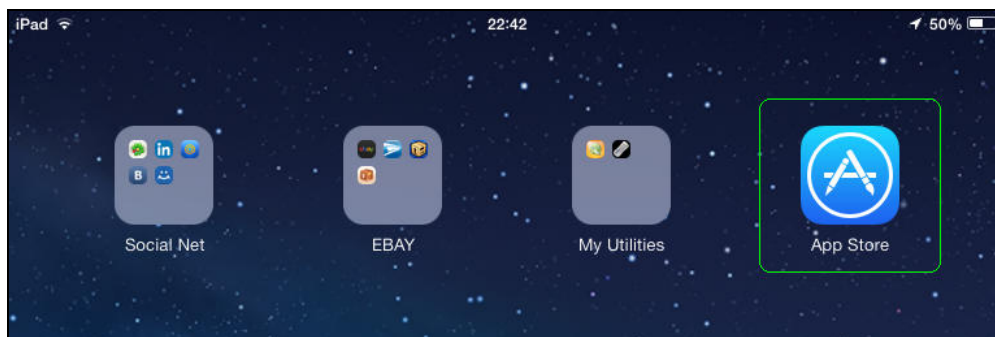


2. HOW TO INSTALL ISAILOR ON THE DEVICE.

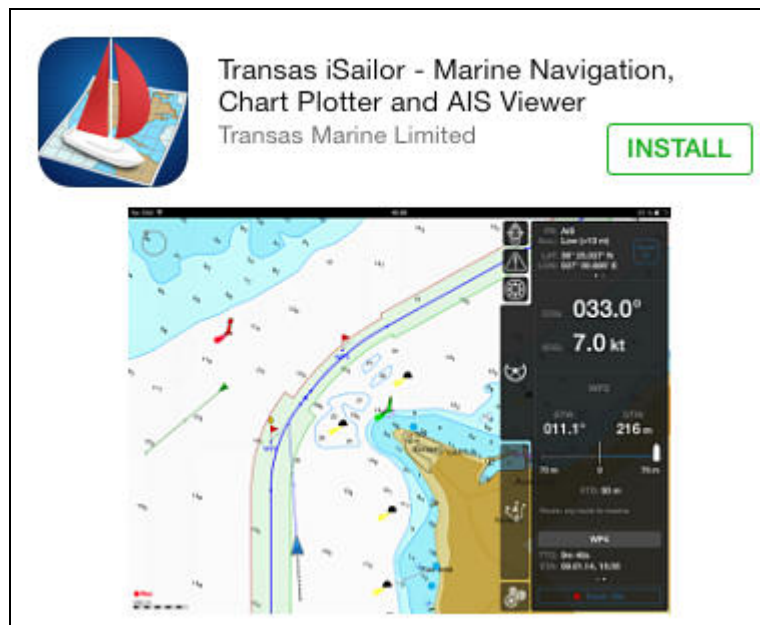
ATTENTION!

We strongly recommend that the app should be loaded with your device connected to the Internet via Wi-Fi and to the power supply unit.

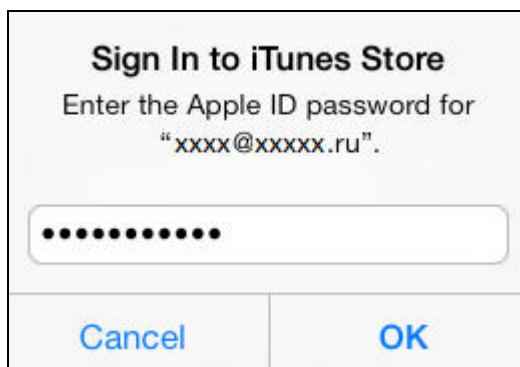
- Open the **App Store**:



- Find the **Transas iSailor** App:



- **Important:** Check that your correct iTunes login account (Apple ID) is used on the device;
- Install the **Transas iSailor** application on the device using your **Apple ID** and **Password**:



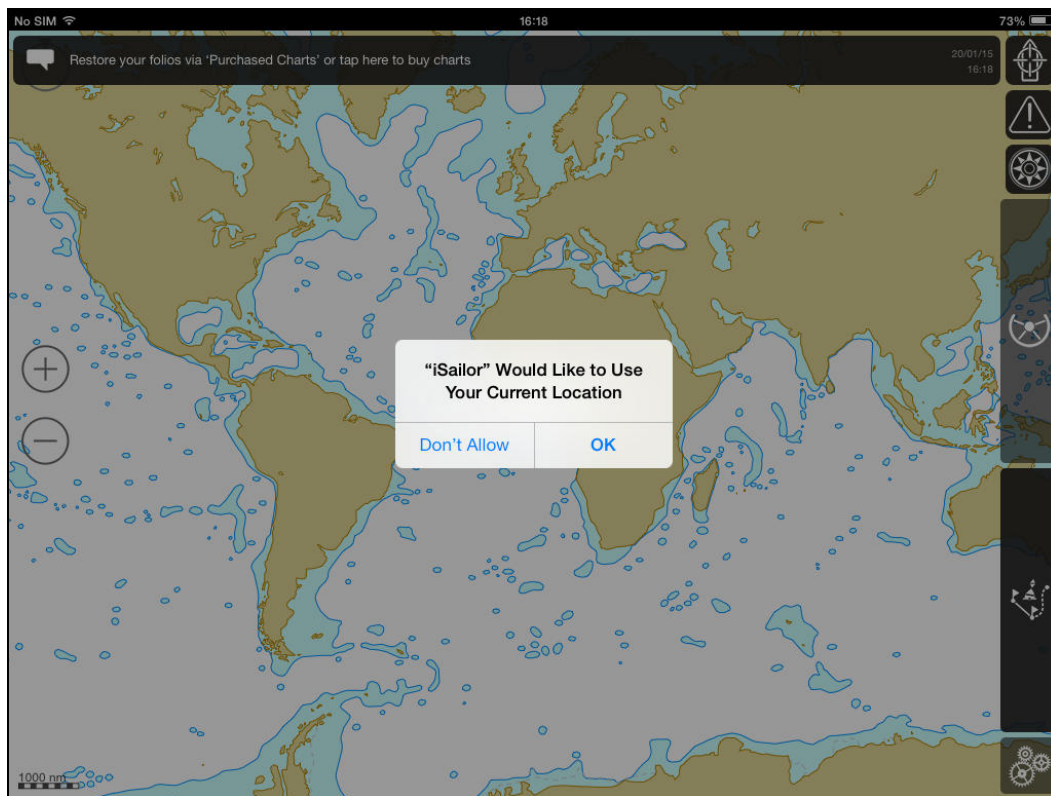
- Note: **Apple ID** and **Password** may be requested twice. Press **OK** button.

In order to automatically save the purchase data (charts, options, subscriptions) of the Transas iSailor application we do recommend you to use Apple iCloud (connection to this service is required).

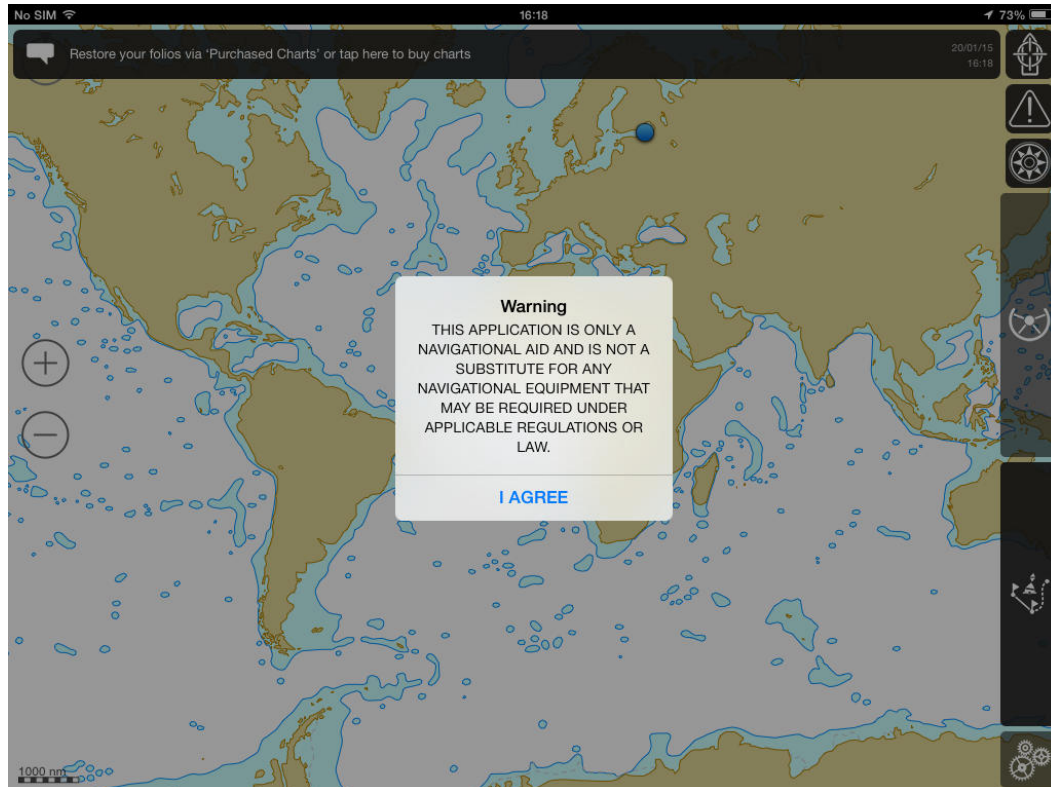
3. FIRST STARTUP OF ISAILOR.

Run the “iSailor” app. You will see following windows during the first startup:

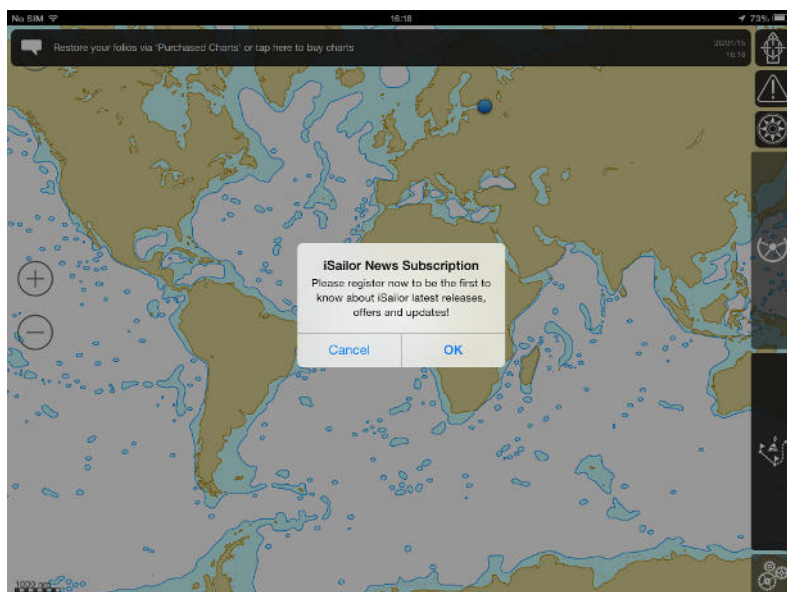




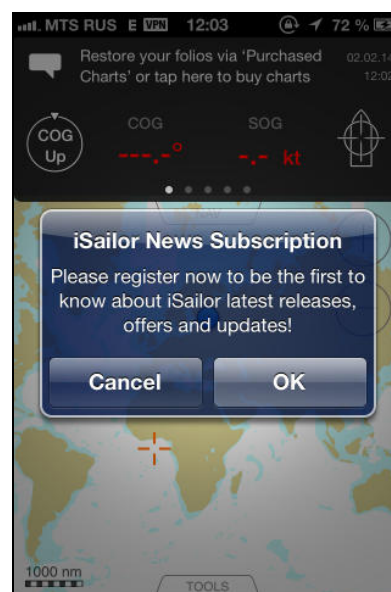
Tap **"OK"** to enable the **"Location Services"** for iSailor App



Tap **"I AGREE"** here

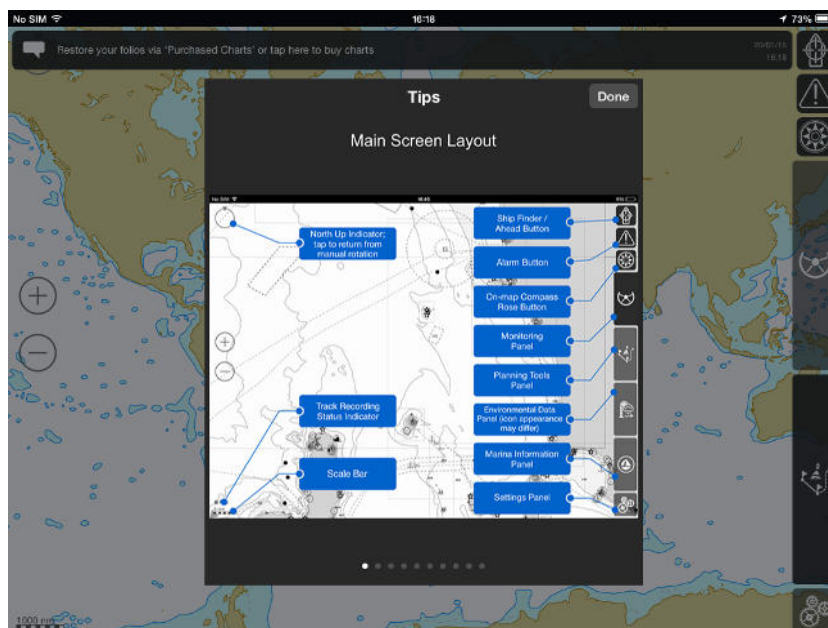


iPad

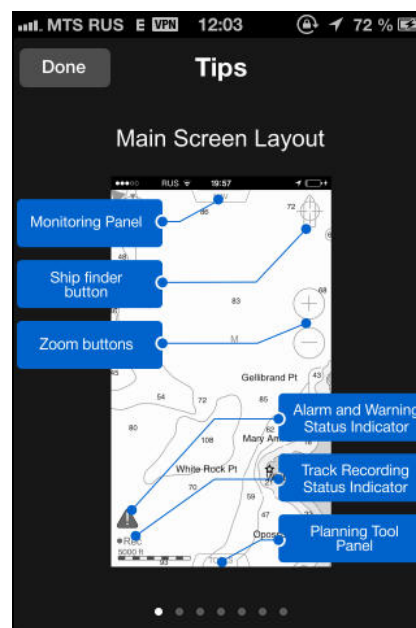


iPhone

You can activate subscription for the iSailor News at this step or perform it later via
“Settings” \ “Registration” menu item.



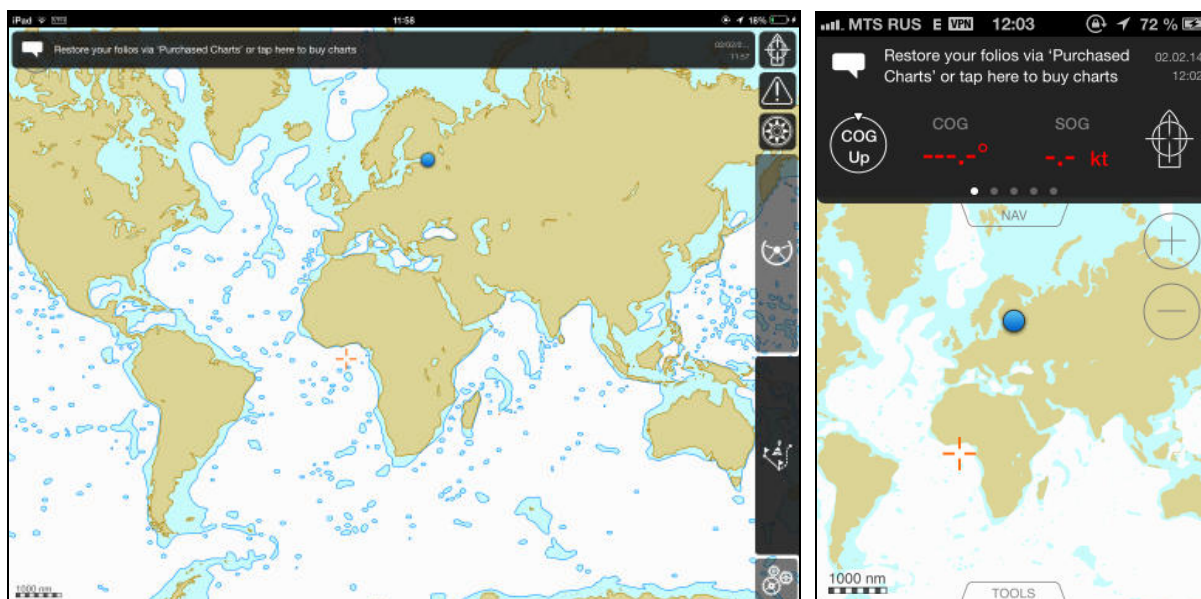
iPad



iPhone

Main iSailor functions and controls may be checked using **Tips** at this step or activate **Tips** later via
“Settings” \ “Tips & User Manual” menu item.

Tap “Done” button to close **Tips** window.



iSailor main screen on iPad and iPhone after the first startup

ATTENTION!

Transas iSailor app has differences in iPad and iPhone versions. Differences are mostly related to the User Interface and navigation controls; Deviations are specified separately in the below mentioned chapters of the given **User Manual** document.

4. HOW TO PURCHASE AND RESTORE CHARTS.

You can purchase charts for iSailor only via the “**Chart Store**” layout in-app.

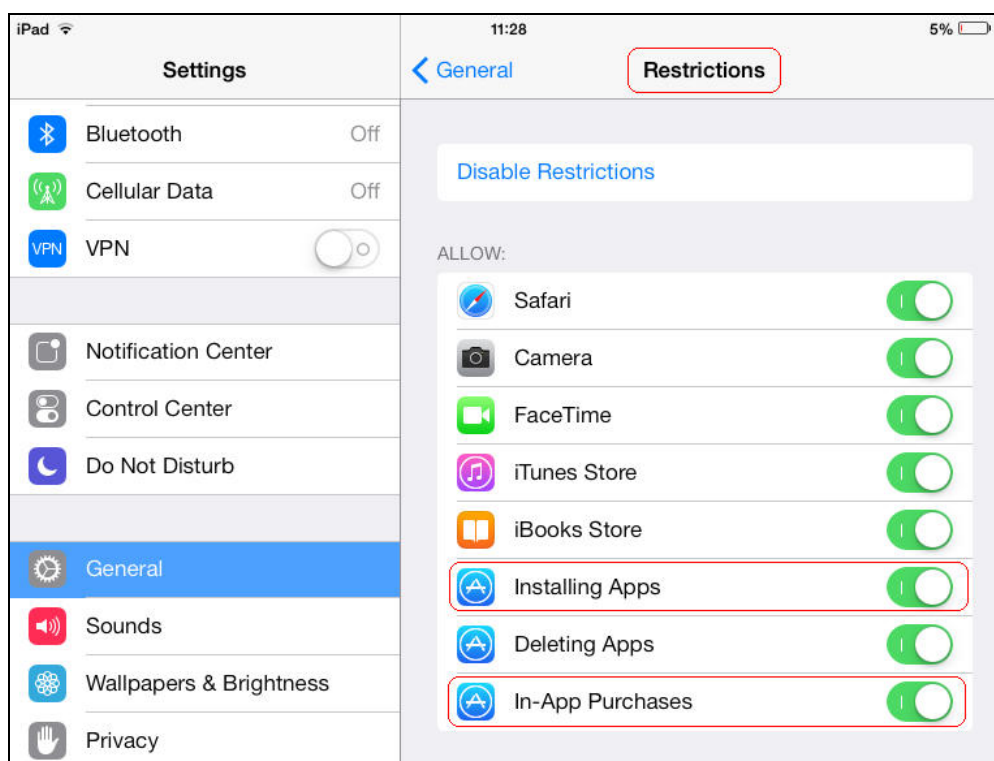
ATTENTION!

We strongly recommend that the data should be purchased and downloaded with your device connected to the Internet via Wi-Fi and connected to the power supply unit.

In order to automatically save the purchase data (maps, options, subscriptions) of the Transas iSailor application we do recommend you to use Apple iCloud (connection to this service is required).

The iTunes has information on all the in-app purchases you made in the “**Chart Store**” section of the **Transas iSailor** app. Please use the correct current iTunes login account (**Apple ID**). Always use the same iTunes login account (**Apple ID**), because it is only in this case that you can use the free “**Restore**” procedure for free downloading and installation of all the previously purchased charts in future.

Before starting the purchasing process please check the “**Restrictions**” and “**In-App Purchases**” settings on the device:



Installation usually takes a few minutes, but sometimes the process is interrupted by network failures or exit from the program, etc.

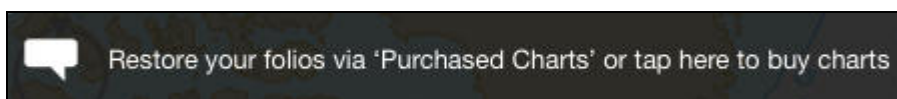
ATTENTION!

Please don't close the application until the loading process is completed!

4.1. “CHART STORE” ACTIVATION

“Chart Store” can be activated by different ways:


a). Using tap command on the notification line:

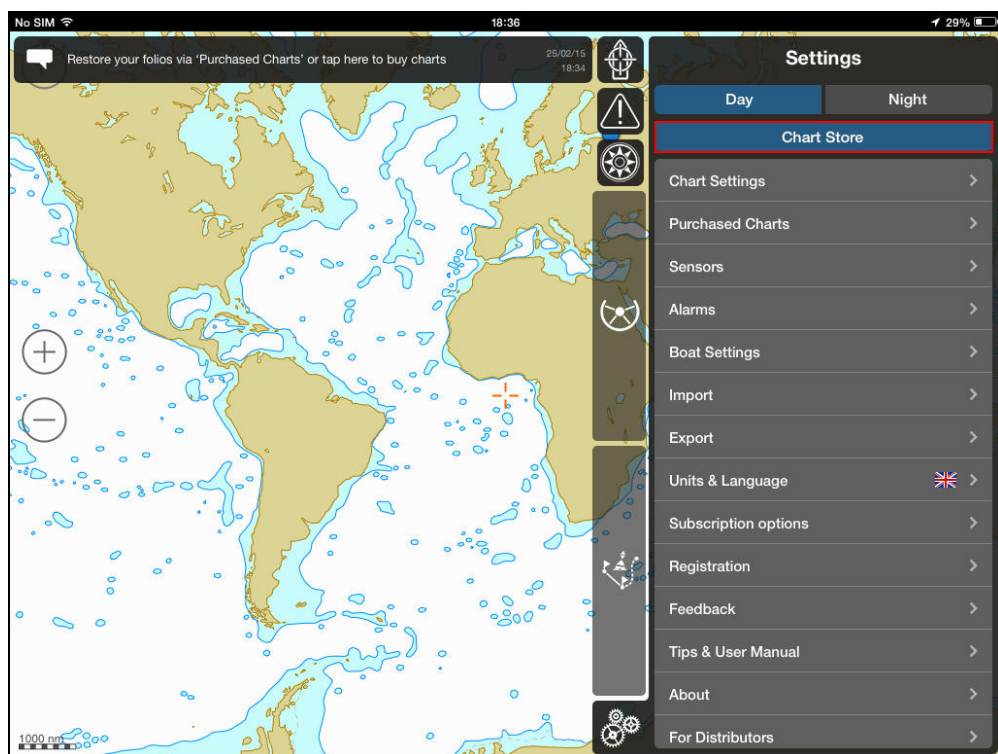


This message will only be shown on top until (*at least*) one Chart Folio is installed in the iSailor App (“Free Demo”, “Paid” or “Premium Paid” folio)

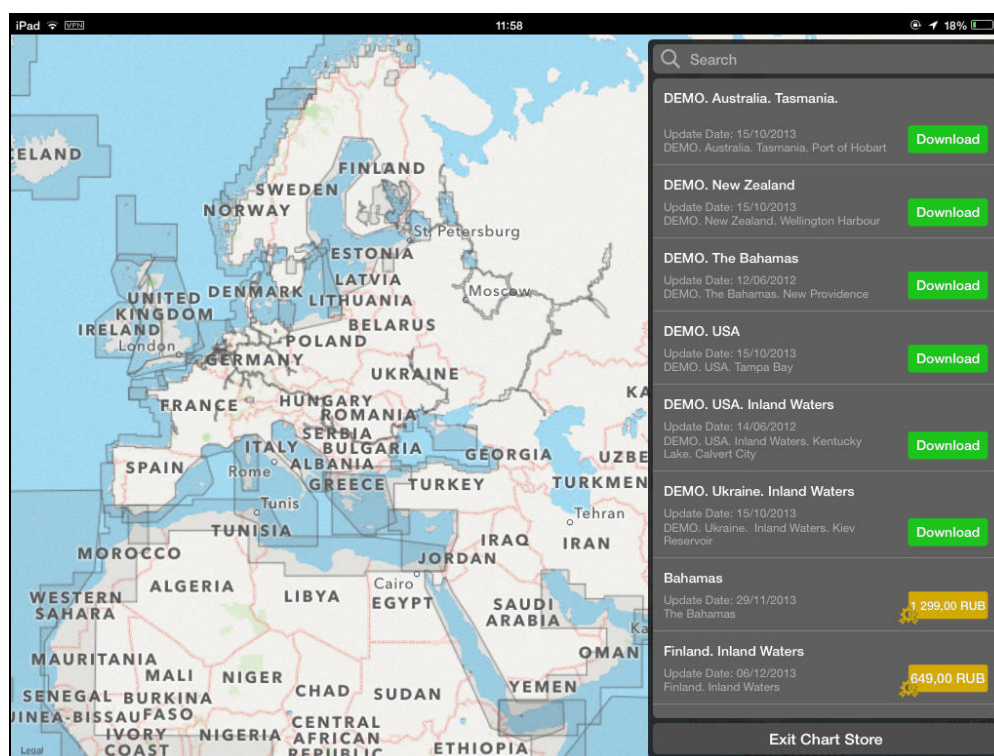
a). Using “Settings” menu, iPad layout:



Tap  page to open the “Settings” tab.

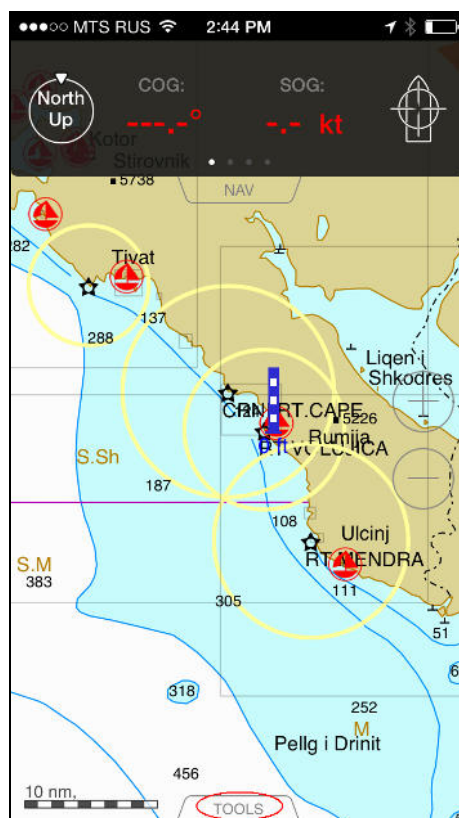


Tap “Chart Store” button.

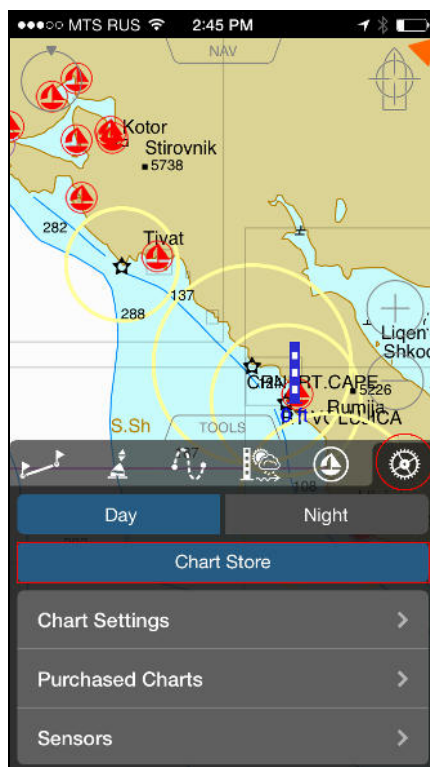


"Chart Store" layout on iPad.

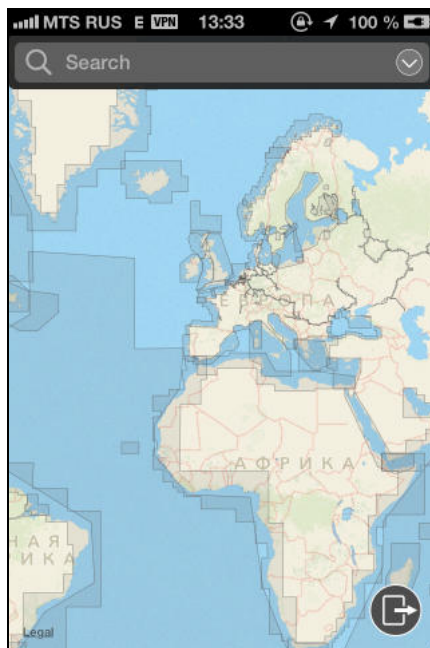
b). Using "Settings" menu, iPhone layout:



Tap "TOOLS" icon on the bottom side.



Then tap “**Settings**” button. Then tap “**Chart Store**” button.



“**Chart Store**” layout on iPhone.

Find the necessary chart folio and purchase it. There are three ways to purchase the chart folio(s):

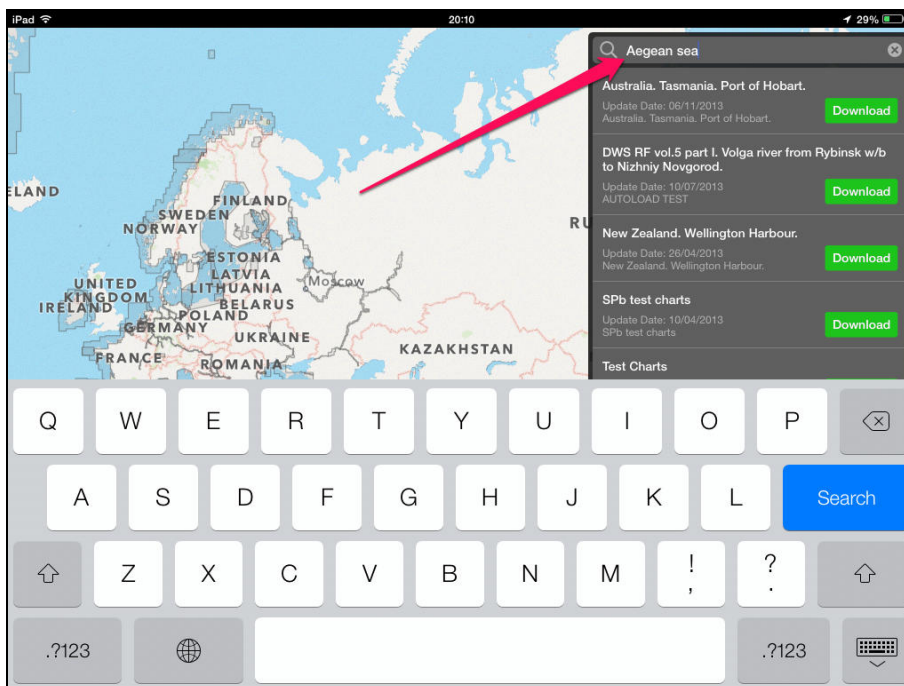
- **Method 1.** Search of the necessary chart folio via search line (you can use for search any names, coordinates, etc.);
- **Method 2.** By tapping of the necessary area on the world chart;
- **Method 3.** Select from the list of available charts folios.

All methods described below in the appropriate chapters.

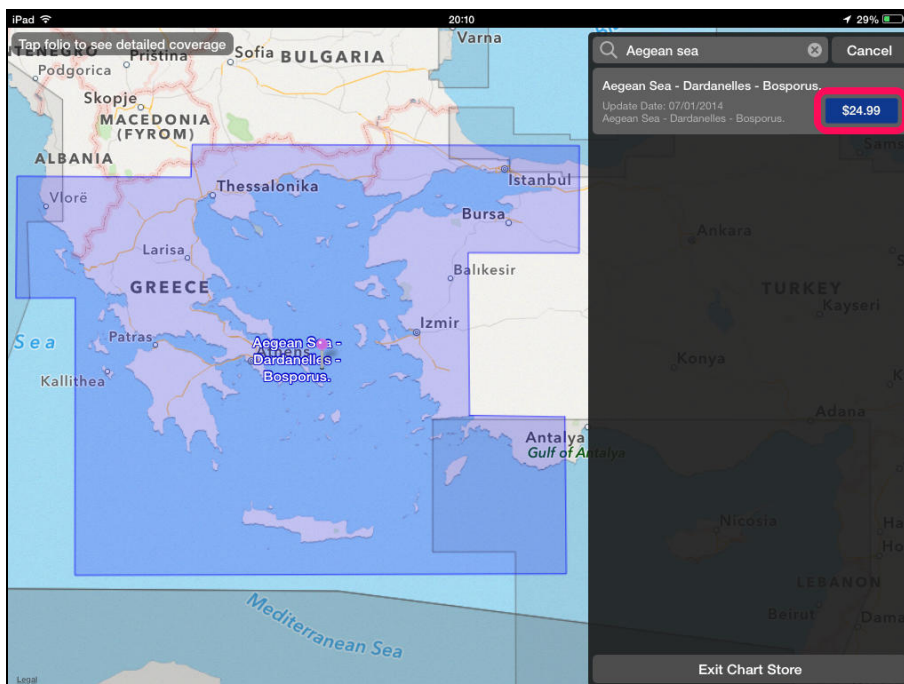


4.2. METHOD 1 - SEARCH OF THE NECESSARY CHART FOLIO VIA “SEARCH” LINE

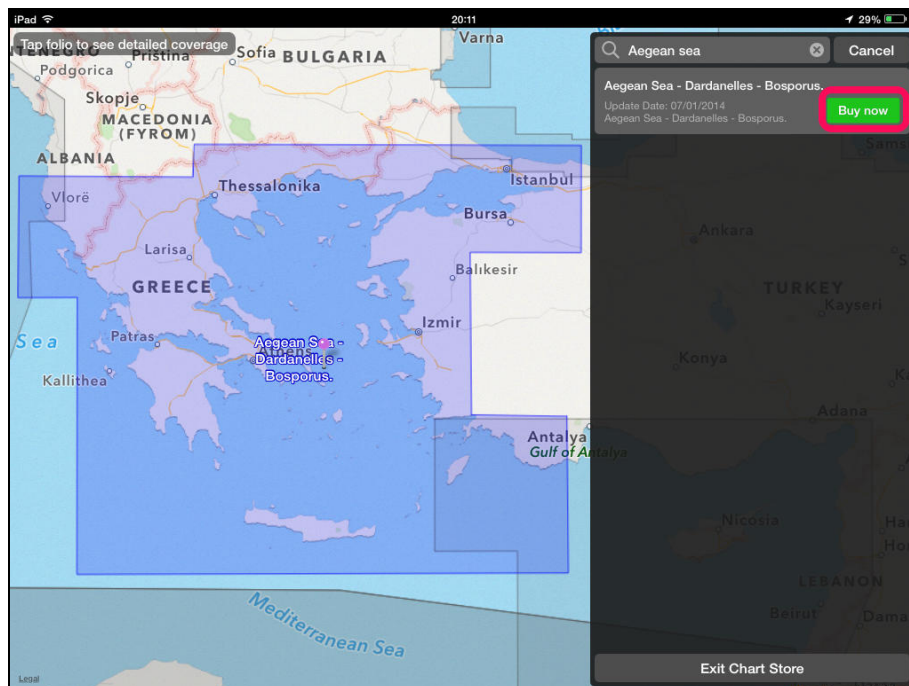
Run the “iSailor” app. You will see following windows during the first startup:



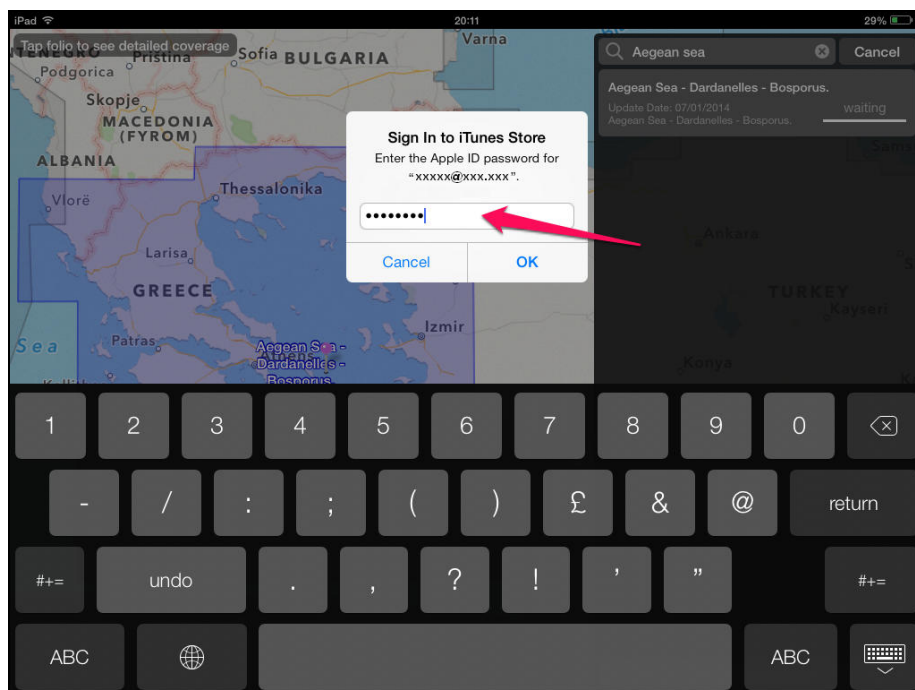
Enter a search parameter in the search line and tap “**Search**” button.



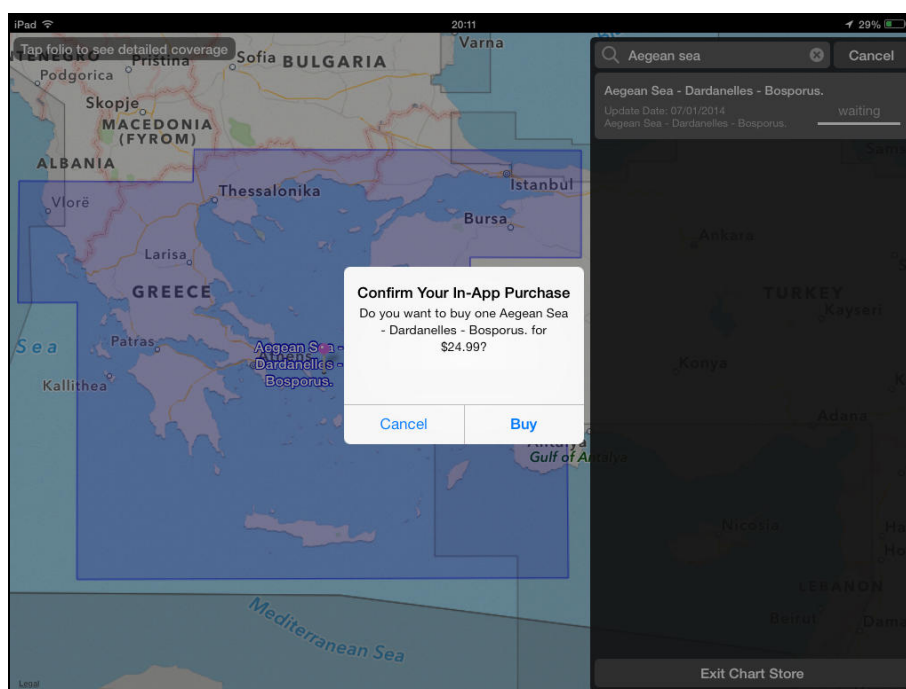
Tap the “**Price**” button to order selected folio.



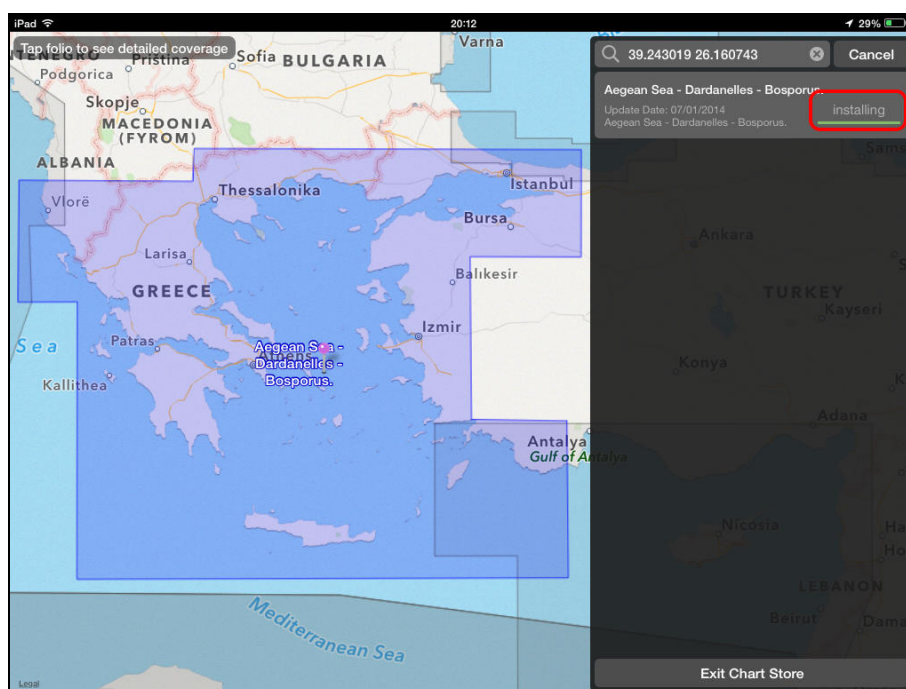
Tap the “**Buy now**” button.



Enter your **Apple ID** password (or both) and press “**OK**” button finally.
Note: **Apple ID** and **Password** may be requested twice!



Press the “**Buy**” button for confirmation.



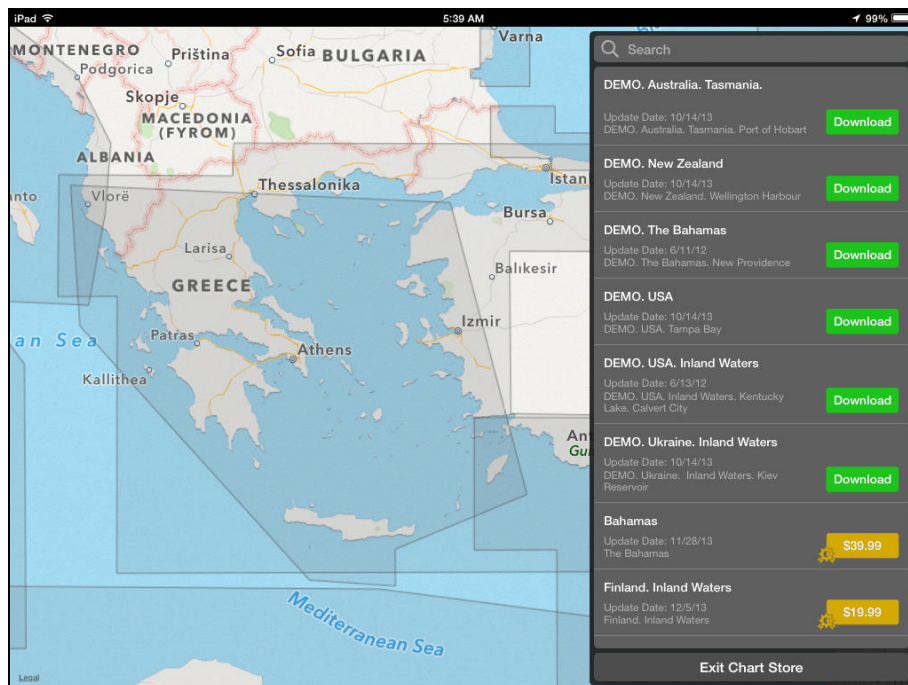
Wait until status is changed to “**installed**”.

Note: “**Installed**” status is shown for all installed charts & folios. Following statuses are available during the installation procedure:

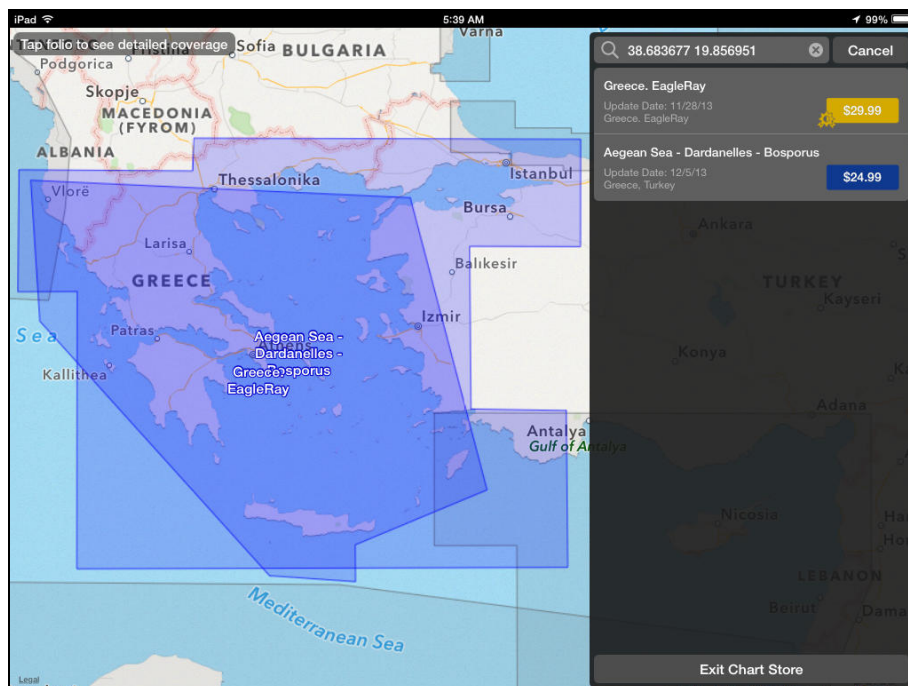
- “**Waiting**” – waiting ordering approval from the AppStore;
- “**Loading**” – Chart folio loading. Do not interrupt the Wi-Fi connection and keep iSailor active;
- “**Installing**” – iSailor is installing downloaded folio(s);
- “**Installed**” – Chart folio is installed.



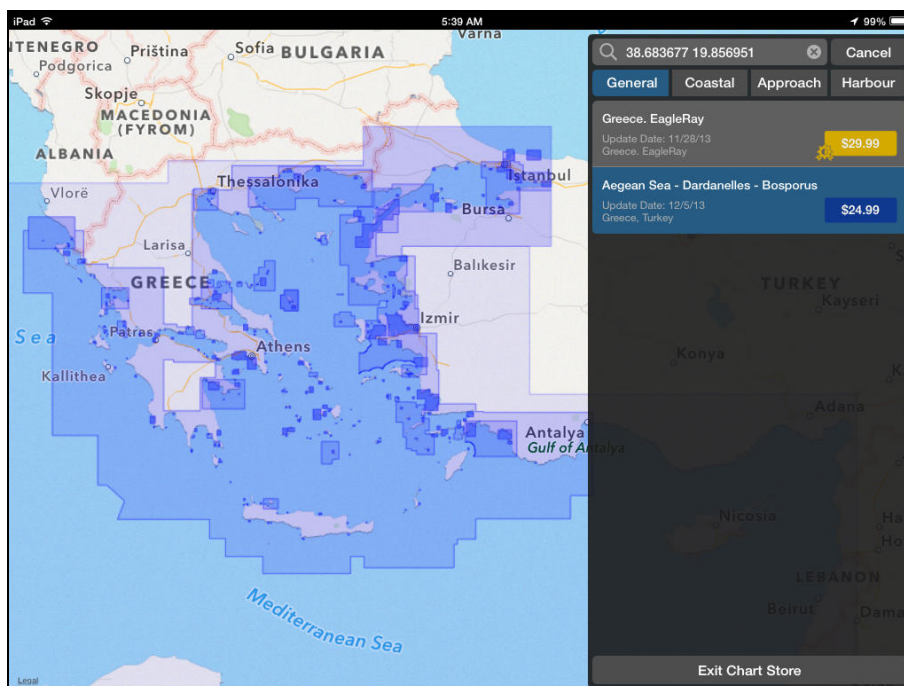
4.3. METHOD 2 - BY TAPPING ON THE NECESSARY AREA OF THE WORLD CHART



Drag to scroll the Chart folios and tap the necessary area on the screen. You may also use the “Pinch Open to Zoom-In” and “Pinch close to Zoom-Out” commands for chart scaling purposes.



Tap the necessary area on the chart screen. You'll see detected folios specified position.



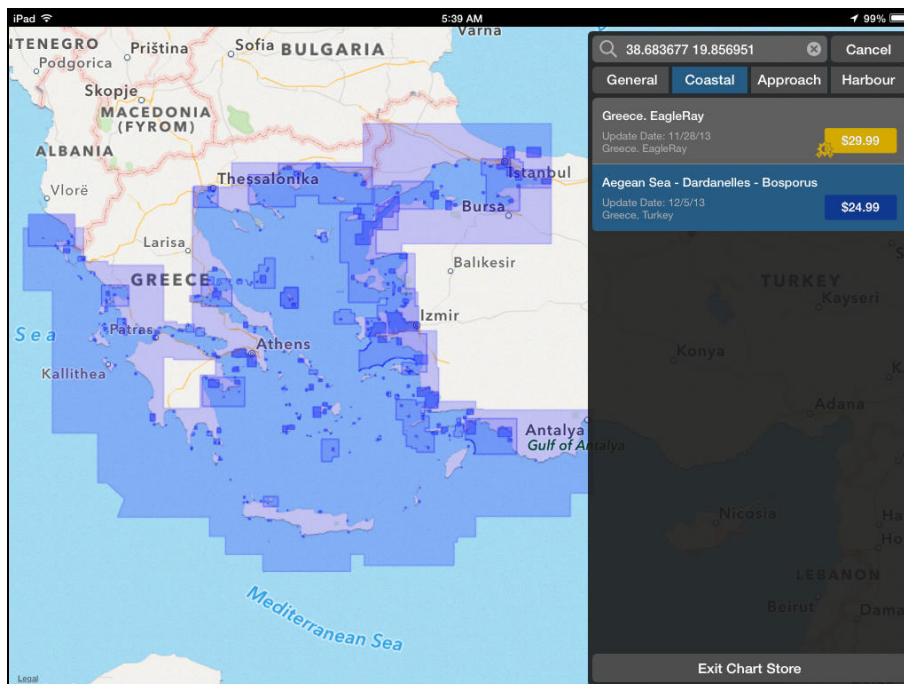
Tap second time on detected folios or select detected folio from the list.

“**Aegean Sea – Dardanelles – Bosporus**” folio is shown as **selected** folio on the example above.

Note: Selected folio is highlighted in the “blue” background color in the list!

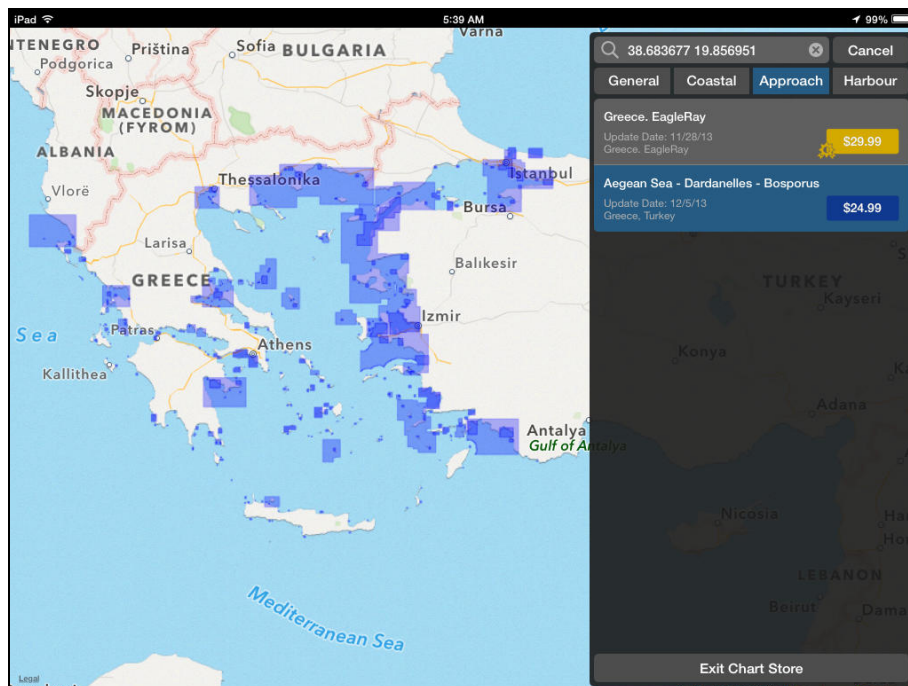
The additional button line will be enabled in the top of “**Chart Store**” tab after that. Four buttons will be appeared after that: “**General**”, “**Coastal**”, “**Approach**” and “**Harbour**”.

These buttons are intended for presentation of the different chart categories for the selected folio, divide into 4 main groups. Press these buttons and check chart coverage before the purchasing, if necessary:



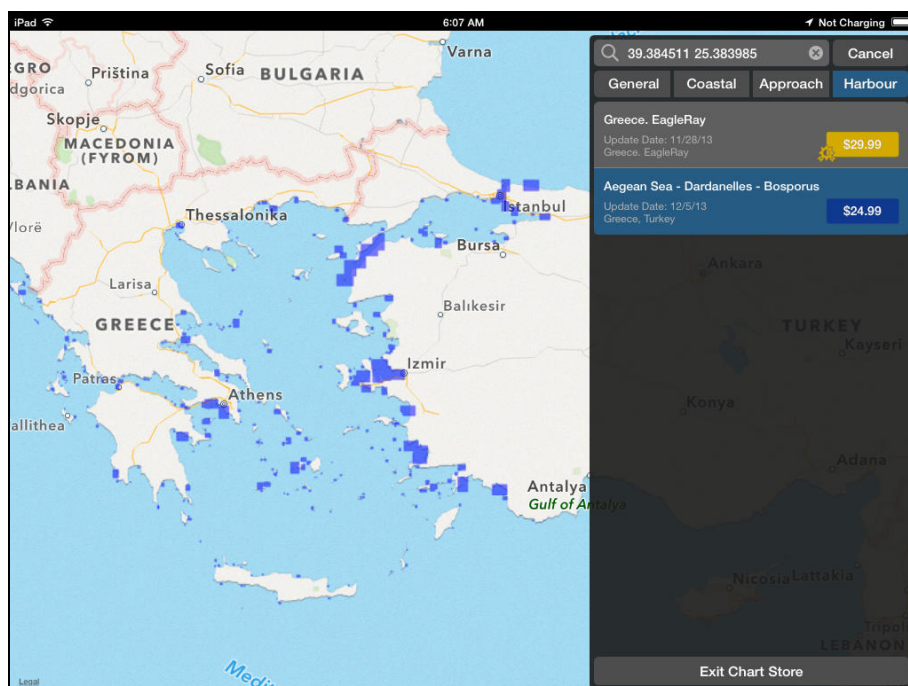
“**Coastal**” button is pressed on.

All Coastal charts of the selected folio are presented on the display.



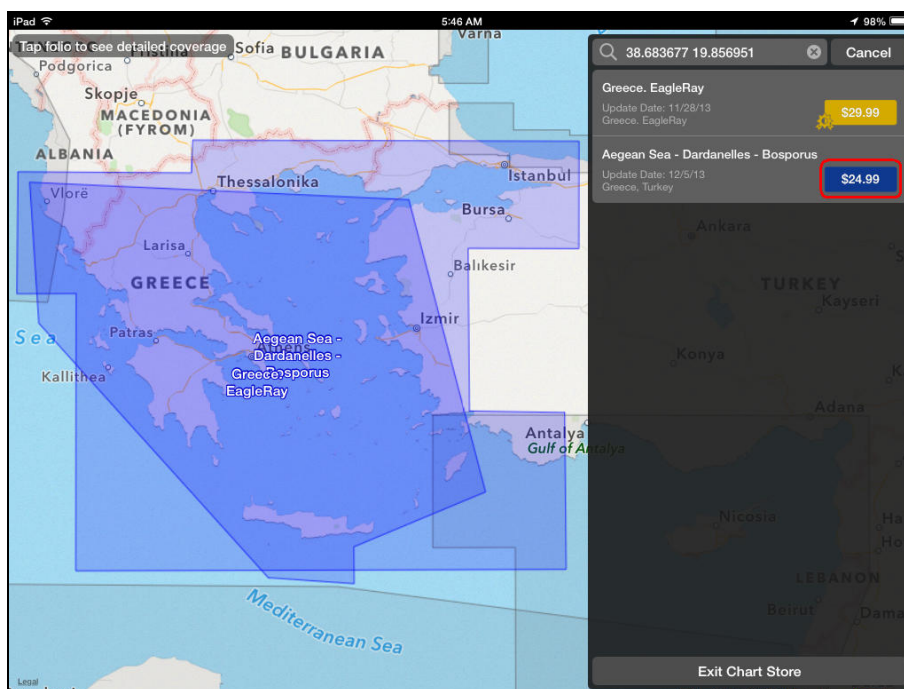
“Approach” button is pressed.

“General” and “High Sea - Coastal” charts are excluded from presentation.

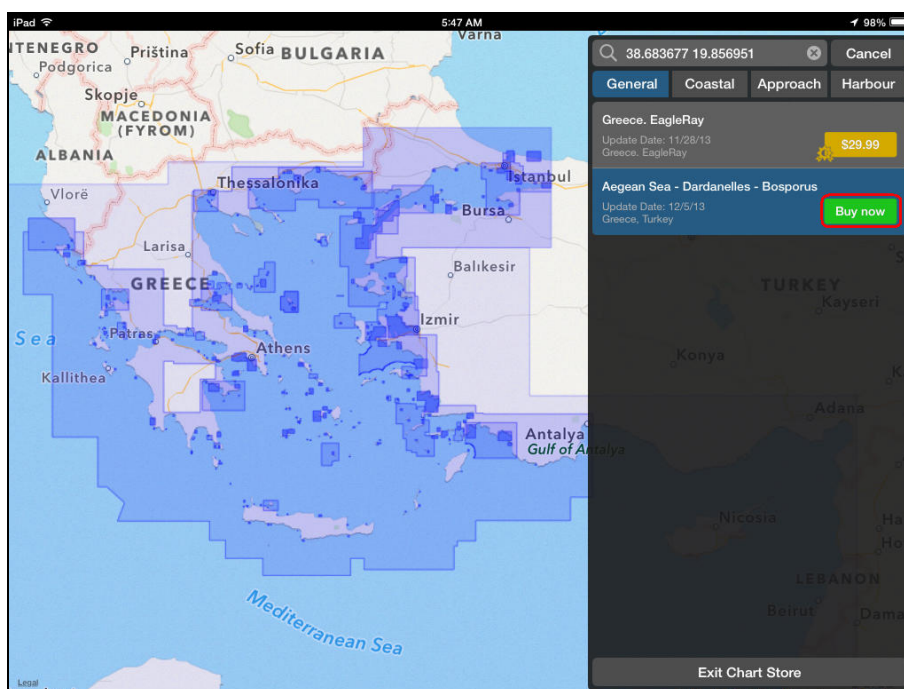


“Harbour” button is pressed on.

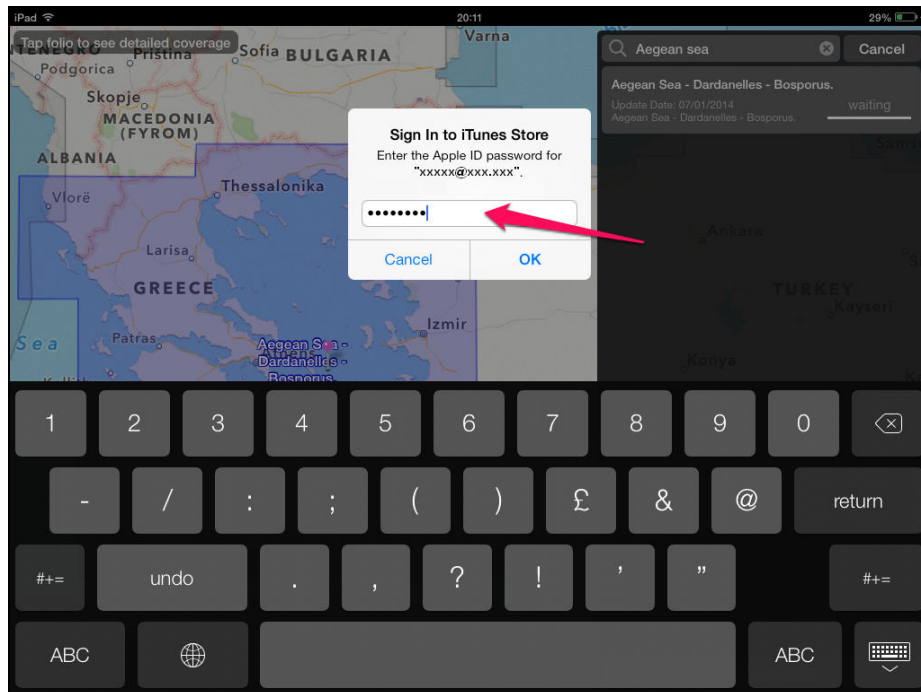
Only large scale charts and plans are presented on the display for the selected chart folio.



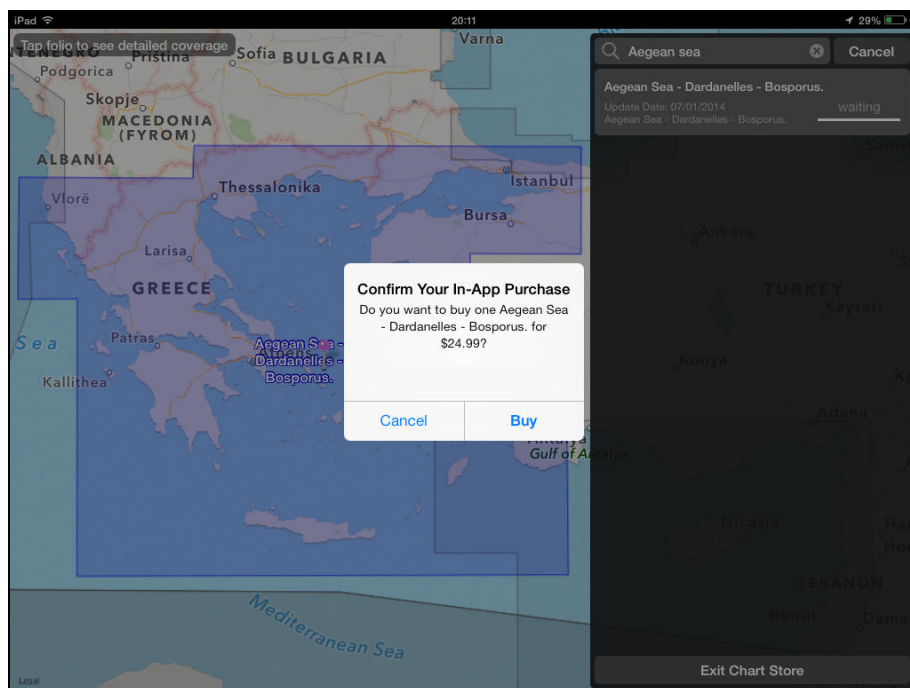
Tap the **"Price"** button to order selected folio.



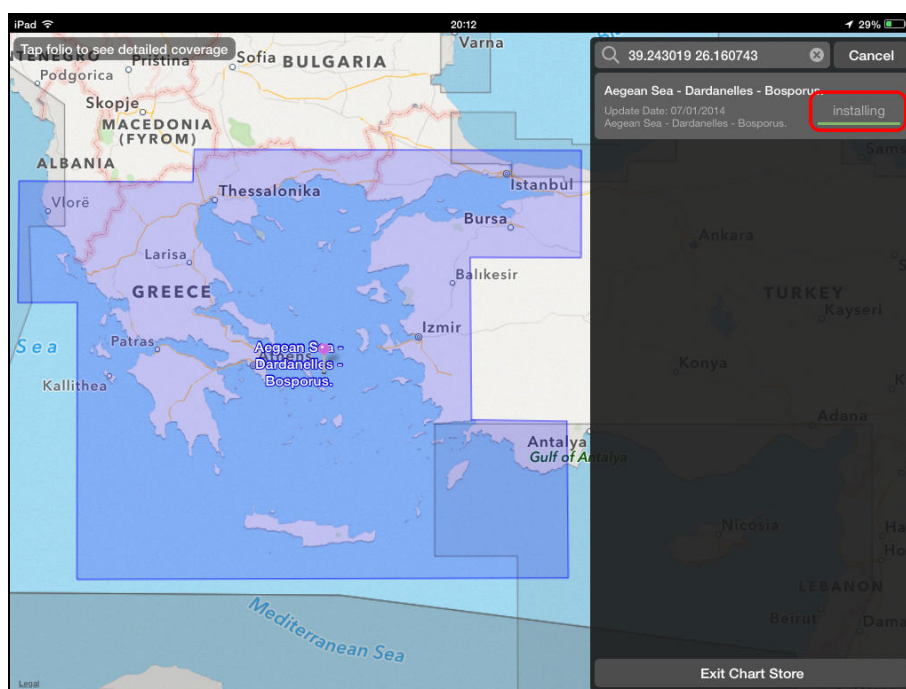
Tap again the **"Buy now"** button for confirmation.



Enter your **Apple ID** password (or both) and press “**OK**” button finally.
Note: **Apple ID** and **Password** may be requested twice!

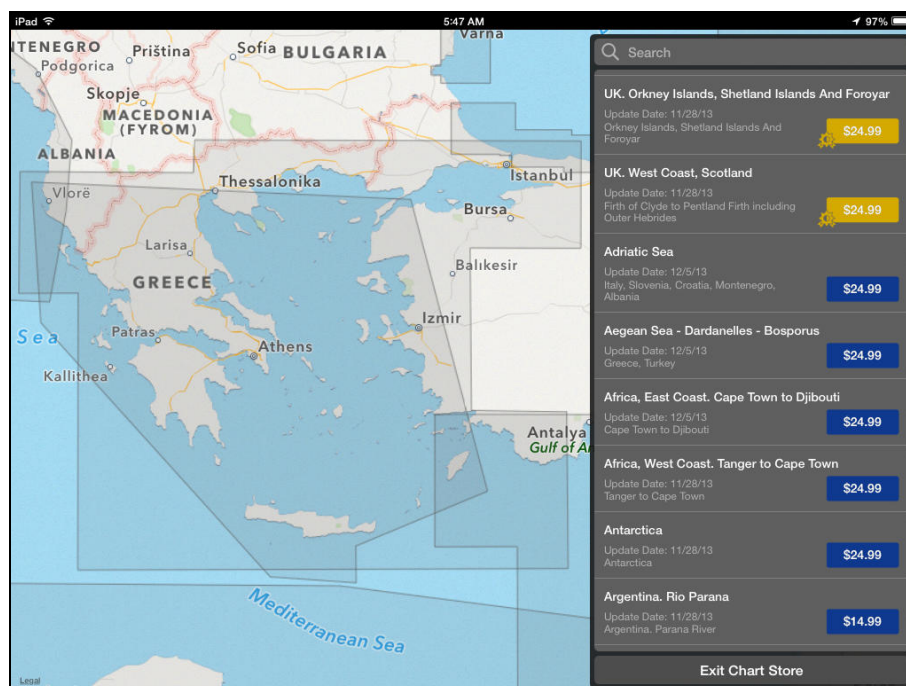


Press the “**Buy**” button for confirmation.

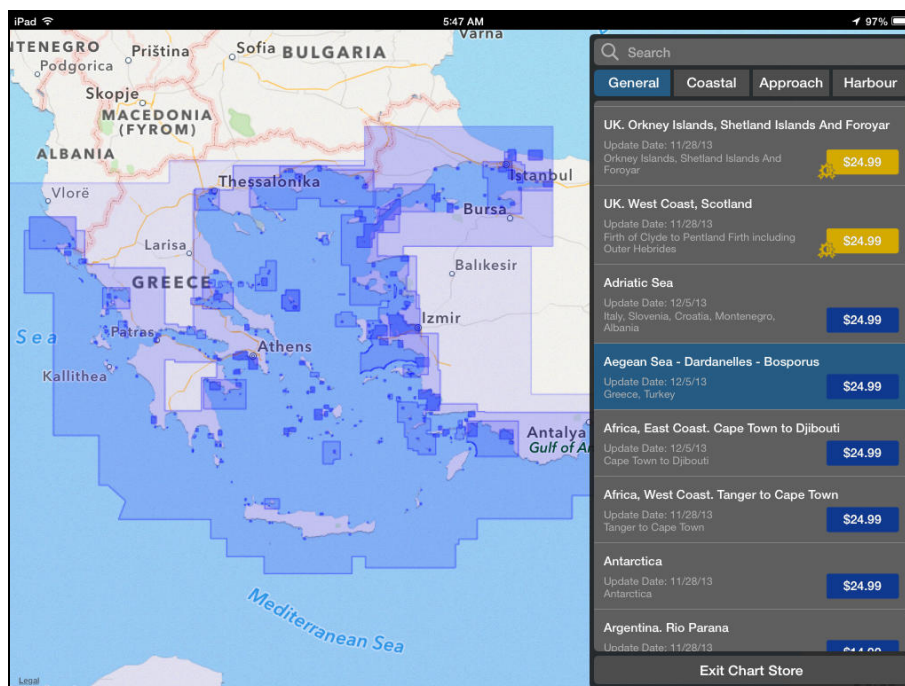


Wait until status is changed to “installed”.

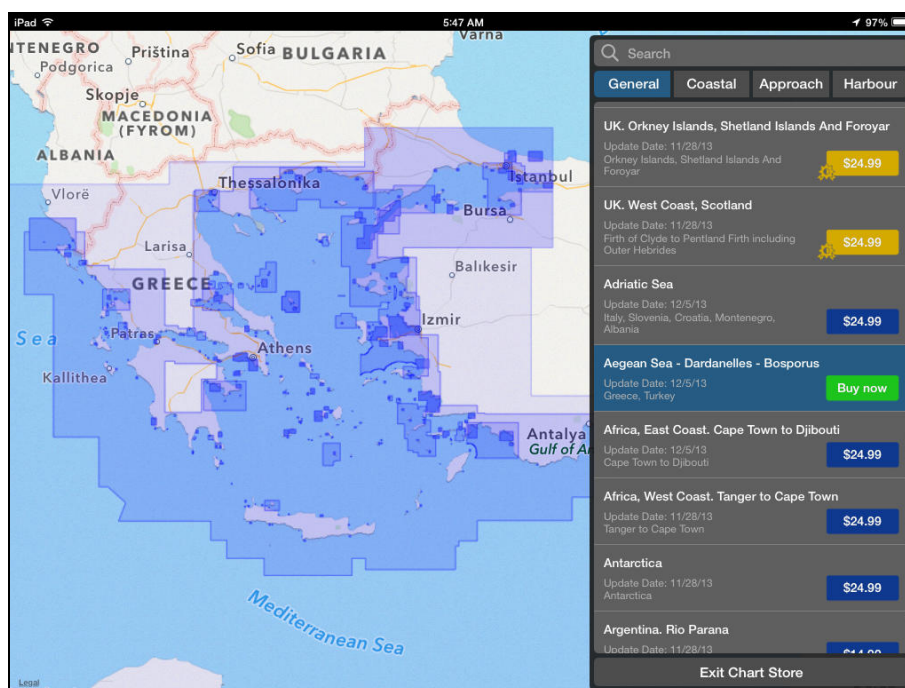
4.4. METHOD 3 - SELECT FROM THE LIST AVAILABLE CHART FOLIOS



Select the necessary chart folio in the list.



Tap the “Price” button.



Tap again the “Buy now” button for confirmation.

- Enter your **Apple ID** password (or both) and press “OK” button finally.
Note: **Apple ID** and **Password** may be requested twice! Refer to Chapters 4.2 and 4.3 for details.
- Wait until status is changed to “installed”.



4.5. HOW TO RESTORE PREVIOUSLY PURCHASED CHARTS.

We strongly recommend that the app and any other data should be downloaded with your device connected to the Internet via Wi-Fi and connected to the power supply unit.

Two main parts:

- Correct installation of the “**iSailor**” app;
- Restore the previously purchased charts.

All the charts and paid options purchased earlier are restored simultaneously.

Technically, if you have only one **iTunes** login account (**Apple ID**) you can go on to the second part (“**Restore**” procedure), but before that it is advisable to carefully read the instructions.

The iTunes has information on all the in-app purchases you made in the “**Chart Store**” layout of the Transas “**iSailor**” app.

Note: Please, use **THE SAME** “iTunes” login account (**Apple ID**) as was previously used for the installation of the Transas “**iSailor**” app and all the in-app purchases of chart folios in the Chart Store section of the Transas “**iSailor**” app.

It is only in this case that you can use the free “**Restore**” procedure for the free download of all the previously purchased folios.

Please follow this rule, and you will not receive extra invoices from the iTunes for the chart folios which were already bought before.

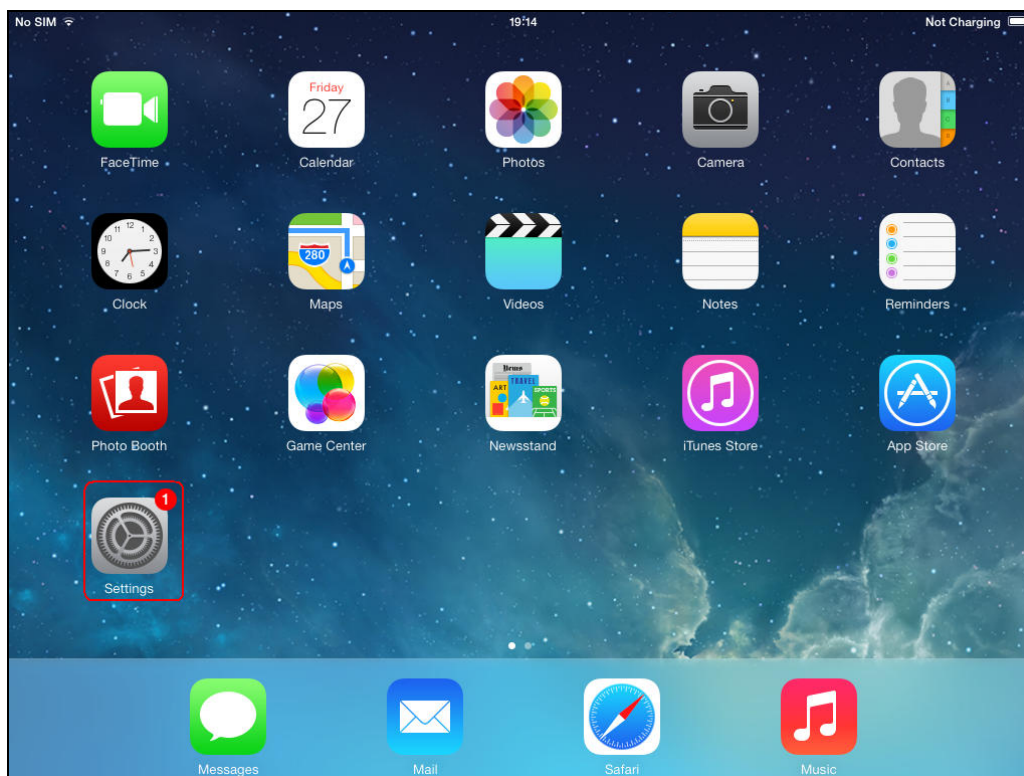
Part one. Correct installation of the “iSailor” app:

Open the **iTunes Receipt** and find the iTunes login (**Apple ID**) which was used for the in-app purchase. If you have several different chart folios and various Receipts from the iTunes, please carefully check all of them.

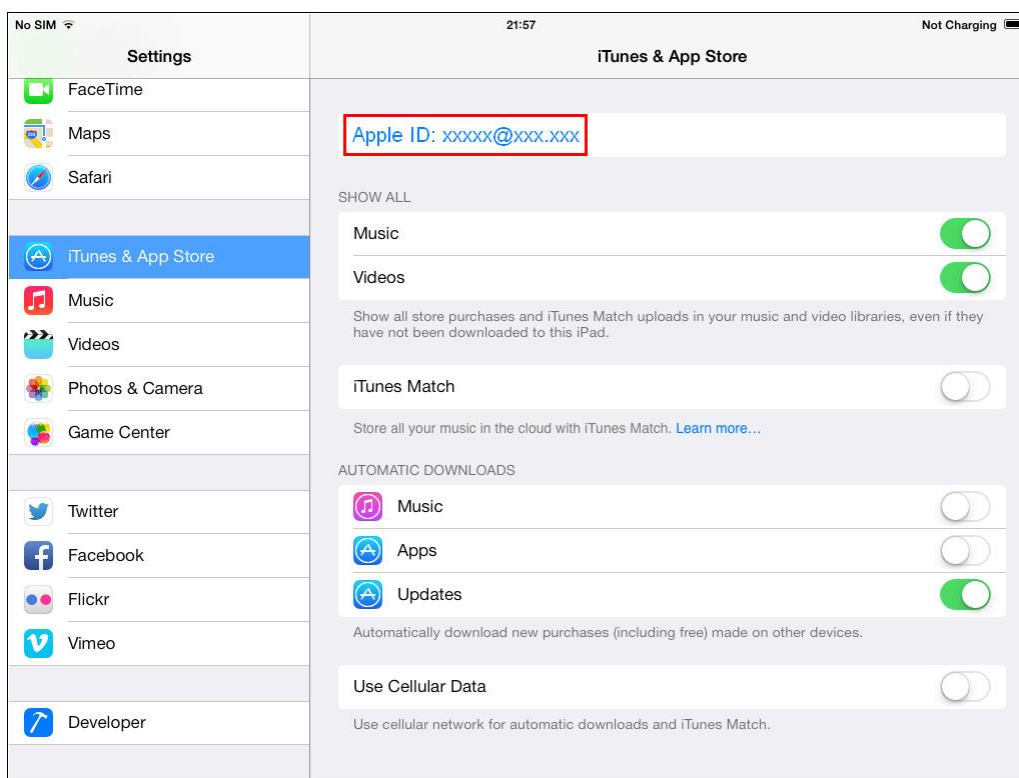
This iTunes login account (**Apple ID** from **iTunes Receipts**) should be set in the device store and used for installation of the “**iSailor**” app. It is only in this case that you can use the free “**Restore**” procedure for the free download of all the previously purchased folios.



Where to set iTunes login (**Apple ID**) on device – Go to “**Settings**” menu of your device:



Find where “**iTunes & App Stores**” setting:



If you do not remember the iTunes login (**Apple ID**) which was used for the “iSailor” app installation, please delete the app and install it again with the correct iTunes login (**Apple ID**) available in the iTunes Receipt.

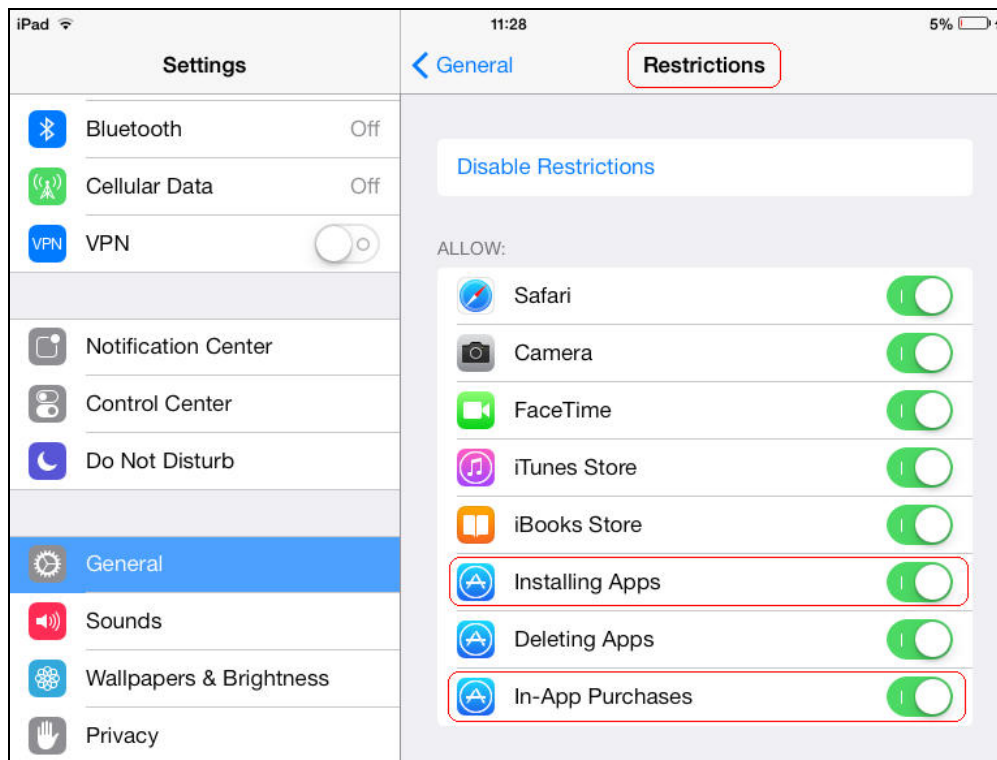
Installation of Transas iSailor app from App Store on the device:

Refer to the **Chapter 2. How to install iSailor on the device** above for details.

We strongly recommend that the app should be loaded with your device connected to the Internet via Wi-Fi and to the power supply unit!

Part two: Restoration of previously purchased charts.

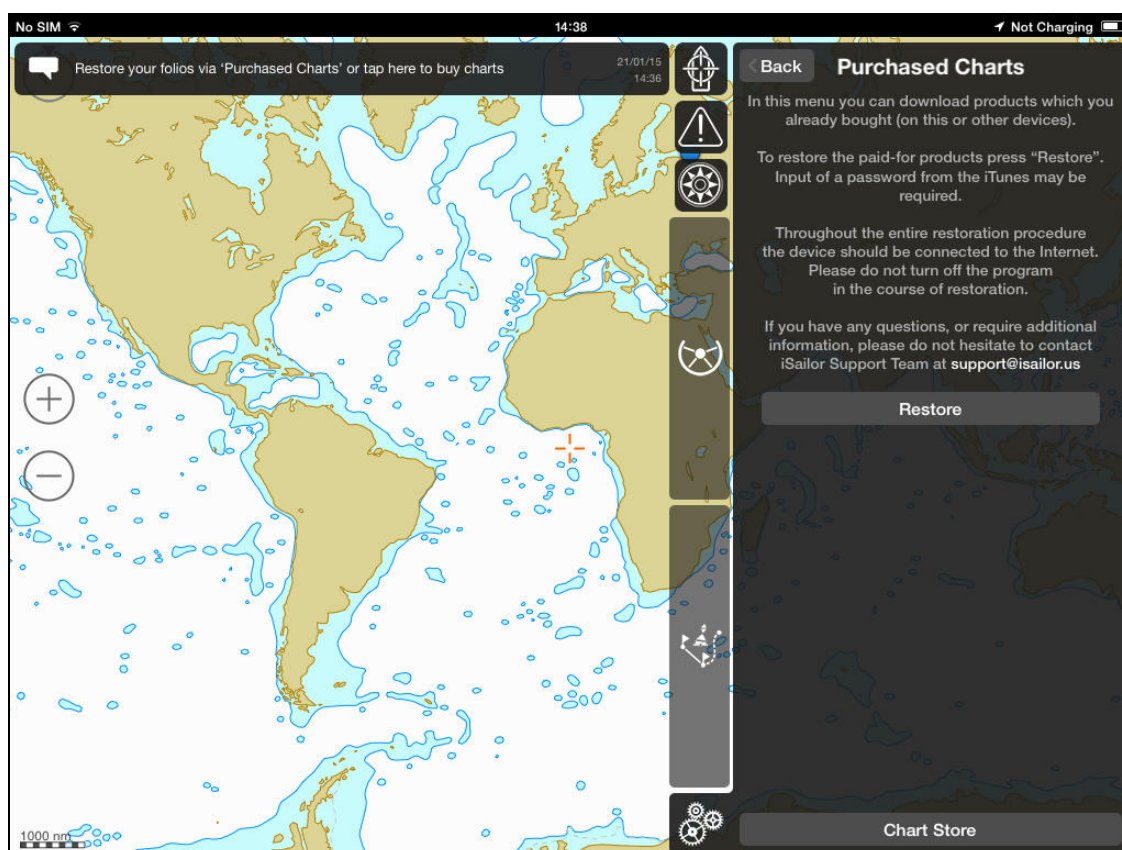
You can restore charts for the Transas iSailor via the “**Settings**” / “**Purchased Charts**” menu item in-app. Please check the “Restrictions” and “In-App Purchases” settings on your device:



Go to “**General**” settings of your device and check that “**In-App Purchases**” set as “**ON**” and “**Restrictions**” setting as “**Disabled**”.

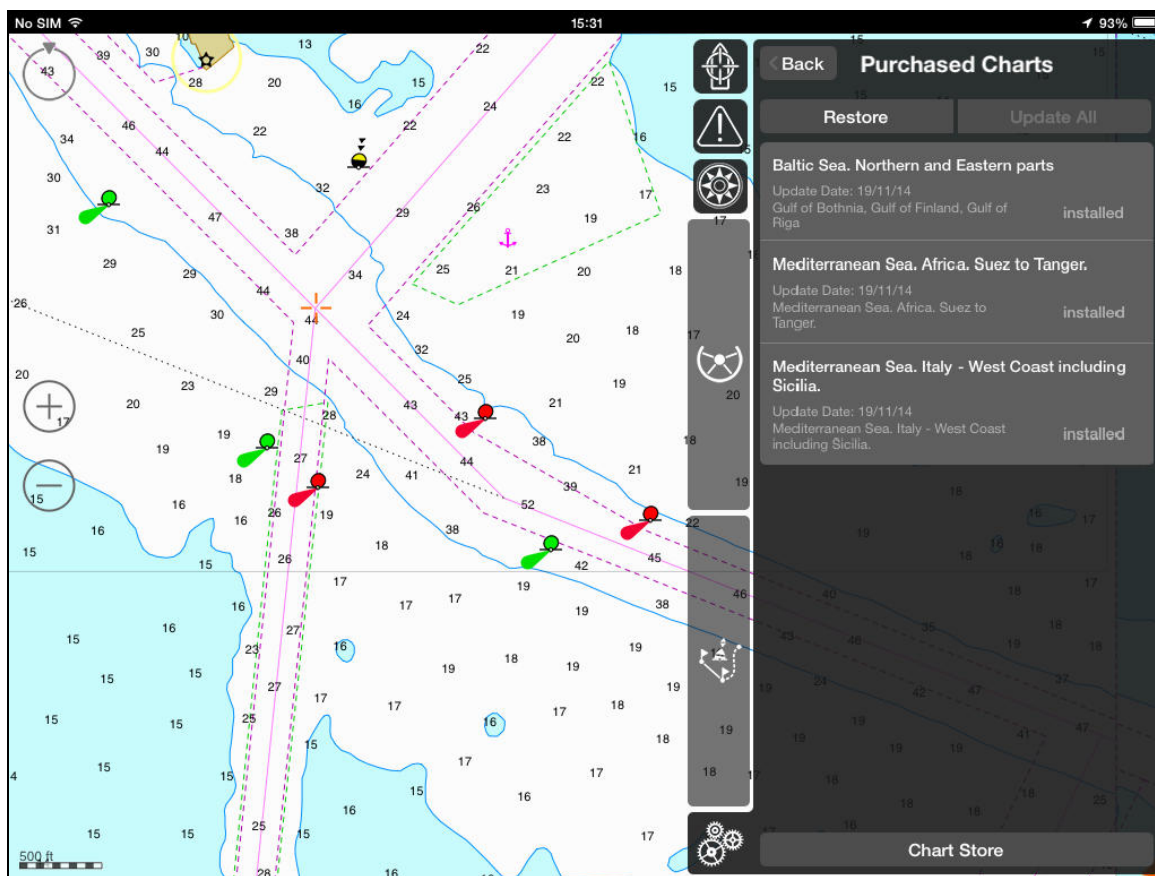
Follow the “**Restore**” procedure:

- Run the “**iSailor**”;
- Go to the “**Settings**” / “**Purchased Charts**” menu item;
- Tap the “**Restore**” button:



Please don't close the application until the Restore process is completed.

We strongly recommend that the data should be restored (downloaded) with your device connected to the Internet via Wi-Fi and to the power supply unit.



You will see following statuses in a few minutes:

- **Waiting;**
- Folio **Loading;**
- Folio **Installing;**
- Folio **Installed.**

Check that all the previously purchased folio will be available in the "**Purchased Charts**" section. As soon as the folio status changes to "**Installed**", the charts are successfully installed on the device.

Usually the installation takes a few minutes (**depends on the purchased folios quantity**), but sometimes the process is interrupted by network failures or exit from the program, Apple Server cannot respond at the moment etc. Try the "**Restore**" procedure again in these cases.

All the charts and Transas iSailor paid options purchased earlier are restored simultaneously.

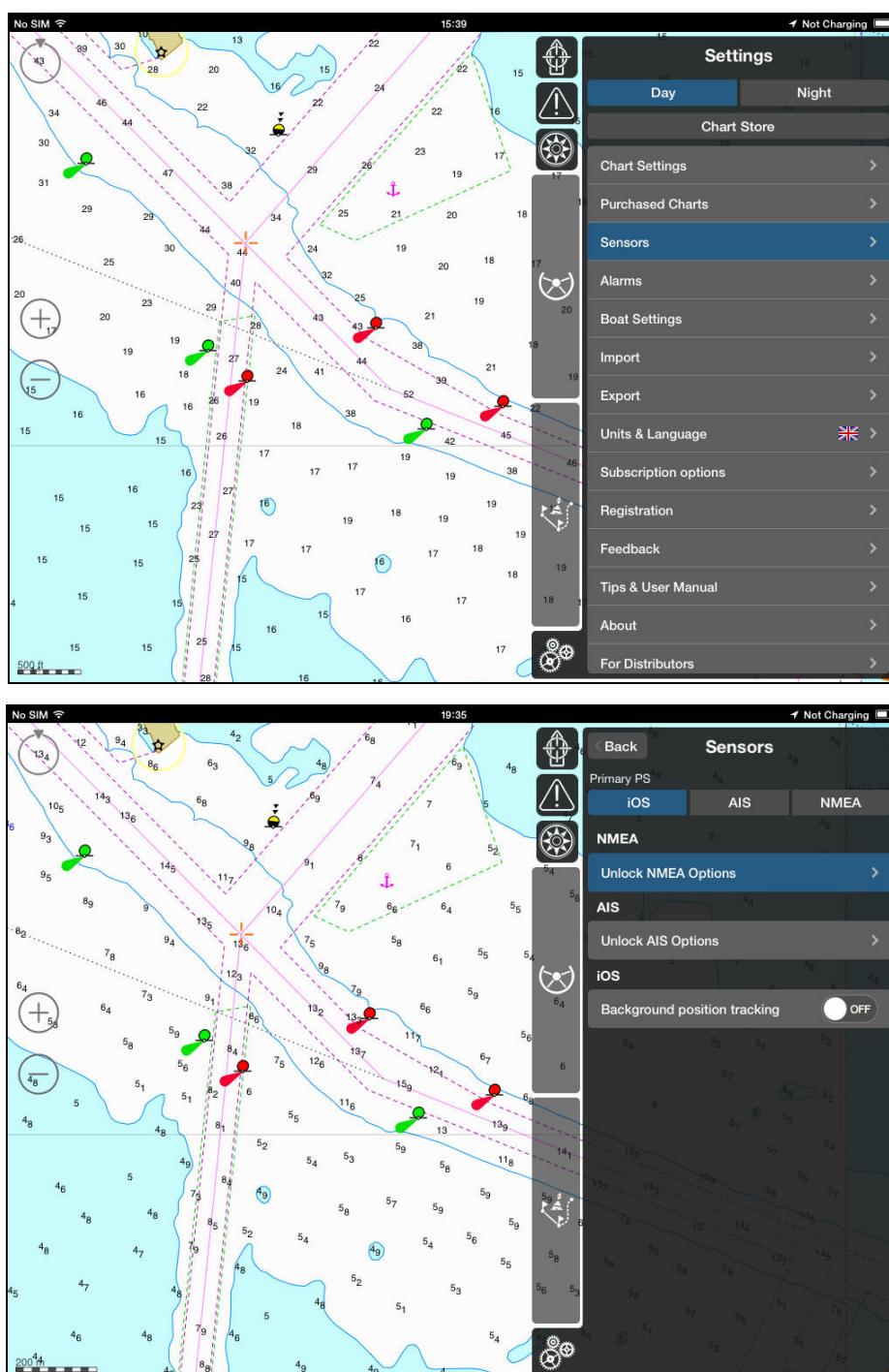


5. HOW TO PURCHASE AND RESTORE ADDITIONAL OPTIONS.

5.1. IMPORTANT GENERAL INFORMATION

You can purchase additional options for working with external navigational sensors and devices. Once purchased additional options can be restored for free.

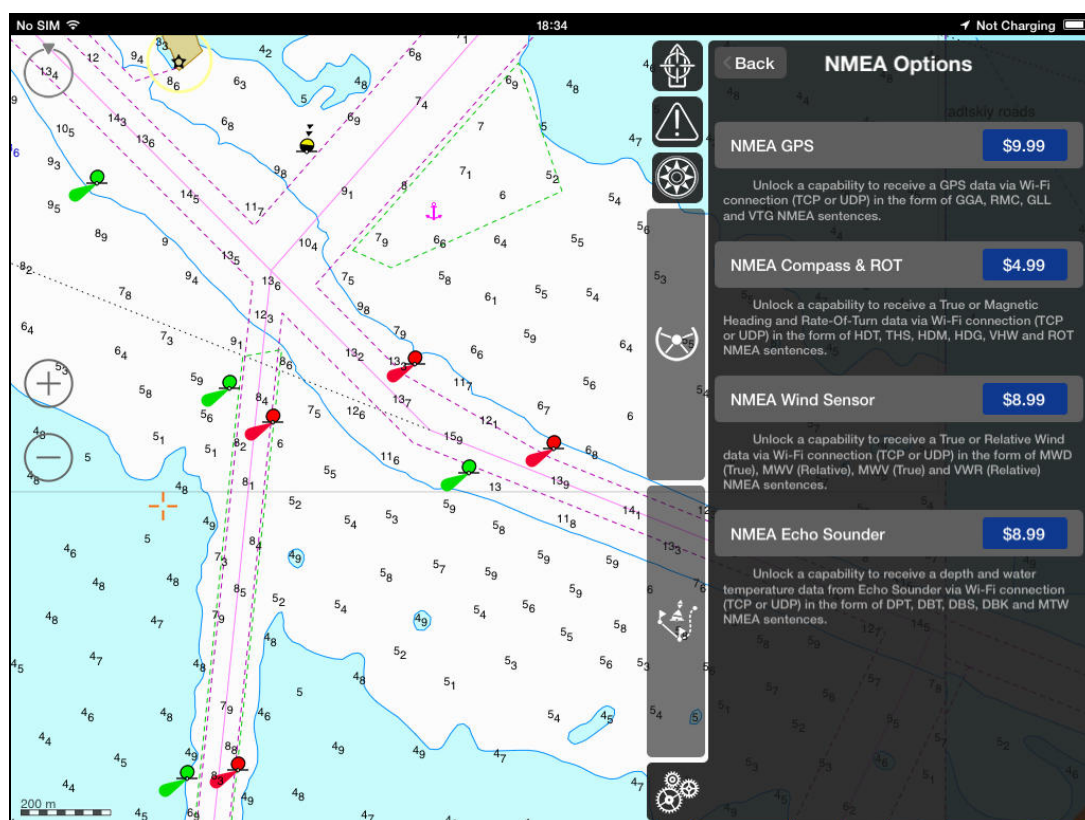
Additional options are located in the menu **“Settings” – “Sensors”**.





Available “NMEA” options:

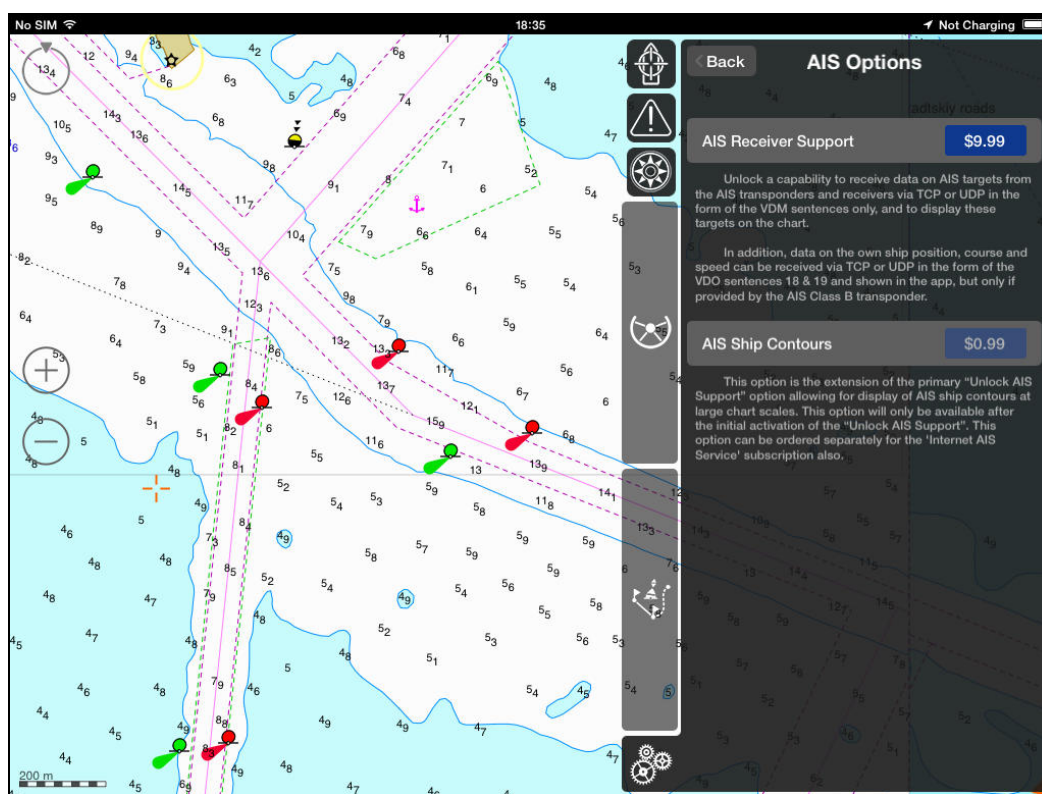
- **NMEA GPS**
- **NMEA Compass & ROT**
- **NMEA Wind Sensor**
- **NMEA Echo Sounder**





Available “AIS” options:

- AIS Receiver Support
- AIS Ship Contours



More detailed description of “AIS Receiver Support” option is available in **Chapter 14, Section 14.1. “Using AIS in iSailor”** of this manual. Information about “AIS Ship Contour” is available in **Chapter 13, Section 13.1. “Additional information about the “Internet AIS Service” subscription option”** of this manual.



5.2. HOW TO RESTORE PREVIOUSLY PURCHASED ADDITIONAL OPTIONS.

All the charts and Transas iSailor paid options purchased earlier are restored simultaneously.
The restore procedure is described in the Chapter 6 of this manual.

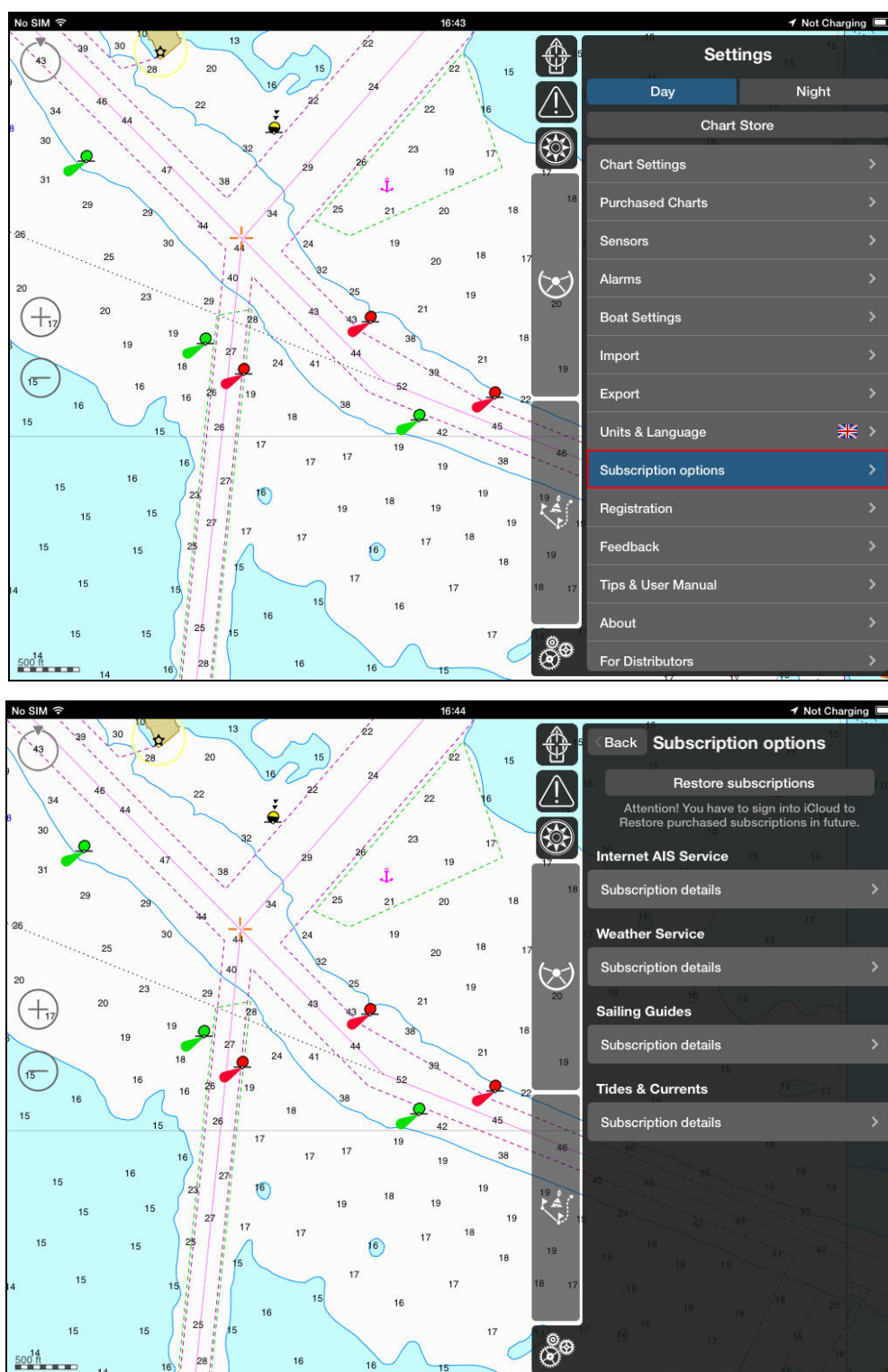
6. HOW TO PURCHASE AND RESTORE SUBSCRIPTION OPTIONS.

6.1. IMPORTANT GENERAL INFORMATION

The subscription options are only available for the devices with **IOS 7.x.x** and are not available for the devices operating **IOS 6.x.x**. Please, upgrade your iOS on Apple device to be able to use the subscription options.

You can purchase subscription options for iSailor only via menu the “**Subscription options**” in Settings menu. Subscription options are located in the menu “**Settings**” – “**Subscription options**”.

Procedure of purchases for all subscriptions is identical.



The following subscriptions are available:

- **Internet AIS Service** (1 year subscription);
- **Weather Service** (1 month subscription & 1 year subscription);
- **Sailing Guides** (1 year subscription for each region);
- **Tide & Currents** (1 year subscription).



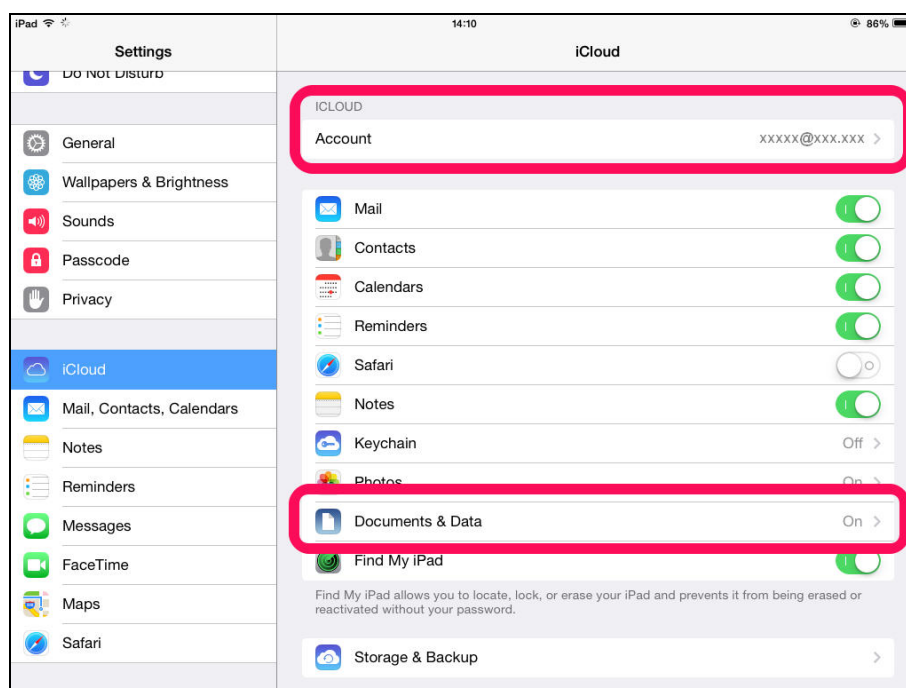
We strongly recommend that the data should be purchased and downloaded with your device connected to the Internet via Wi-Fi and connected to the power supply unit.

For automatic saving of data purchased in the Transas iSailor application we strongly recommend to use the Apple iCloud service (connection to Apple iCloud service is required before beginning purchases procedure).

Always use the same Apple iCloud login account because it is only in this case that you can use the free **"Restore subscriptions"** procedure for free activation on device of all the previously purchased subscriptions in future.

The subscription options are only available for the devices with **IOS 7.x.x** and are not available for the devices operating **IOS 6.x.x**. Please, upgrade your iOS on Apple device to be able to use the subscription options.

Attention!!! Before purchasing any of subscription option, please, make sure that the following IOS settings are active.



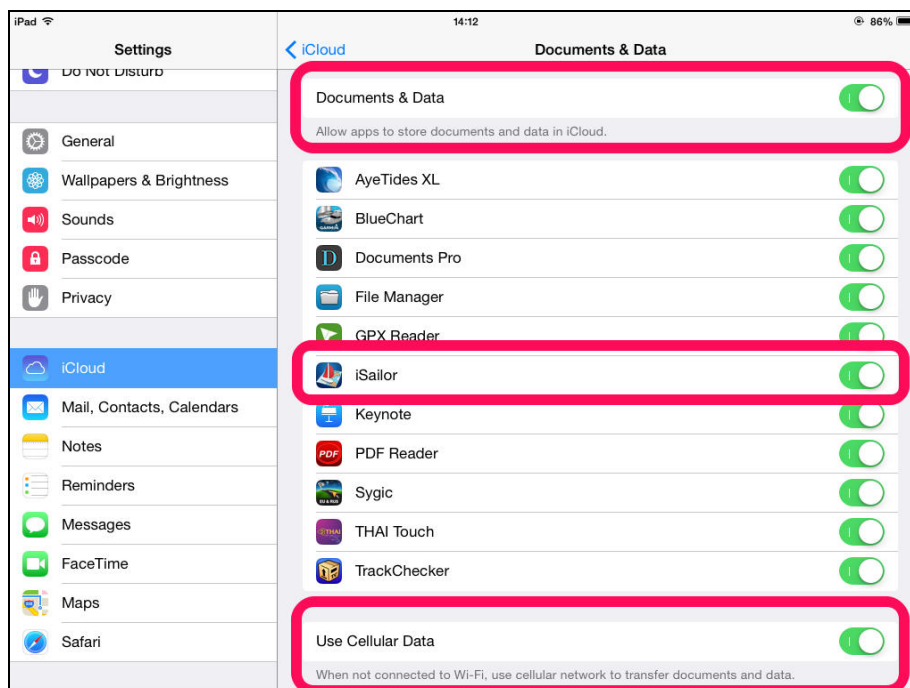
You have successfully logged in to your **iCloud** account.

- As shown on the example above: **ICLOUD / Account / xxxxx@xxx.xxx**

iCloud data and document synchronization is on:

- As shown on the example above: **"Documents & Data" = On**

In the **"Documents & Data"** menu:



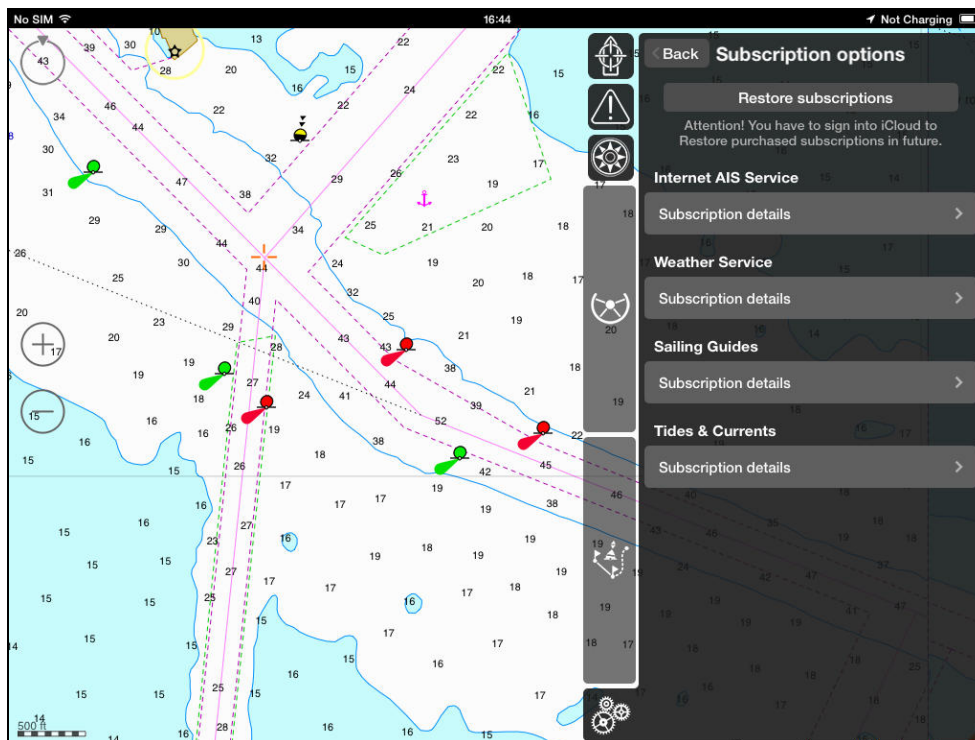
- **iSailor** data and document synchronization is on: “**iSailor**” = **ON**
- If the iSailor subscription options will be purchased via 3G, the “**Use Cellular Data**” setting must be **ON** also.

Attention! All the described above is needed only for synchronizing receipts on the subscription options purchased (“**Internet AIS Service**”, “**Weather Service**”, “**Sailing Guides**”, “**Tides & Currents**”) with your personal iCloud storage. If the synchronization is off, **you will not be able to restore the subscription options** for your current device or any other. These are Apple’s subscription options requirements.

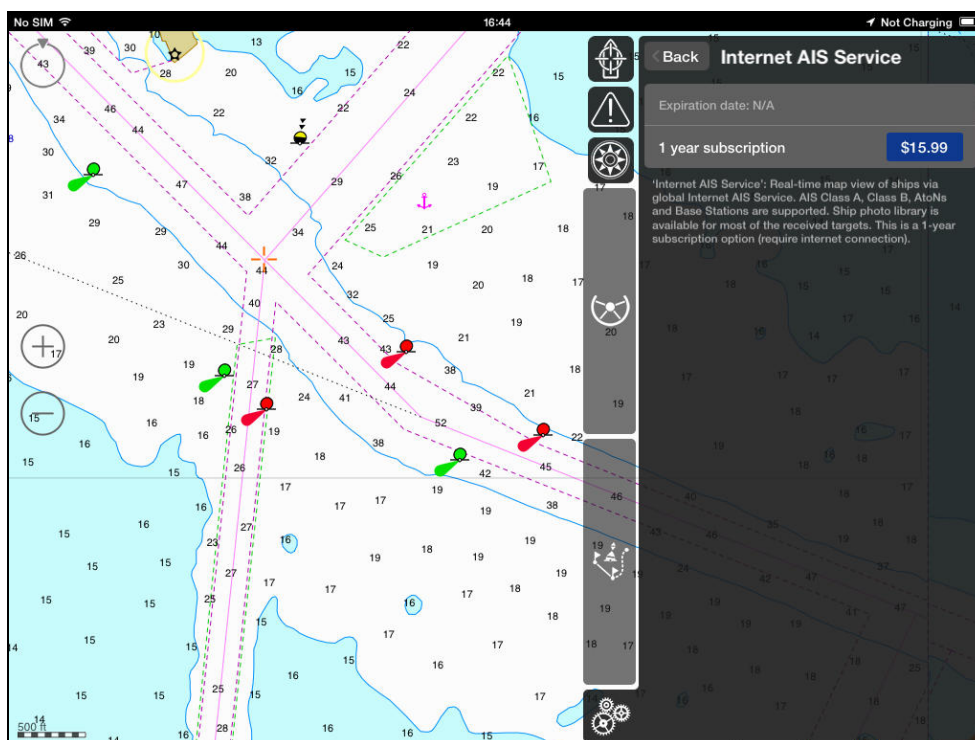


6.2. HOW TO PURCHASE SUBSCRIPTION PROCEDURE.

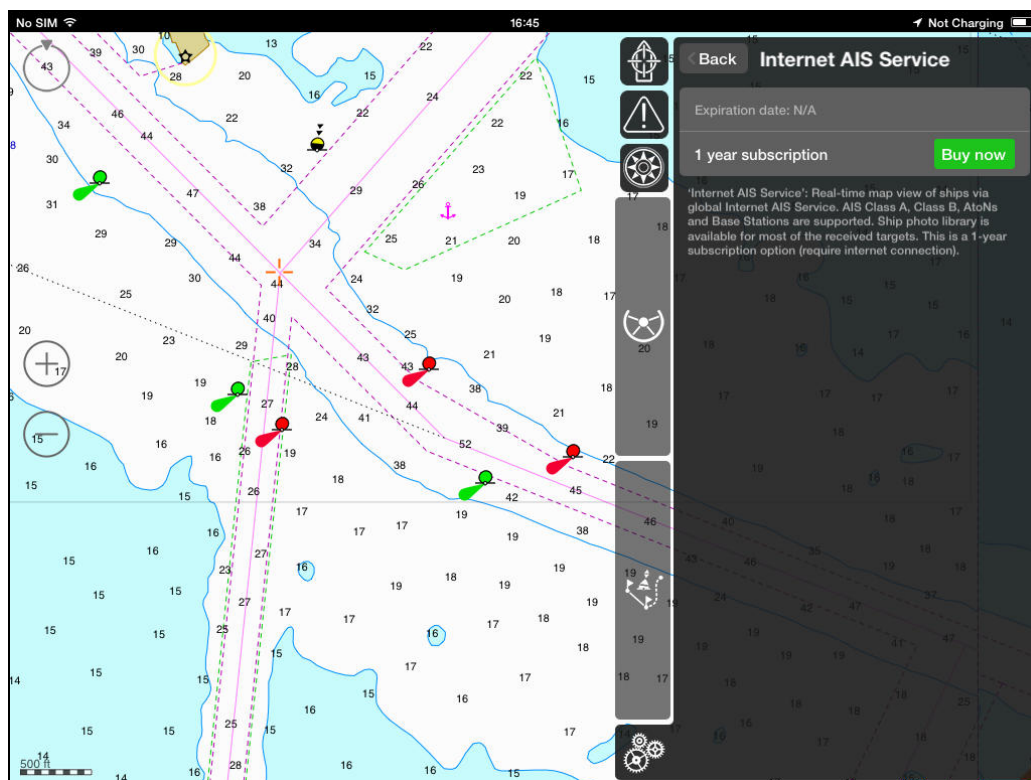
Procedure of purchases for all subscriptions is identical.



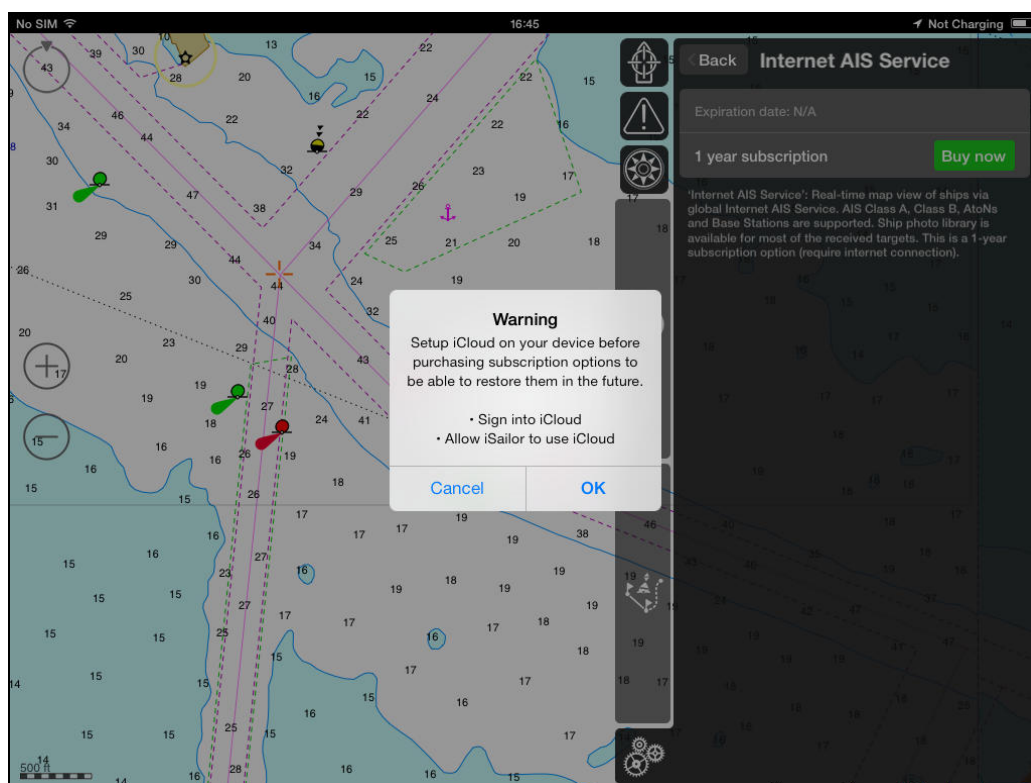
As an example, we will consider “Internet AIS Service” subscription.

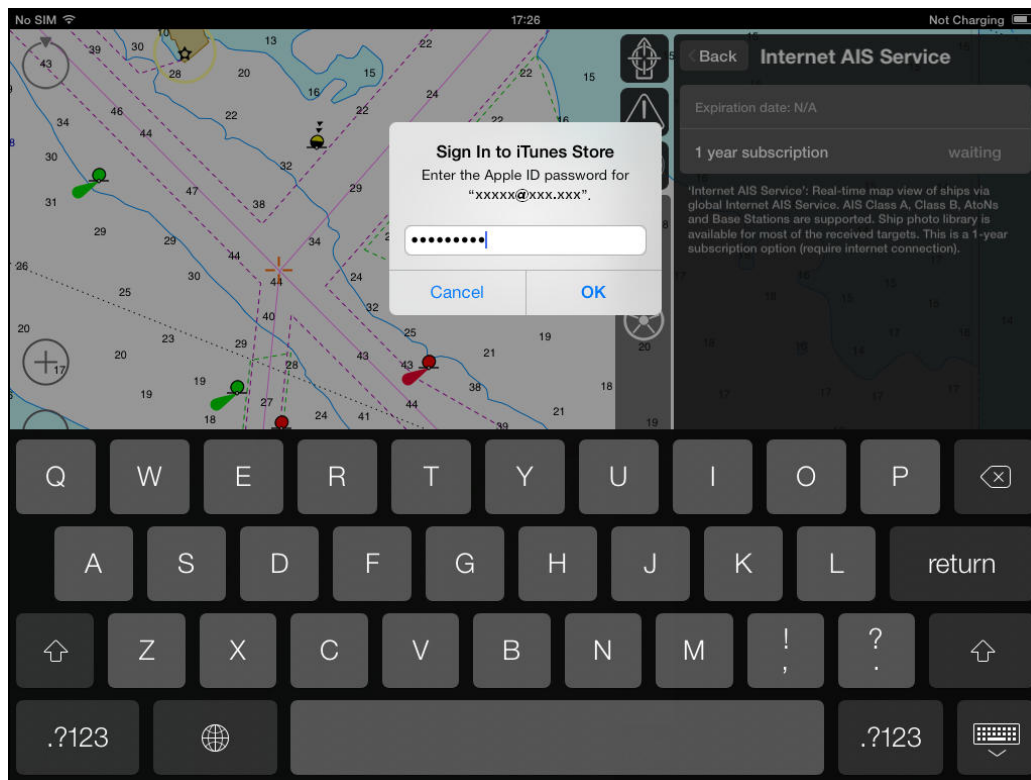


Press the button indicating the price of the subscription option you would like to purchase. The button's caption will change to “Buy Now”.

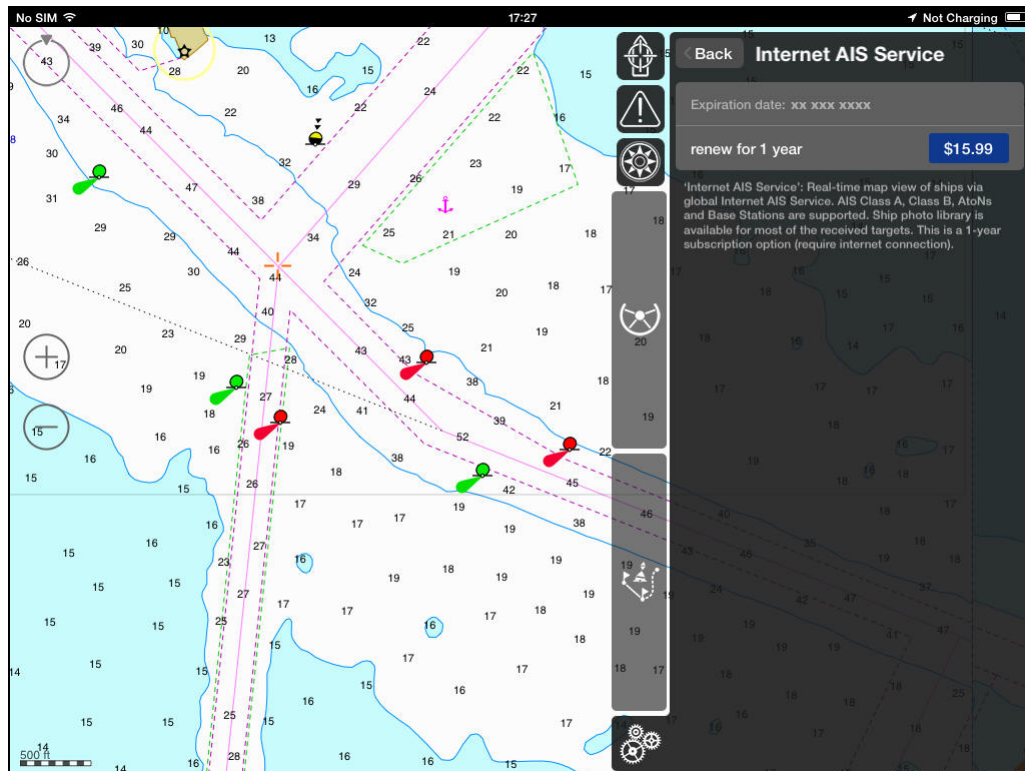


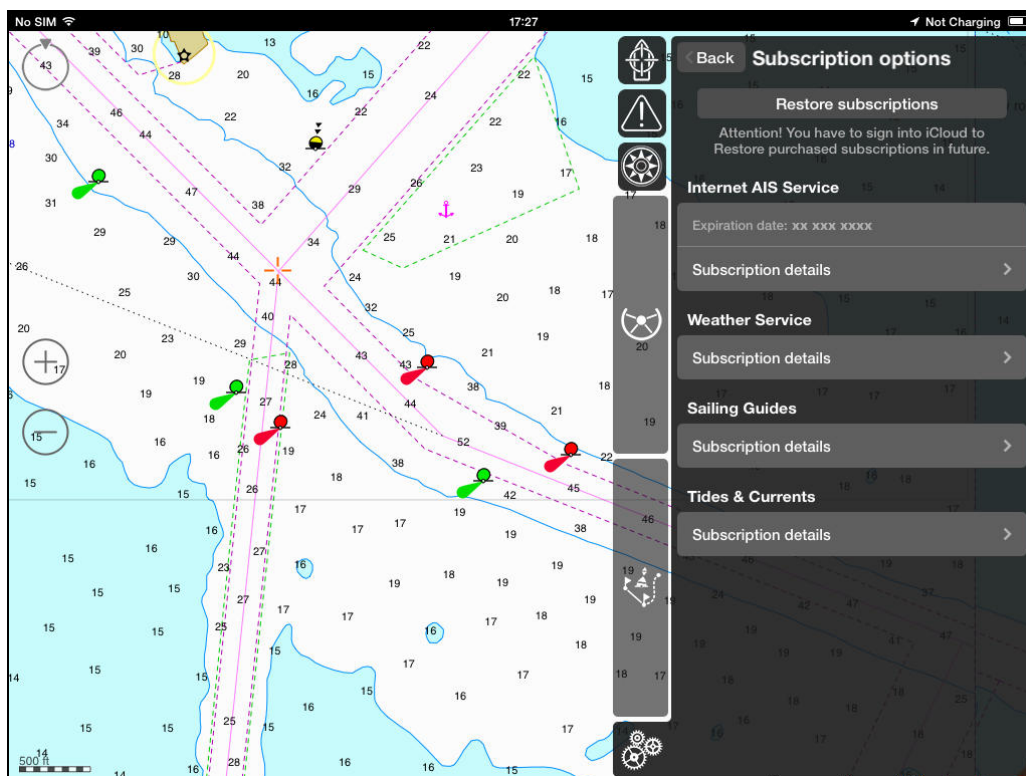
To confirm your purchase press the **“Buy now”** button; a standard Apple ID password dialog will appear:





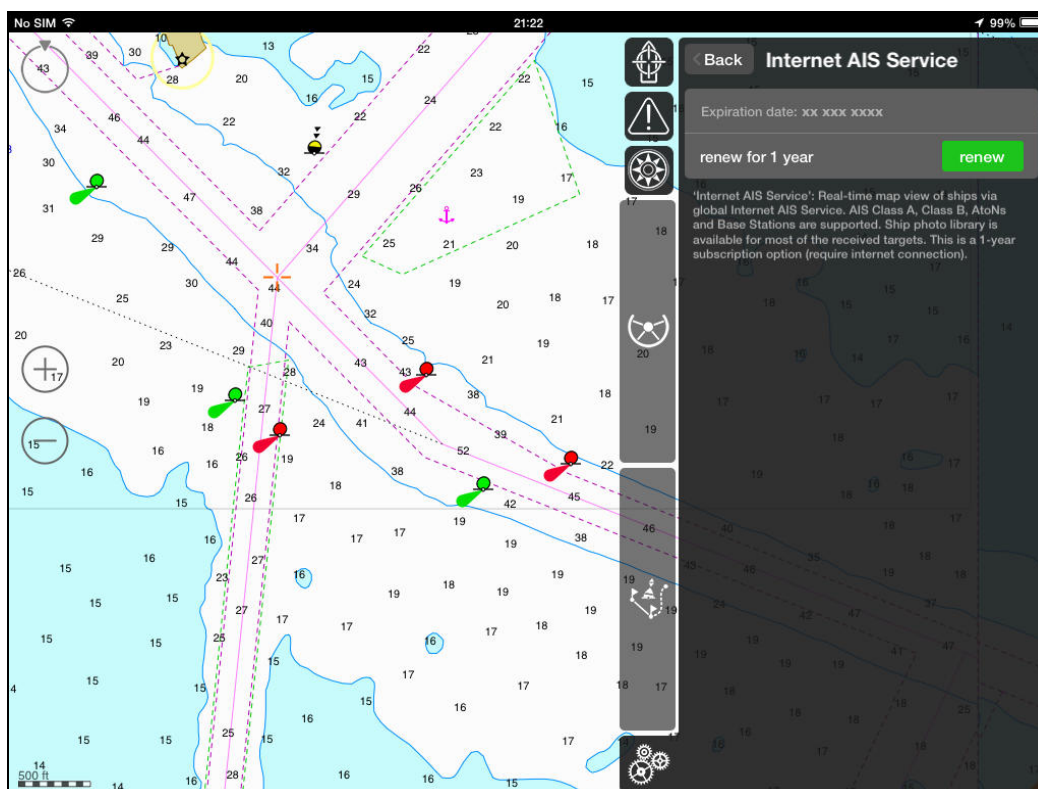
After you have logged in, confirmed transaction and purchased the option, you will see the status of the subscription and its expiration date.





6.3. HOW TO RENEW SUBSCRIPTION PROCEDURE.

The subscription renewal procedure is identical to initial purchase; the only difference is the button caption, which will show **“Renew”** instead of **“Buy Now”**.

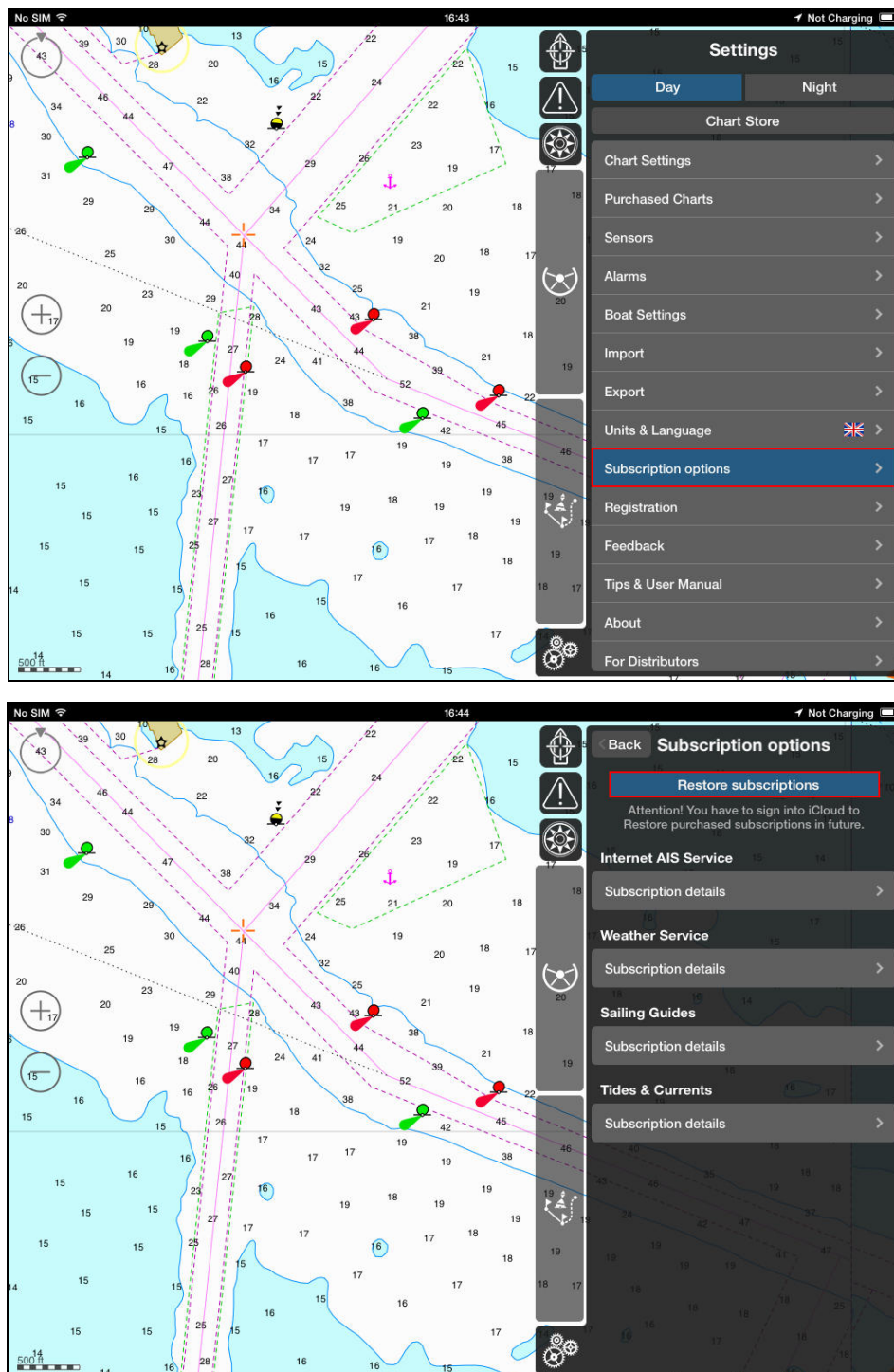




6.4. HOW TO RESTORE SUBSCRIPTION PROCEDURE.

The Restore subscription procedure can be performed on all your devices (under your **Apple ID** and **iCloud accounts**), if subscription options were purchased according to the procedure described above, in this section "**How to purchase and restore subscription option**", and your original receipt for purchased subscription options was synchronized with your **iCloud**.

You can restore subscription options on page located in the menu "**Settings**" – "**Subscription options**".

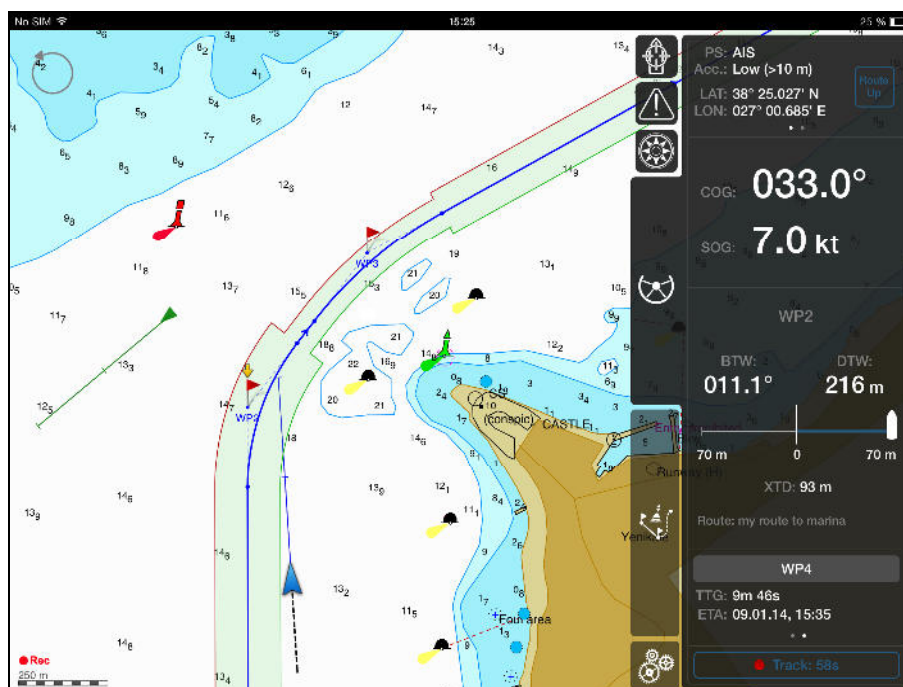



Tap the "**Restore subscriptions**" button to restore your purchased subscription(s) from the iCloud. Internet connection is required!

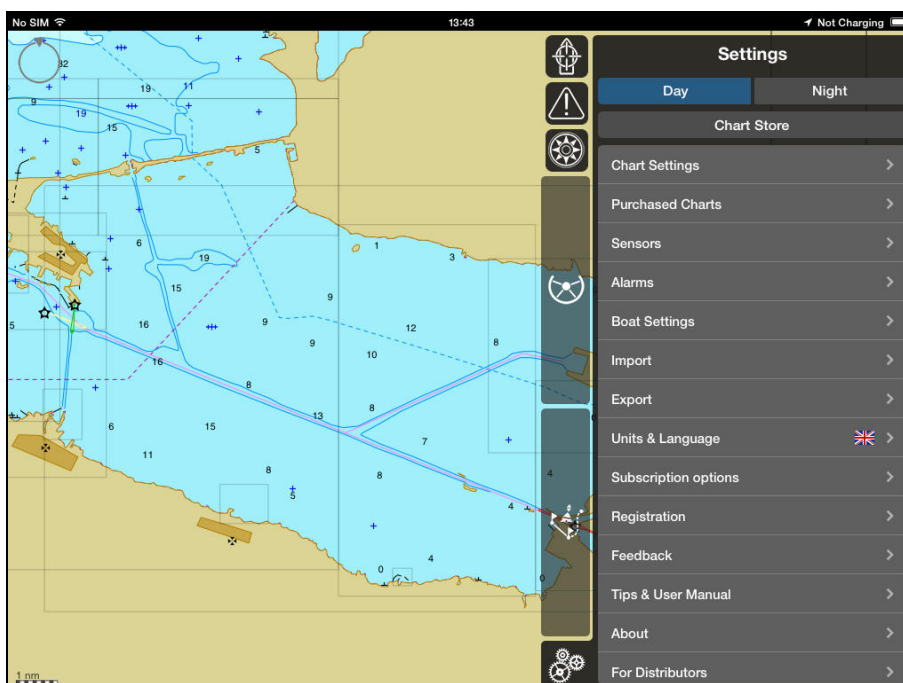


7. “SETTINGS” MENU AND USER SETTINGS

Run the “iSailor” app.



Tap  button to open “Settings” tab:



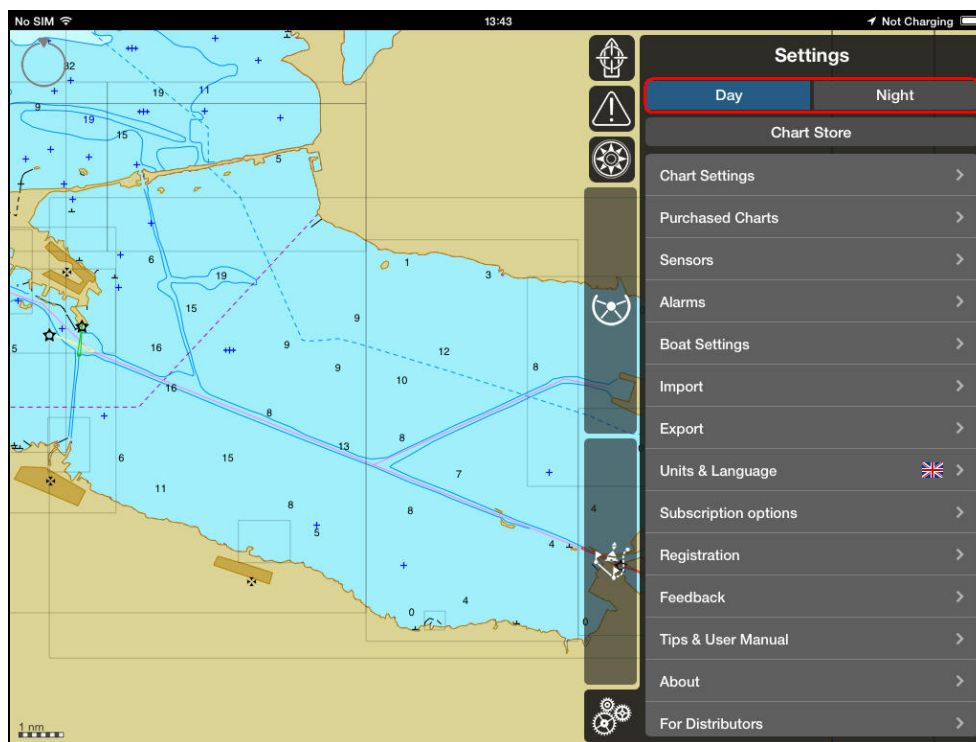


The **Settings** menu is needed to adjust user settings, purchase, restore charts and for other functions. This chapter contains information for user settings and links to other chapters of that document, where some functions already described in details:

The **Settings** layout consists of the following menu items:

- Chart Settings;
- Purchased Charts;
- Sensors;
- Alarms;
- Boat Settings;
- Import;
- Export;
- Units & Language;
- Subscription options;
- Registration;
- Feedback;
- Tips & User Manual;
- About;
- For Distributors.

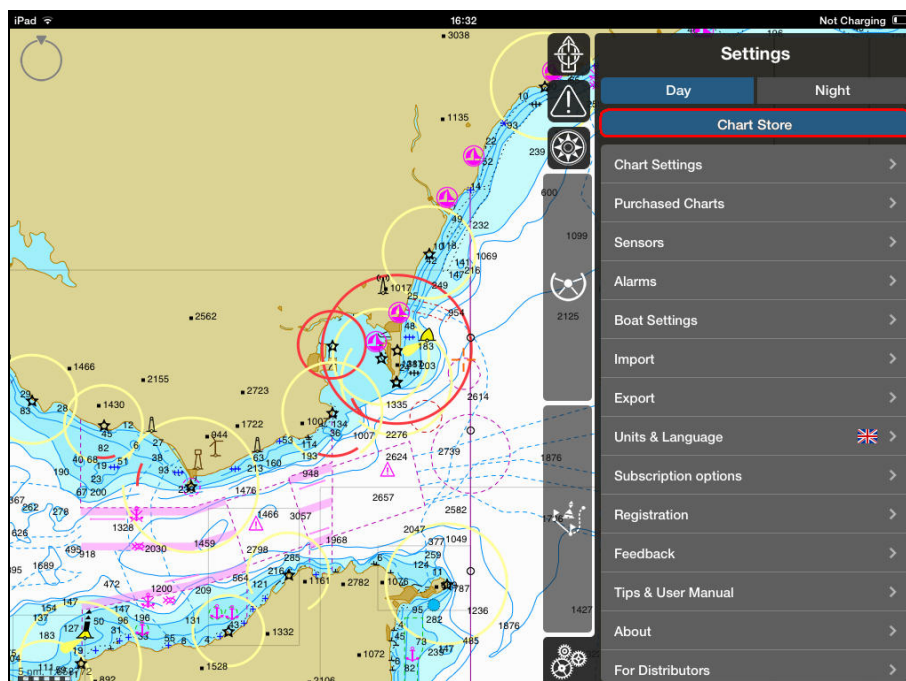
7.1. "DAY" AND "NIGHT" BUTTONS



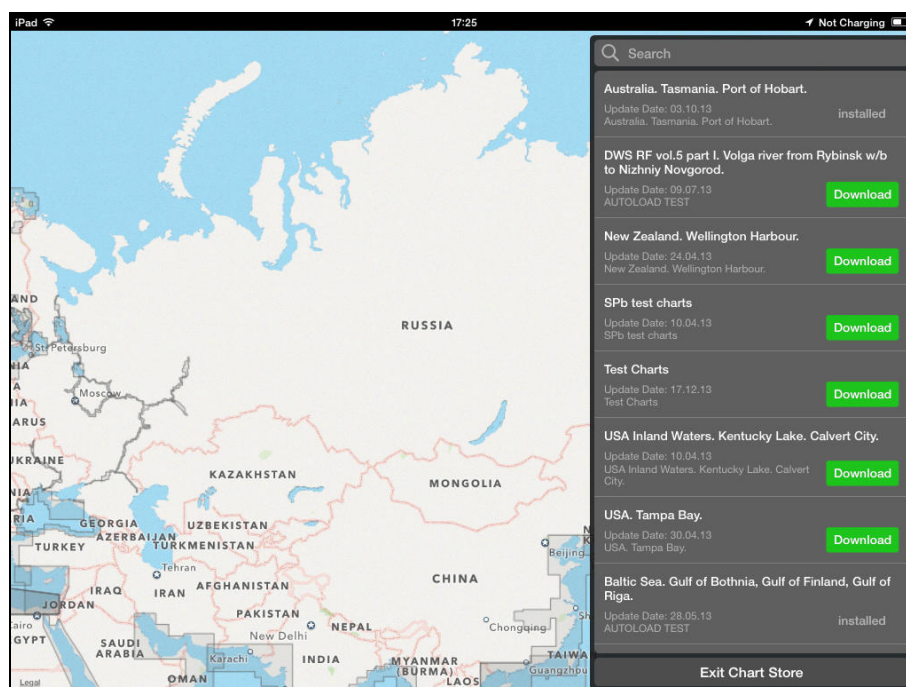
Day \ Night buttons – select **Daylight** or **Night** palette.



7.2. “CHART STORE” BUTTON



In the **Settings** menu, tap the **Chart Store** button.



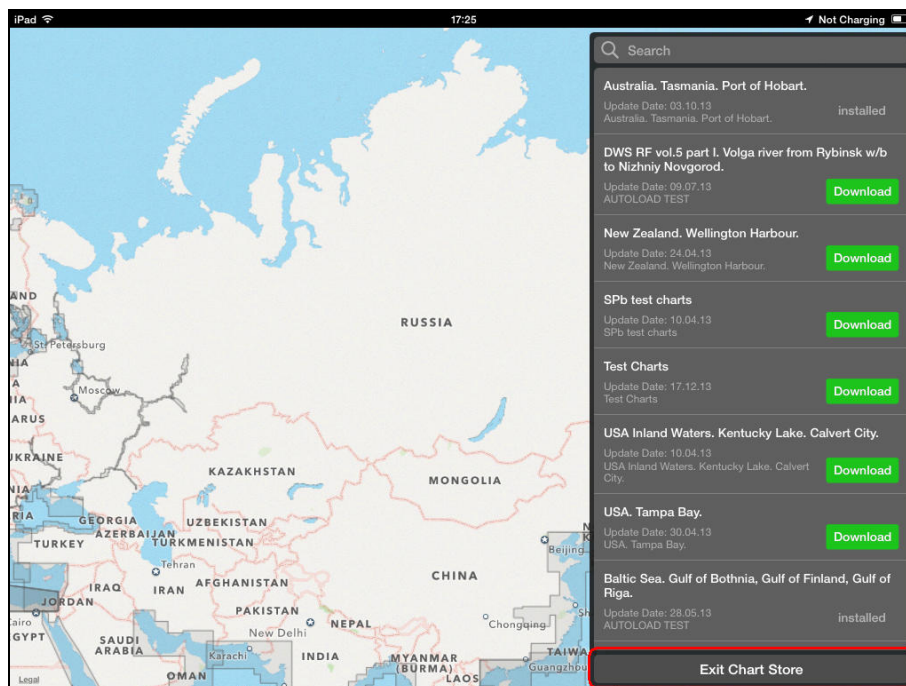
The screen intended for work with the built-in **Chart Store** will appear.

“**Chart Store**” layout is intended for the following actions:

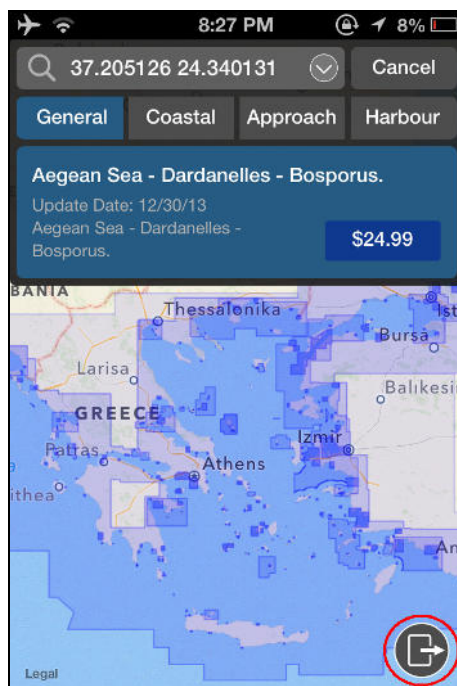
- Simple search of the chart folio;
- Obtaining detailed coverage of the chart folio;
- Obtaining detailed coverage of the charts;
- Purchase of the chart folio.



For search of the necessary chart folio and purchase charts, see above **Chapter 4. “How to purchase and restore charts”**.



To close “**Chart Store**” layout, tap the Exit Chart Store button (**iPad** layout).



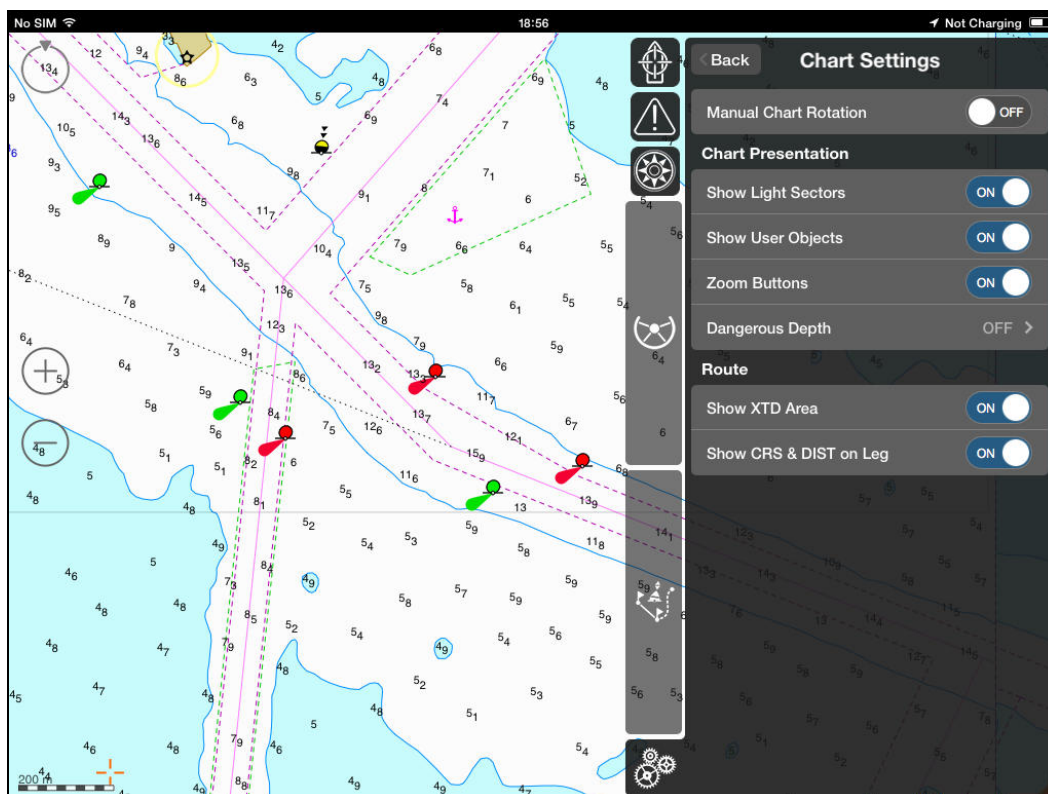
To close “**Chart Store**” layout, tap the Exit Chart Store button (**iPhone** layout).



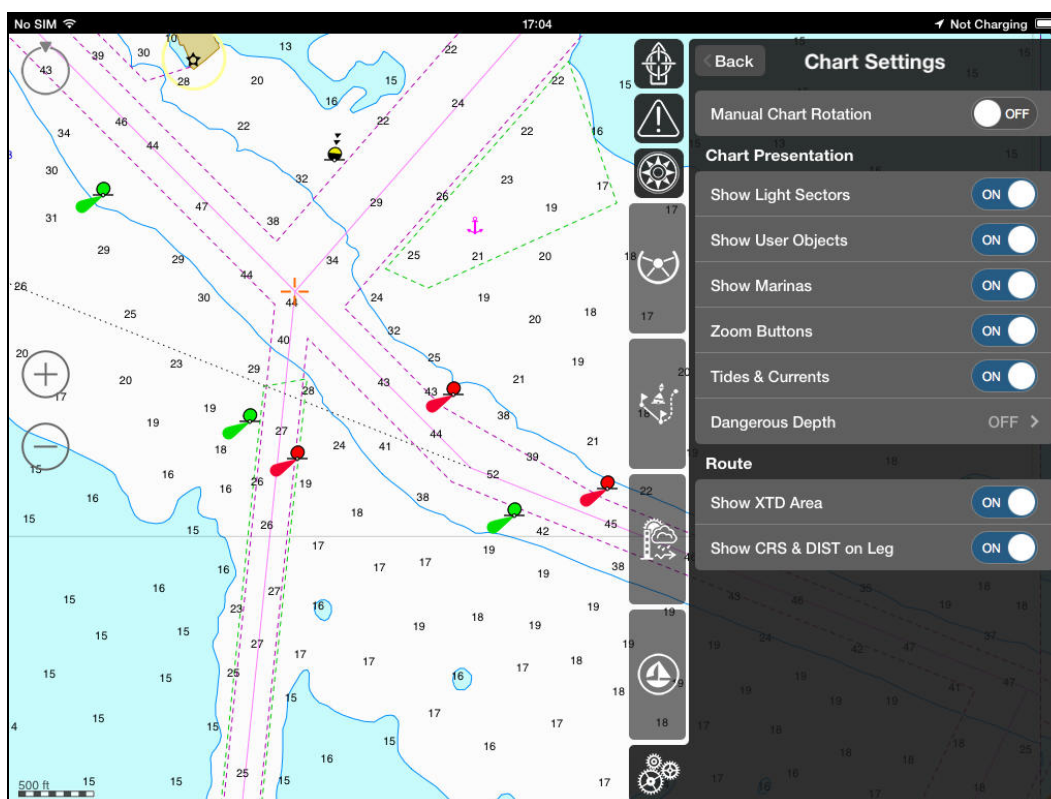
7.3. “CHART SETTINGS” MENU ITEM

In the **Settings** menu, tap on the **Chart Settings** menu item.

Default view:



Full view:





In the **Settings** menu, tap the **Chart Settings** menu item.

The **Chart Settings** menu item is needed for the following actions:

- **Manual chart rotation** button – switch **ON** / **OFF** the possibility to rotate charts manually by fingers.

Please, be noted that charts will be oriented back to the user defined location after a timeout, if chart rotation was performed on the screen with the own ship position!

The “**Chart Presentation**” section:

- **Show Light Sectors** button – switch **ON** / **OFF** the presentation of the Light Sectors for lighthouses and rest lights on the chart layer.
- **Show User Objects** button – switch **ON** / **OFF** the presentation of the plotted “**User Objects**” on chart layer.
- **Show Marinas** button – switch **ON** / **OFF** the presentation of the Sailing Guides points (see **Annex I – “Additional information about the “Sailing Guides” option”** for details below).
- **Zoom Buttons** button – switch **ON** / **OFF** the availability of the **Zoom In** (Plus) and **Zoom Out** (Minus) scale control buttons on the chart layer.
- **Tide & Currents** button – switch **ON** / **OFF** the presentation of the Tidal Reference points and Tidal Currents vectors (see **Annex I – “Additional information about the “Tides & Currents” option”** for details below).
- **Dangerous Depth** – adjust value for presentation of Dangerous Depths in the “**bold**” font. Parameter settings: **OFF** (Disabled), **1.0 – 50.0 meters**, Step: **1 meter**

The “**Route**” section:

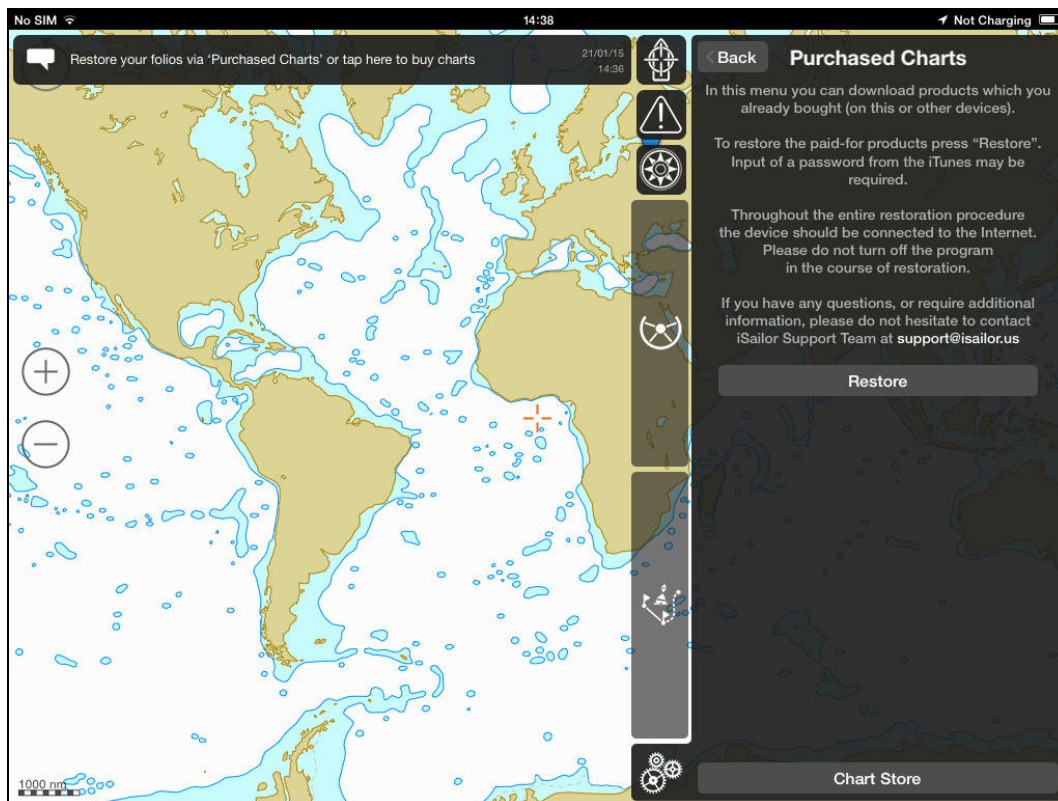
- **Show XTD Area** – switch **ON** / **OFF** the displaying of the route XTD area(s).
- **Show CRS & DIST on Leg** – switch **ON** / **OFF** the showing of course and distance on the route leg(s).



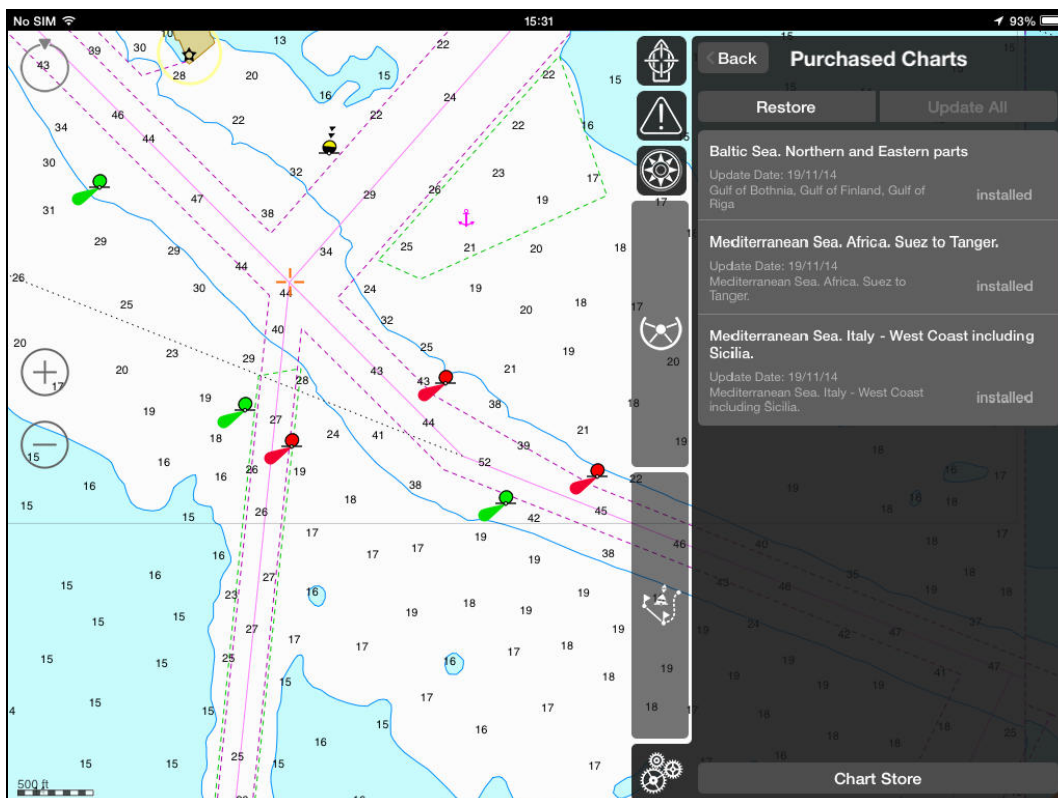
7.4. "PURCHASED CHARTS" MENU ITEM

In the Settings menu, tap on the Purchased Charts menu item.

Default view:



Full view:





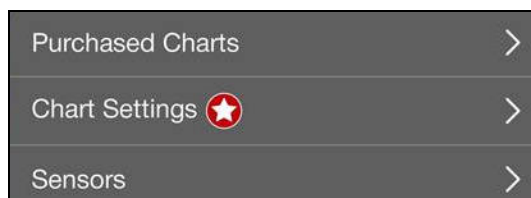
The **Purchased Charts** menu item is needed for the following actions:

- Restore previously purchased charts on the new user device (or when “iSailor” app was totally removed from the device). This procedure is clearly described in **Paragraph 4.5. “How to restore previously purchased charts”**;
- To see purchased and installed charts in the list, as **Chart Store** and purchasing procedure are described in the **Chapter 4. “How to purchase and restore charts”** above;
- Use the **Update All** button to update chart folios;

NOTE: Available chart updates are shown by the following symbol in the iSailor app:



“**Chart Update**” icon.



“**Chart Update**” is available.

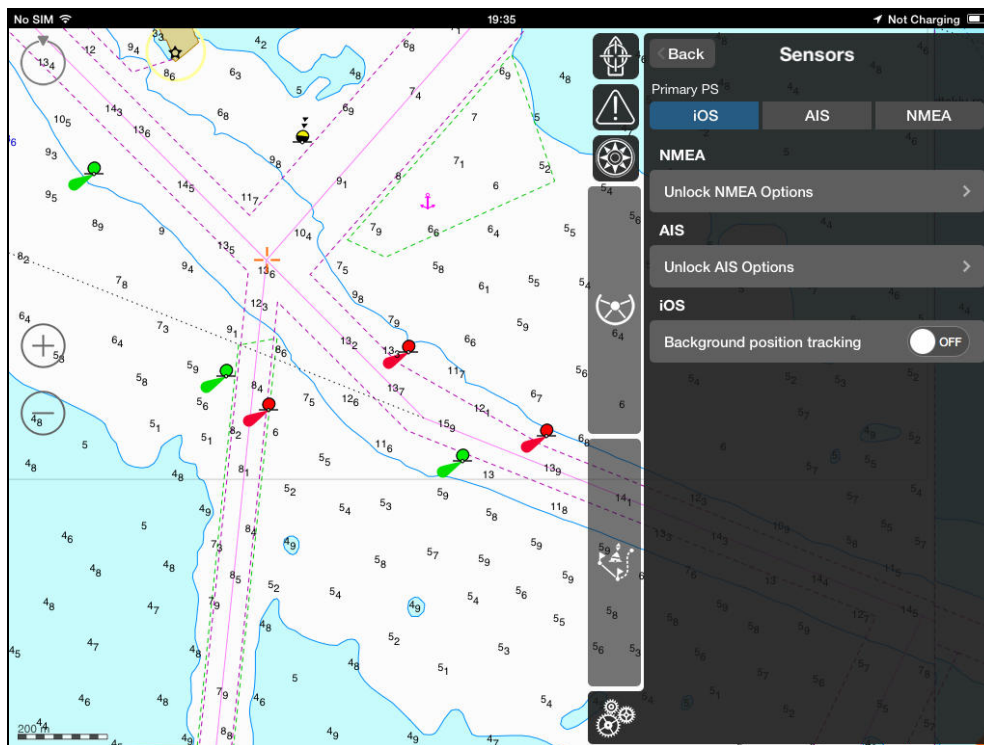
- Use the **Chart Store** button (on the bottom side) to switch over into “**Chart Store**” layout, if necessary.



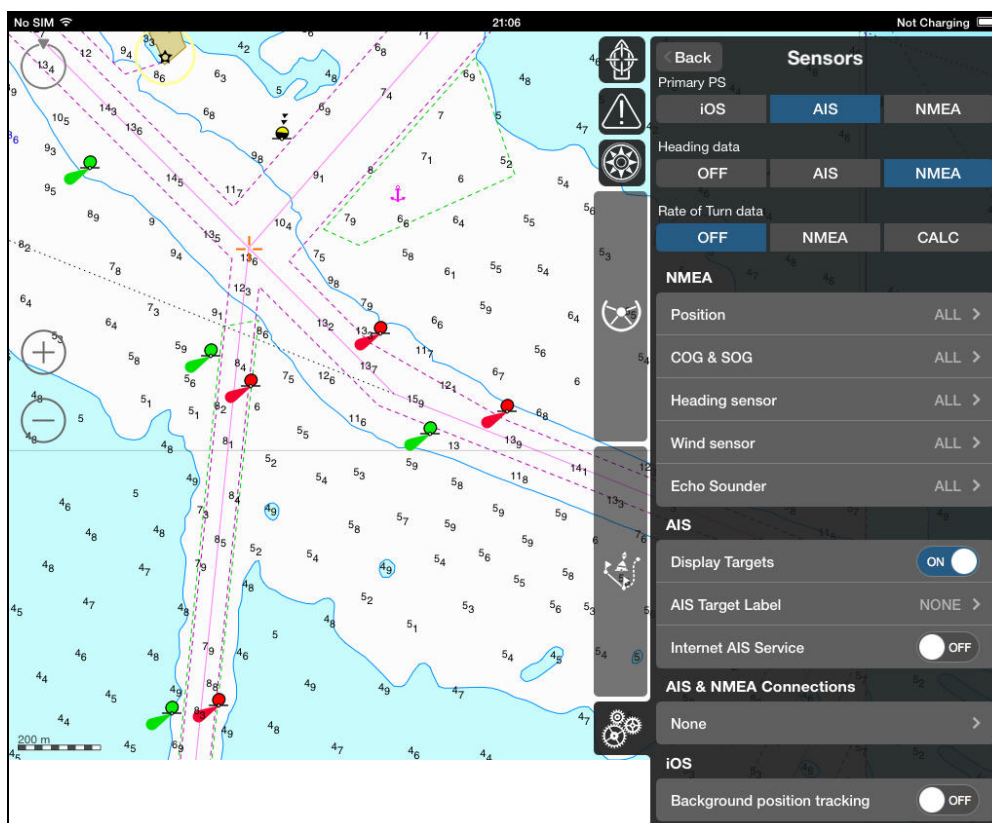
7.5. “SENSORS” MENU ITEM

In the Settings menu, tap the Sensors menu item.

Default view:



Full view:





The **Sensors** menu in full mode is consist of the following data:

- **Primary PS** – to select the primary positioning system:

iOS – to use position from Apple Location Service (built-in or external Bluetooth GPS receiver);

AIS – to use position from AIS Class B via Wi-Fi;

NMEA – to use position from 3rd party NMEA devices via Wi-Fi.

- **Heading data** – select source of the Heading data:

OFF – source of Heading is switched off;

AIS – to use Heading from AIS Class B via Wi-Fi;

NMEA – to use Heading from 3rd party NMEA devices via Wi-Fi.

- **Rate of Turn data** – select source of the Rate-of-Turn (ROT) data:

OFF – source of ROT is switched off;

NMEA – to use ROT from 3rd party NMEA devices via Wi-Fi;

CALC – to use calculated Rate-Of-Turn data, calculation is based on the incoming Heading data and presents the average value by 10 latest heading readings.

- **NMEA** – section is needed for filtering purposes of the incoming NMEA data:

Position – select processing of the incoming NMEA messages from the **Primary PS: NMEA** sensor. Setting **ALL** means that all supported NMEA sentences will be processed. Alternatively, select a specified NMEA message for the positioning purposes: **GGA**, **GLL** or **RMC**.

COG & SOG – select processing of the incoming NMEA messages from the **Primary PS: NMEA** sensor. Setting **ALL** means that all supported NMEA sentences will be processed. Alternatively, select a specified NMEA message for the Course and Speed-Over-Ground data: **VTG** or **RMC**.

Heading sensor – select processing of the incoming NMEA messages from the **Heading data: NMEA** sensor. Setting **ALL** means that all supported NMEA sentences will be processed. Alternatively, select a specified NMEA message for Heading data: **HDT** (Recommended), **THS** (Recommended), **VHW (True)**, **VHW (Magnetic)**, **HDM (Magnetic)**, **HDG (True)** or **HDG (Magnetic)**.

Wind sensor – select processing of the incoming NMEA messages from the **Wind** sensor. Setting **ALL** means that all supported NMEA sentences will be processed. Alternatively, select a specified NMEA message for Wind data: **VWR**, **MWD**, **MWV (relative)**, **MWV (true)**.

Echo Sounder – select processing of the incoming NMEA messages from the **Echo Sounder** sensor. Setting **ALL** means that all supported NMEA sentences will be processed. Alternatively, select a specified NMEA message for Echo Sounder data: **DPT**, **DBT**, **DBS**, **DBK**.

- **AIS** – section is needed for operation with AIS targets:

Display Targets – switch **ON** / **OFF** the displaying of AIS targets in the Chart area;

AIS Targets label – setup presentation of the AIS target labels in the Chart area. Available settings: **NONE** (no labels), **NAME** (AIS Ship name will be presented near to the target symbol), **CALL** (AIS Ship Call Sign will be presented near to the target symbol) or **MMSI** number (AIS Ship's MMSI number will be presented near to the target symbol);



Internet AIS Service – switch **ON / OFF** the displaying of Internet AIS targets received from Internet AIS Targets source. See **Annex I – “Additional information about the “Internet AIS Service” subscription option”** for details below.

- **AIS and NMEA Connections** – section is needed for adjustments of connection settings via Wi-Fi to external AIS Class B Transponder, AIS Receiver or 3rd Party NMEA sensors;

None / Name of current connection – to add and select source of data for Wi-Fi connection. This procedure is described in the **Chapter 14. “AIS Class B transponder or receiver”**;

- **iOS** – section has only one setting for operation with the internal built-in GPS or external Bluetooth GPS via Apple iOS Location Service;

Background position tracking - switch **ON / OFF** the position tracking in the background mode. It's only applicable for the (Primary PS = iOS).

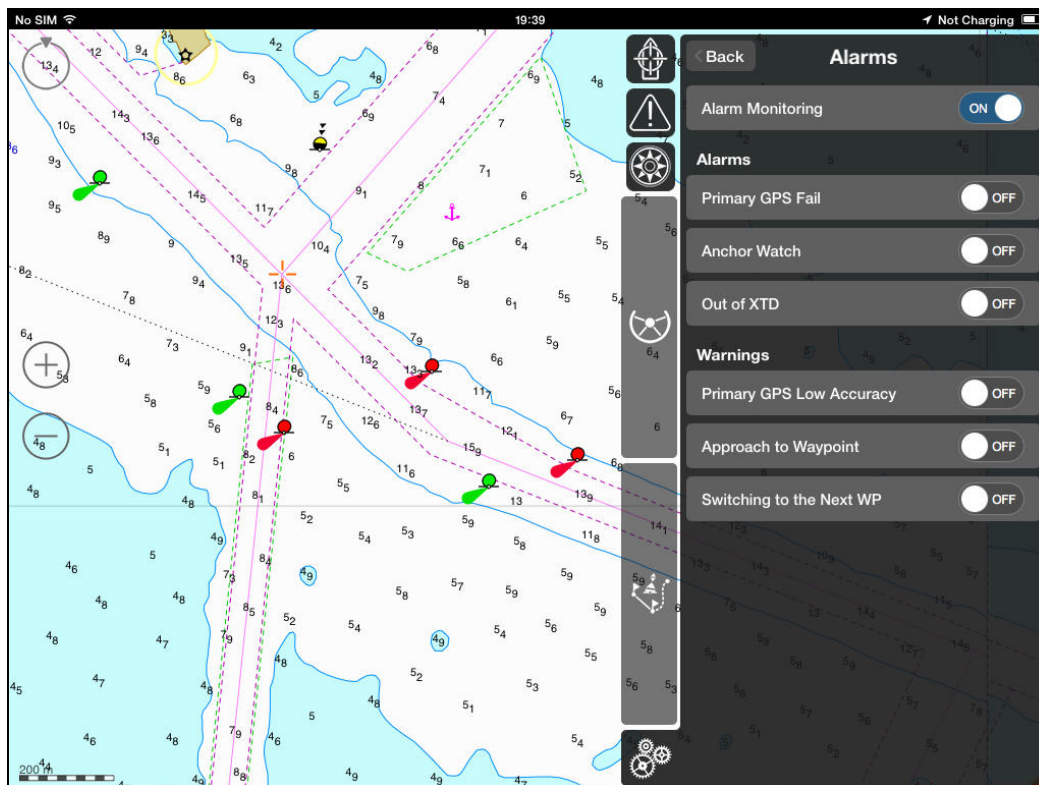
Please, be noted that operation in this mode may discharge your device battery much faster!



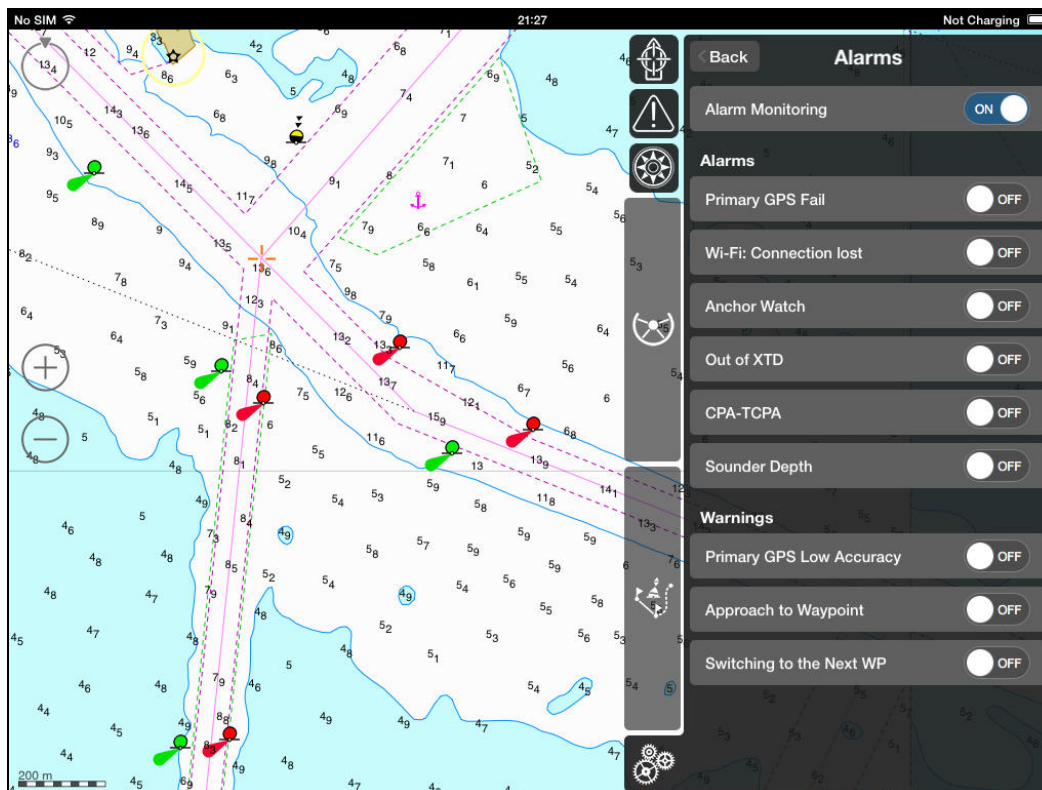
7.6. “ALARMS” MENU ITEM

In the Settings menu, tap on the Alarms menu item.

Default view:



Full view:





Alarm – the constant an audio and visual signal in red colour, announcing a condition requiring immediate attention or operator action.

Warning – the time limited signal in yellow colour, announcing a condition requiring non-immediate attention for precautionary reasons.

The **Alarms** menu item is intended for the following actions:

- **Alarm Monitoring** button – switch **ON** / **OFF** to monitor of alarms and warnings. When this button is switched on, the next list of alarms and warnings appears:

- **Primary GPS Fail alarm** – switch **ON** / **OFF** the alarm activation. Alarm conditions:

Primary GPS Fail	Alarm Conditions
iOS	No position from the iOS Location Service in period of 1 min and accuracy better than 20 meters
AIS	No Position reporting sentences (VDO18,19) from AIS Class B per the 210 seconds . Note: The Class B "CS" AIS shall transmit position reports (Message 18) in reporting intervals of · 30 s if SOG > 2 kn; · 3 min if SOG ≤ 2 kn
NMEA	No valid position report (GGA, GLL or RMC) from the External NMEA GPS sensor (device) in period of 15 seconds Or invalid status of data from External NMEA sensor (device)

- **Wi-Fi: Connection lost alarm** – switch **ON** / **OFF** the alarm activation. Alarm conditions:

AIS	Alarm Conditions
Wi-Fi connection	Wi-Fi Connection to External sensor (AIS or 3rd party NMEA devices) is lost, cannot be connected or no any AIS messages per 360 seconds. This alarm is only valid for TCP connections and not applicable for UDP mode.

- **Anchor Watch alarm** – switch **ON** / **OFF** the alarm activation.

Anchor Watch radius setting – to set the radius of the anchor watch circle; Alarm conditions:

Anchor Watch	Alarm Conditions
Preset radius of the anchor watch circle	Ship's Primary PS Reference point gets beyond the user-set anchor watch circle

- **Out of XTD alarm** – to switch **ON** / **OFF** the alarm activation. Alarm conditions:

XTD	Alarm Conditions
Check XTD settings for the selected route	When an actual XTD deviation exceeds the preset XTD value from the route table



- **CPA-TCPA alarm** – to switch ON / OFF the alarm activation. Alarm conditions:

CPA-TCPA	Alarm Conditions
Dangerous AIS target	When approaching AIS target is under CPA (distance) and TCPA (time) conditions

- **Sounder Depth alarm** – to switch ON / OFF the alarm activation. Alarm conditions:

Set Alarm Value setting – to set the dangerous depth. Alarm conditions:

Depth value	Alarm Conditions
Dangerous depth	When real depth is less than value specified in Set Alarm Value

- **Primary GPS Low Accuracy warning** – switch ON / OFF the warning activation. Warning conditions:

Primary PS	Warning Conditions
iOS	iOS Location Service provided position with Accuracy less than 20 meters
AIS	“Low Accuracy” status is received from the AIS Class B transponder (VDO18,19)
NMEA	HDOP > 10

- **Approach to Waypoint warning** – switch ON / OFF the warning activation.

Distance to WP setting – to set the distance to waypoint. Warning conditions:

Distance to WP	Warning Conditions
Setting up to 1 nm	<p>Warning generated if the value of distance to the next WPT is less than the set one.</p> <p>Note: Distance to the “Start Radius Point” is used instead of the Distance to Waypoint, if turn radius had been adjusted for such Waypoint.</p>

- **Switching to the next WP warning** – switch ON / OFF the warning activation. Warning conditions:

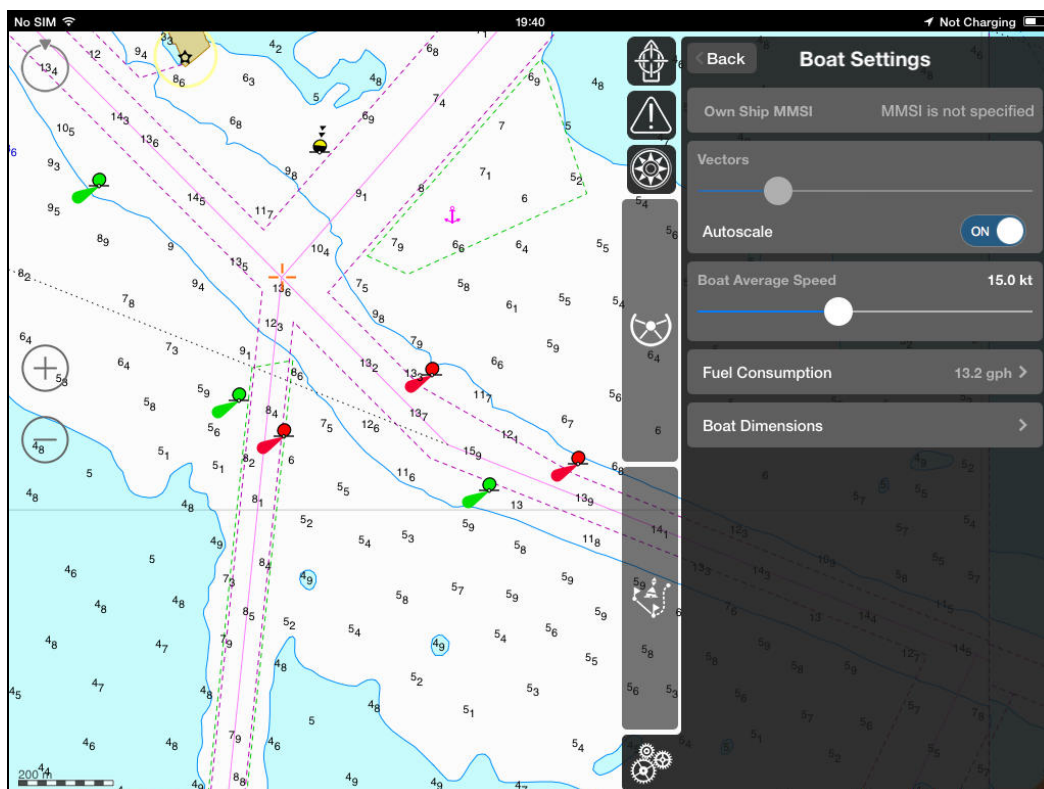
WP switching	Warning Conditions
Selected Route. WP changing during sailing	<p>when the boat approaches the next WPT, this warning is generated upon approach to the distance to waypoint set by the user</p> <p>Note: Warning is generated after passing of the “Start Radius Point”, if turn radius had been adjusted for such Waypoint.</p>



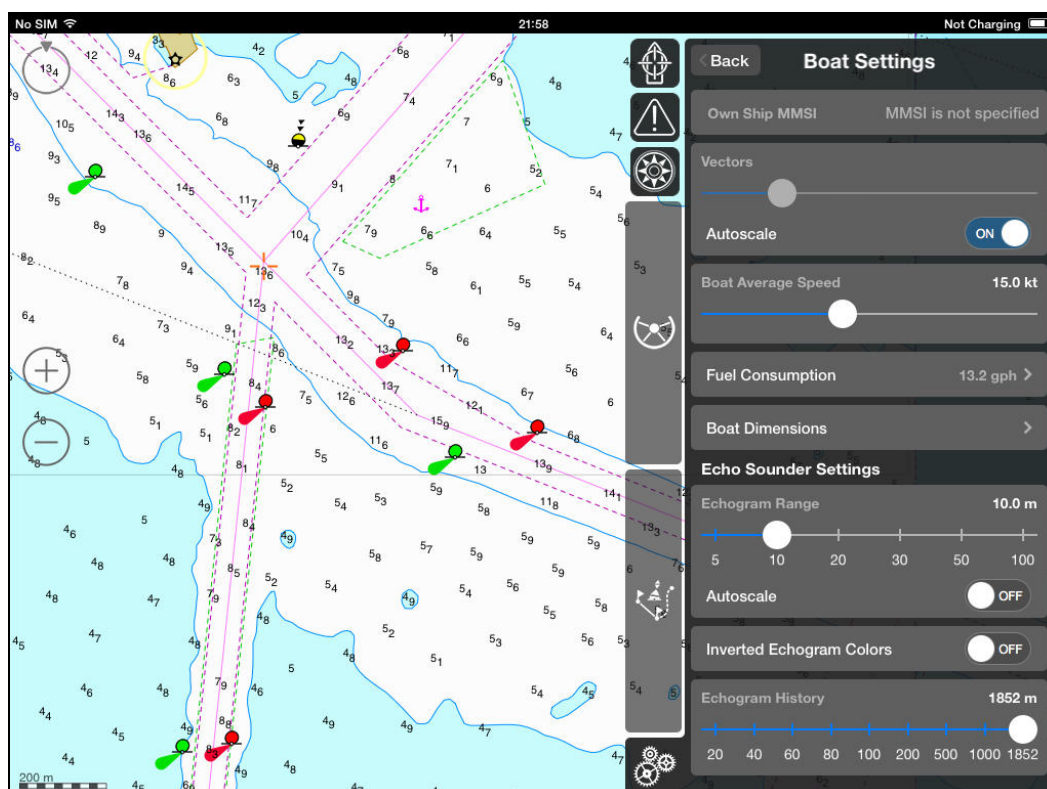
7.7. “BOAT SETTINGS” MENU ITEM

In the Settings menu, tap the Boat Settings menu item.

Default view:



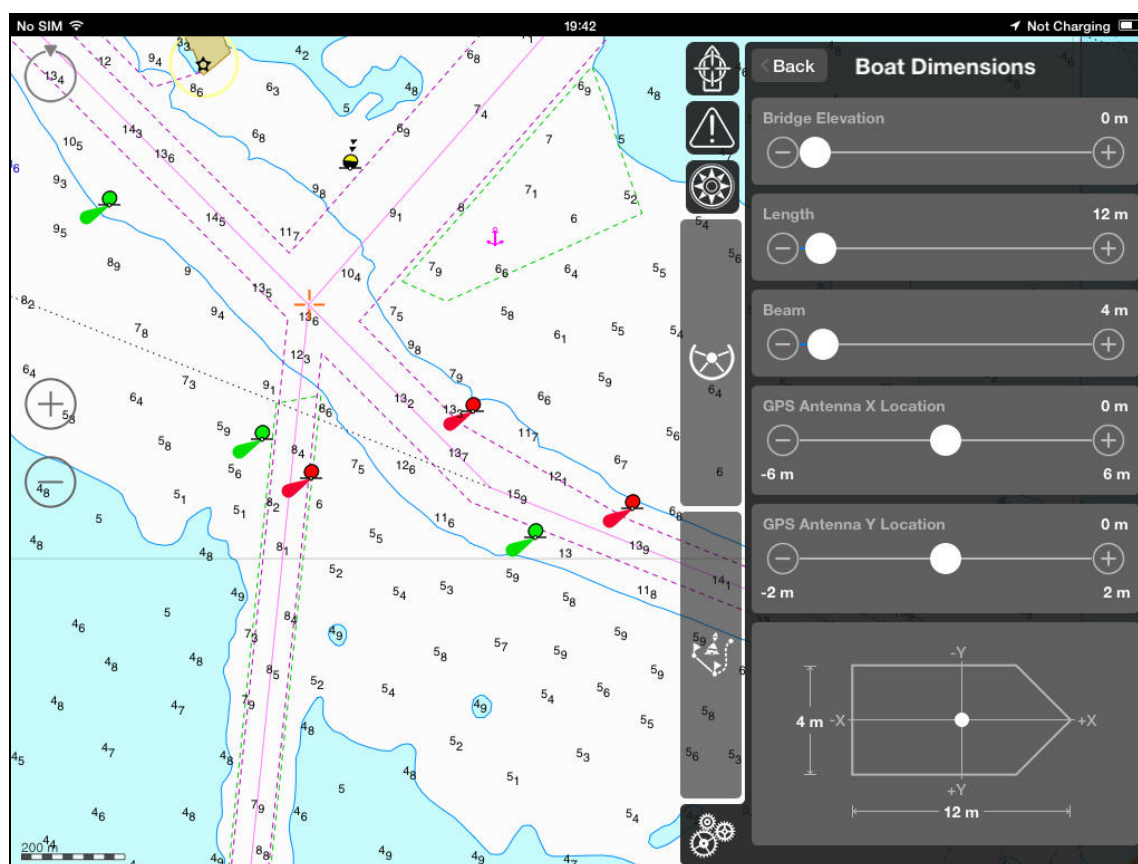
Full view:





The Boat Settings menu item is intended for the following actions:

- **Own Ship MMSI** – to enter own ship MMSI this setting is intended for the filtering of the own ship AIS target presentation, which can be received via **Internet AIS Service** (see **Annex I** – “**Additional information about the “Internet AIS Service” subscription option**” for details below). This setting can be adjusted in this menu manually or via AIS target data card (button “**Set as Own Ship**” at the bottom of the AIS target data card).
- **Vectors** – to set the required vector length for the own boat and AIS targets;
Autoscale – vector length will have a fixed size on the different chart scales;
- **Boat Average Speed** – to set the boat average speed, default value for the schedule calculation;
- **Fuel Consumption** - to set the boat fuel consumption, default value for the schedule calculation;
- **Boat Dimensions** – to set the boat bridge elevation, length, beam and position of the own GPS antenna (see the picture below).
- **Echo Sounder Settings** – to set additional settings for Echo Sounder panel.
- **Echogram Range** – to set height range of the displayed echogram;
Autoscale – automatic setting of height range of the displayed echogram;
- **Inverted Echogram Colors** – to set the inverted colour diagram for the displayed echogram;
- **Echogram History** – to set length range of the displayed echogram.





7.8. “IMPORT” MENU ITEM

The **Import** menu item is needed for import of the Routes, Tracks or User Objects into “iSailor” application; “**Import**” functionality is available by E-mails or using “iTunes” application. See **Chapter 12, paragraphs 12.1. “Import data by E-mail”** and **12.2. “Import data by “iTunes” application via Mac or PC”** for details.

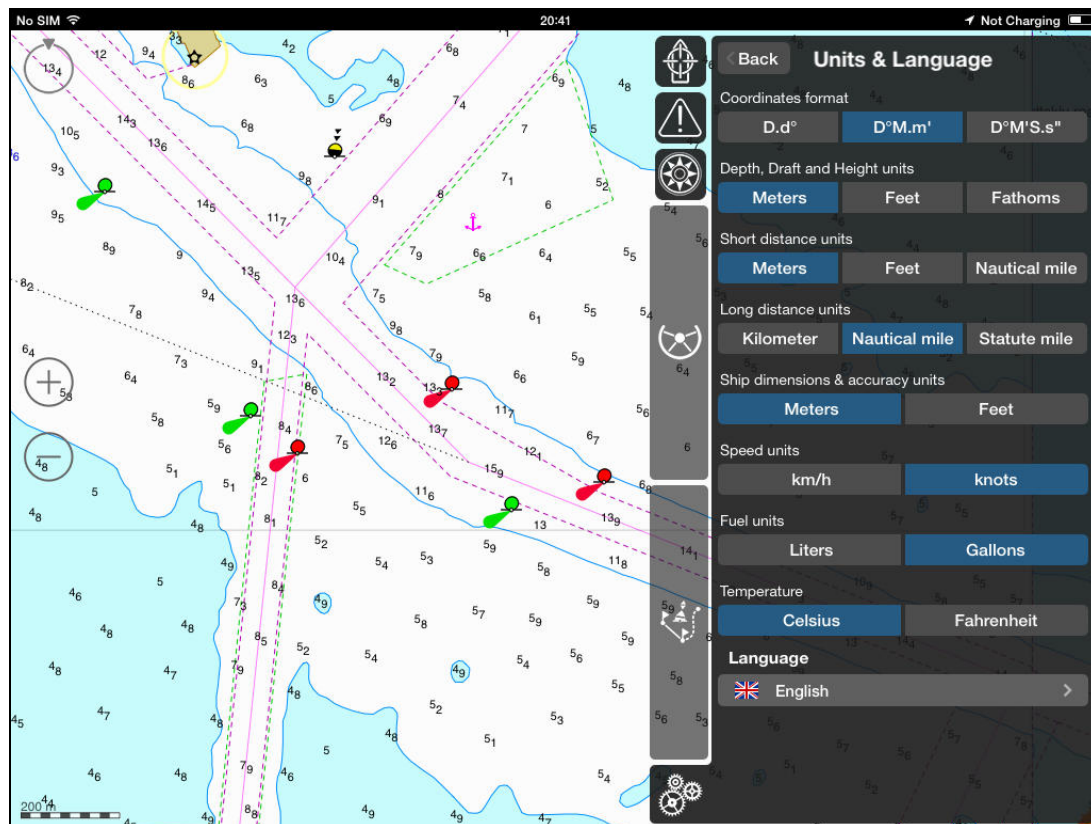
7.9. “EXPORT” MENU ITEM

The **Export** menu item is needed for export of the Routes, Tracks or user Objects from the “iSailor” application to external applications; “**Export**” functionality is available by E-mails or using “iTunes” application. See **Chapter 12, paragraphs 12.3. “How to Export data from device and Import it on another devices”** and **12.4. “How to Export data via “iTunes” application and Mac or PC”** for details.



7.10. “UNITS & LANGUAGE” MENU ITEM

In the Settings menu, tap the Units menu item.



The **Units** menu item is needed for multi-unit adjustments:

- **Coordinates format:** presentation of the own ship coordinates in three possible modes:

Degrees & their decimals, Degrees & Minutes, Degrees & Minutes & Seconds.

- **Depth and Height units:** presentation of depths and heights on Transas charts (applicable also for the User Object depth data):

Meters, Feet, Fathoms.

- **Short distance units:** presentation of short distances (up to 1 nautical mile) in Route data screens, ERBL data window, etc.:

Meters, Feet.

- **Long distance units:** presentation of long distances (> than 1 nautical mile) in Route data screens, ERBL data window, etc.:

Kilometers, Nautical miles.

- **Ship dimensions & accuracy units:** presentation of Own Ship & targets dimensions in “Info” and “Boat Settings” (“Boat Dimensions” screen) and Own Ship in “Monitoring” page (“Position Data” widget screens).

Meters, Feet.

- **Speed units:** presentation of the own ship speed, target speed data, “Cruising speed calculation” in the route data window, etc.:

Km/h, Knots.



- **Fuel units:** Fuel units for the fuel consumption calculation in the route data window, etc.:

Liters, Gallons.

- **Language:** presentation of current language (used for internal user interface of the app):

English,

German,

Spain,

France,

Italy,

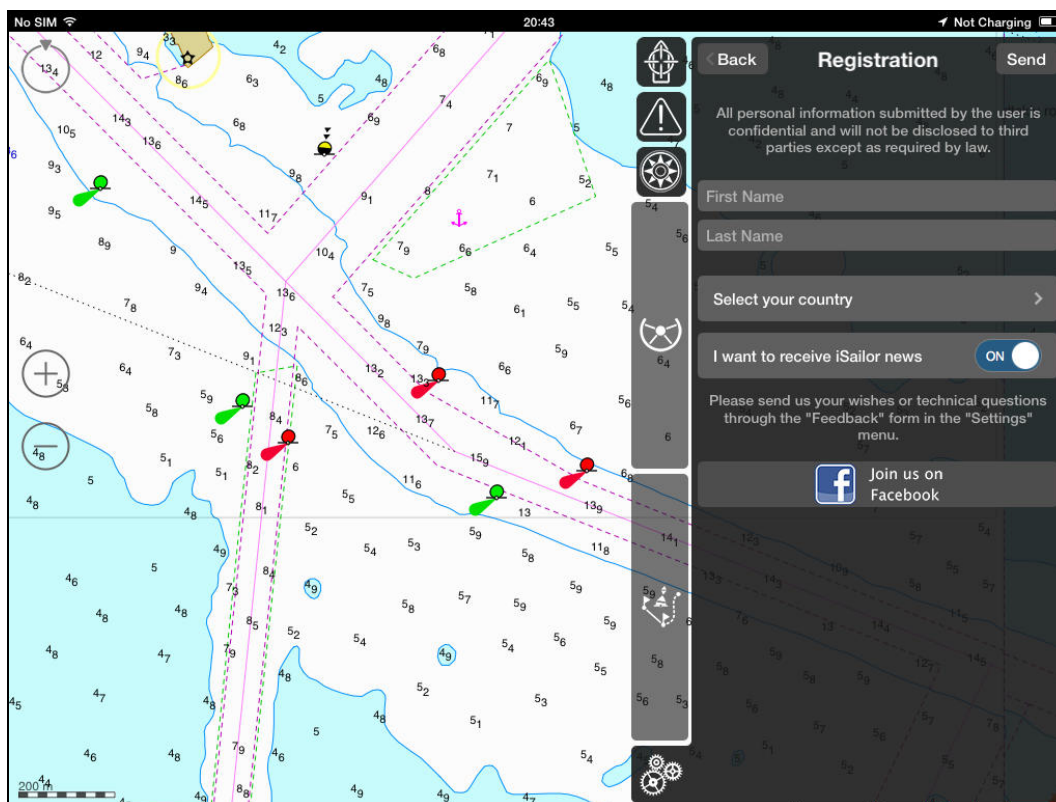
Korean,

Russian,

China.

7.11. “REGISTRATION” MENU ITEM

In the **Settings** menu, tap the **Registration** menu item.



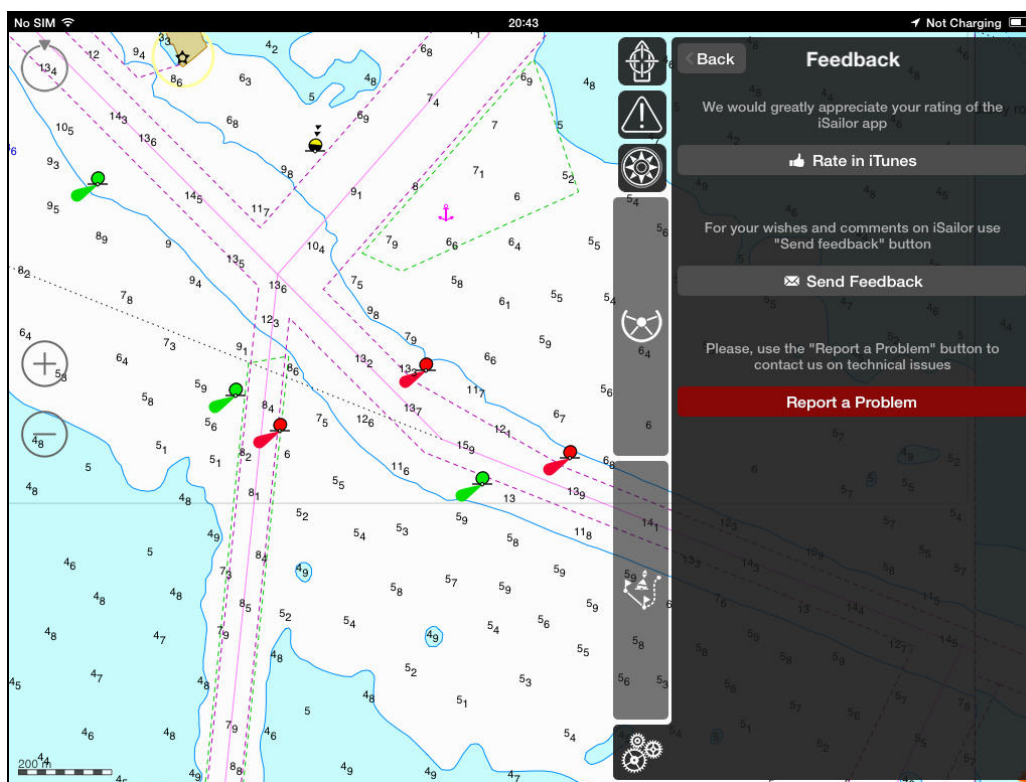
You may use the **Registration** menu item and send us your **Name** and **Location**. This information will not be disclosed to third parties and will be useful for future service and your receiving of the future “iSailor” **news by e-mail**, such as new releases or new functionality, developed in the app.

Fill forms, switch **ON** the **I want to receive iSailor news** and press the **Send** button to send us your registration information.



7.12. “FEEDBACK” MENU ITEM

In the Settings menu, tap the Feedback menu item.



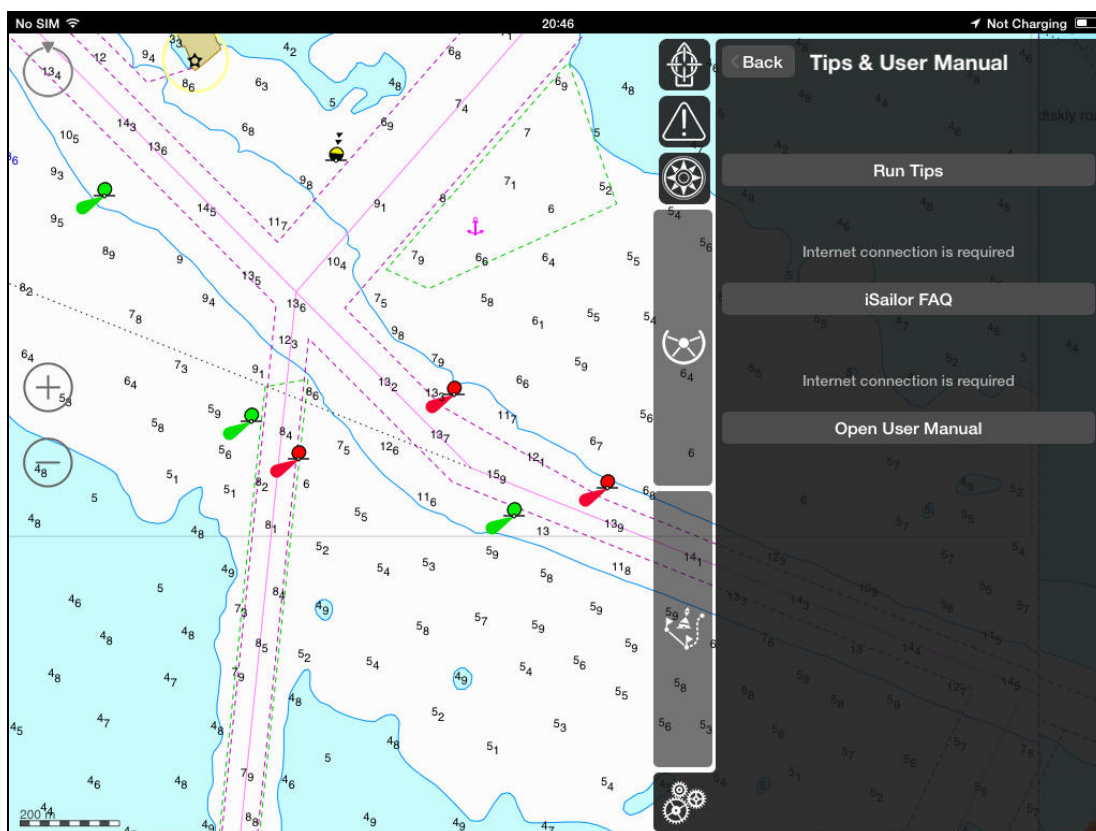
The Feedback menu has following buttons and functionality:

- **Rate in iTunes** button – you may use this button to rate the “iSailor” app in **iTunes / App Store** applications. Your rating will be much appreciated and important for us to improve the “iSailor” in future.
- **Send Feedback** - you may use this button to send us any wishes, comments or your story in relation to “iSailor” app and how did you use it onboard.
- **Report a problem** – you may use this button if you have any problems or difficulties with “iSailor” operation or Chart purchasing. Our service team reverts to you with explanation, help or advices as soon as possible.

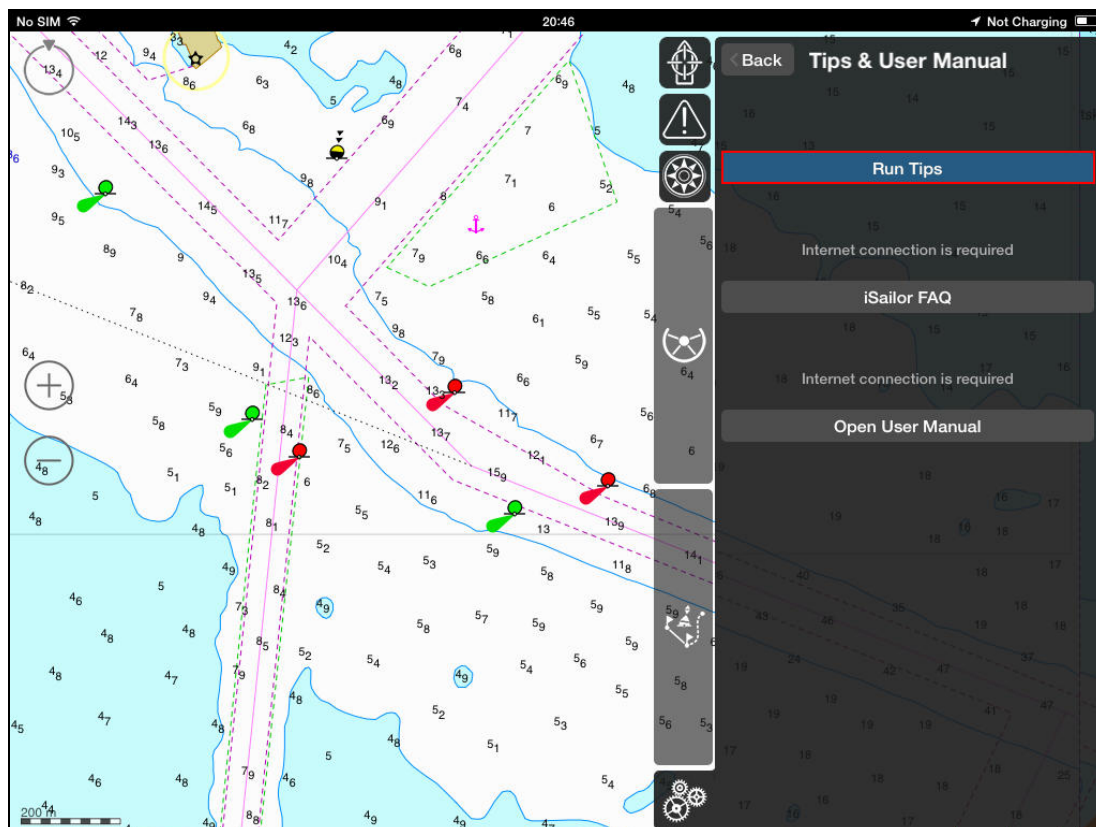


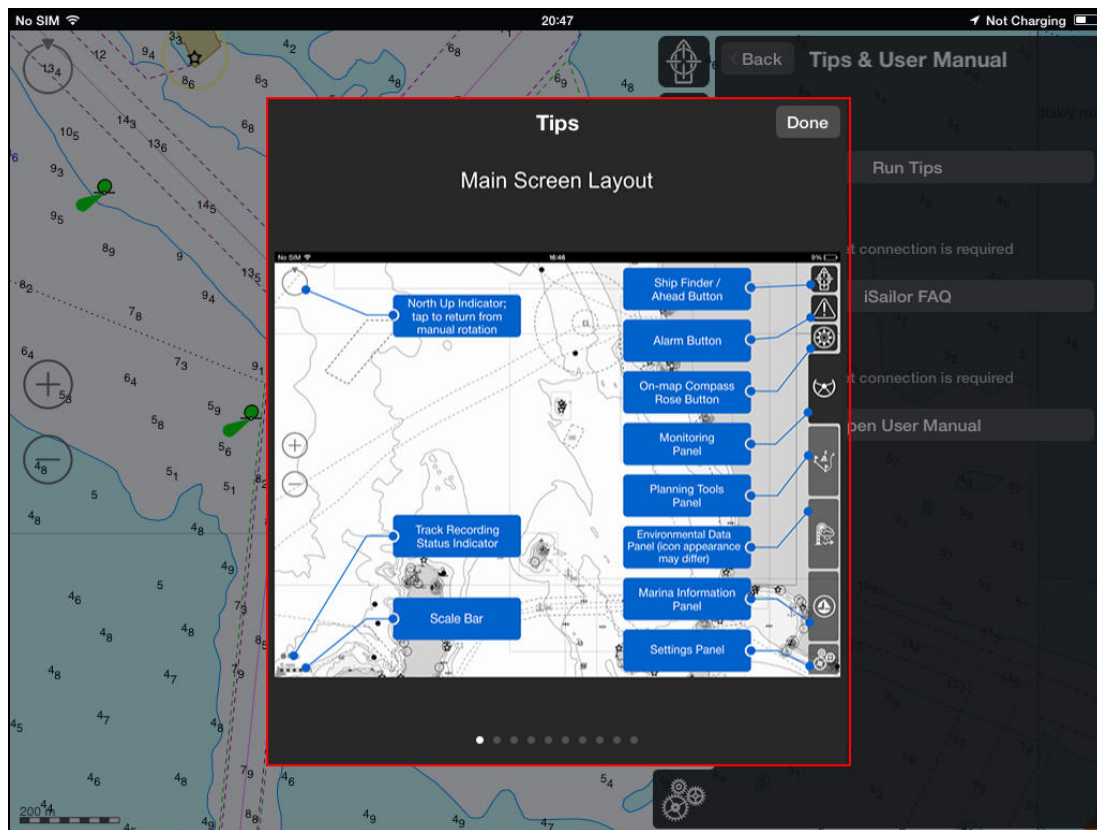
7.13. “TIPS & USER MANUAL” MENU ITEM

In the **Settings** menu, tap the **Tips & User Manual** menu item.



Press **Run Tips** button.





The **Run Tips** menu item is intended for the presentation of interactive tips, which describes in pictures a major functionality of the “**iSailor**” application. This menu has following buttons and functions:

- **Done** – you may use this button to close the **Tips** window;
- **Page control bullets** on the bottom side are showing the number of tips pages and currently selected page as well. Slide the selected page to the right (or left) side to show all available tips pages.

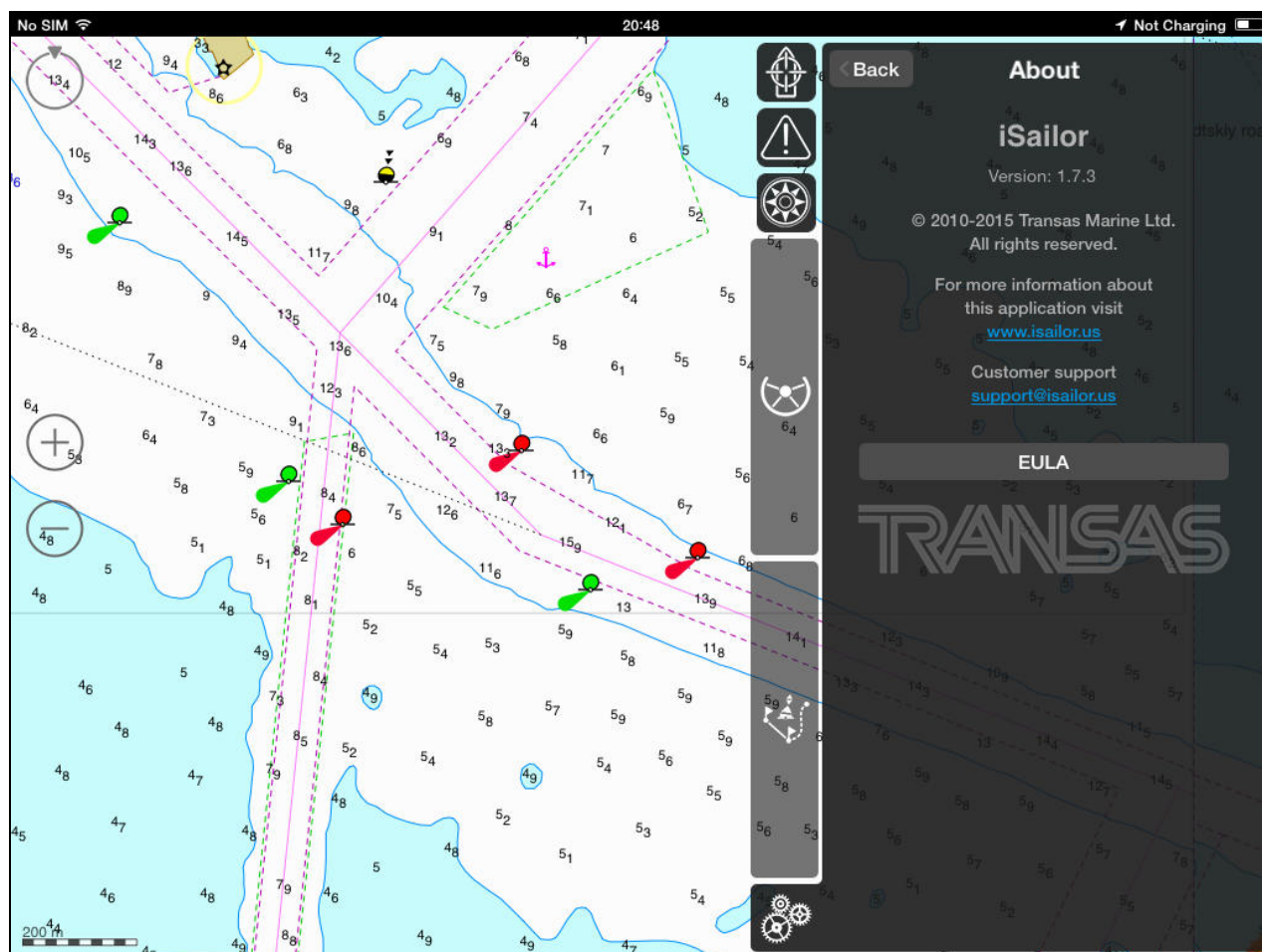
The **iSailor FAQ** menu – Quick access to iSailor FAQ on the www.isailor.us website. Internet connection is required.

NOTE: New FAQ is under construction at the moment!

The **Open User Manual** menu item is working as the link to the latest version of the **Transas iSailor**. Internet connection is required. **User Manual** document in PDF format, which can be also obtained by the following path: www.isailor.us/faq/iTransas_iSailor_User_Manual.pdf.



In the **Settings** menu tap the **About** menu item.

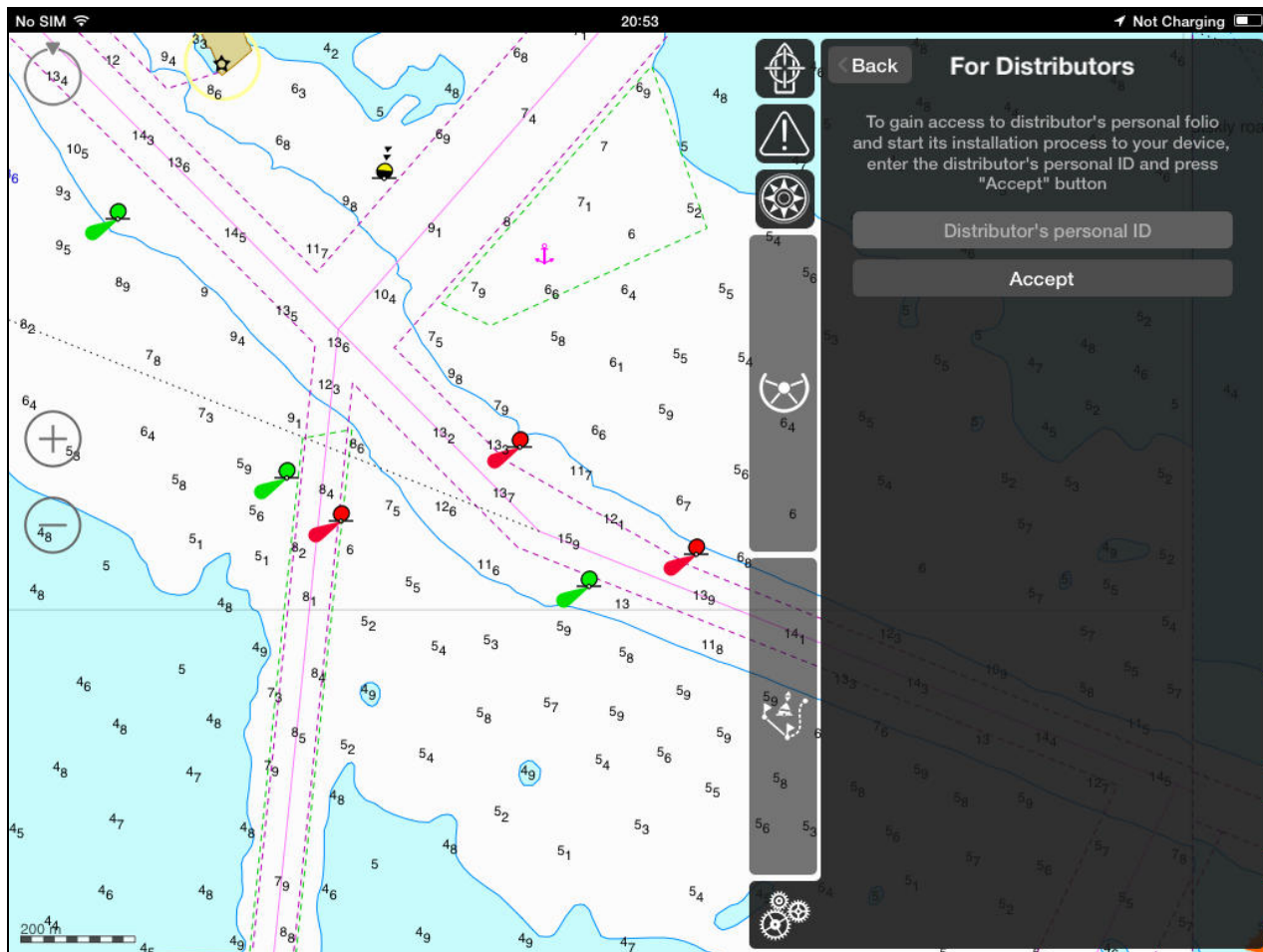


The **About** menu item contains information about manufacturer and currently installed version of the “iSailor” application.



7.15. “FOR DISTRIBUTORS” MENU ITEM

In the Settings menu tap the For Distributors menu item.

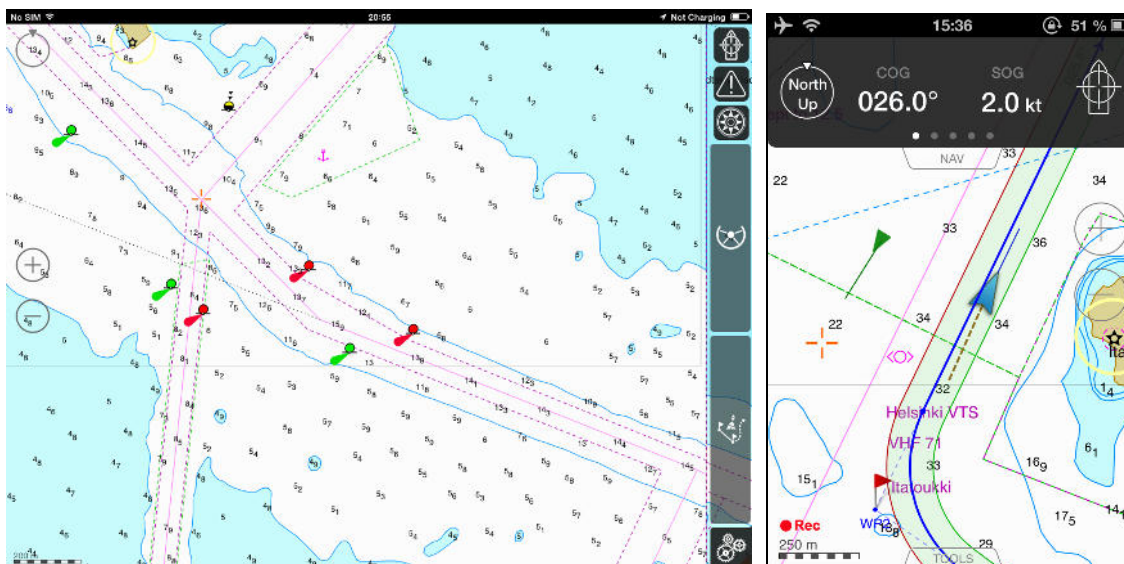


This item is only intended for service purposes and Transas distributors.



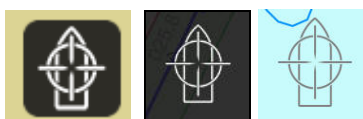
8. TOOLBAR BUTTONS AND OPERATIONAL PAGES

8.1. DEFAULT SCREEN AFTER STARTUP



Default iSailor “Chart” layout after startup. iPad and iPhone presentation

8.2. “AHEAD” BUTTON



“Ahead” button. iPad and iPhone presentation.

The “Ahead” button is intended for return to the display with the own boat position. The screen is re-drawn in the process, the boat symbol moving in the direction opposite to the current course.





8.3. “ALARMS AND WARNINGS” BUTTON

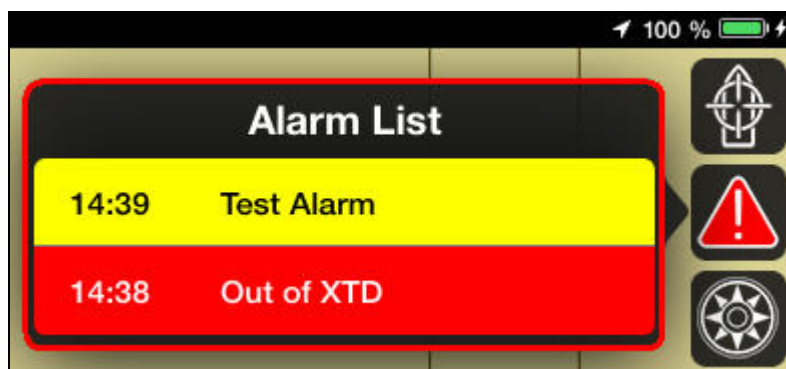
Alarms and Warnings settings are located in the “Settings” \ “Alarms” menu item.



“Alarms and warnings” **Error! Bookmark not defined.** button is intended for the display of the active alarms and warnings. Alarms and warnings may be active, i.e., what caused their generation has not been eliminated, and non-active when the cause is eliminated.

The button looks like follows depending on whether there are or there are no active alarms and warnings:

	There is at least one active alarm. Flashing icon is used for the non-acknowledged alarms
	There is at least one warning.
	There is no any active alarms or warnings.
	Monitoring of alarms and warnings is disabled (the button is greyed).



To open the Alarm list tap the **“Alarms and warnings”** button.



The Alarm List contains active alarms and warnings. Alarms are shown against the red background, and warnings - against yellow. To the left of the alarm or warning name, its generation time is specified.

Alarms are associated with an intermittent sound signal which lasts until the acknowledgement. Warnings are accompanied with a sound signal whose duration is 2-3 sec.

The active alarms and warnings acknowledgement implies that the user has seen and is aware of them. To acknowledge an active alarm or warning tap the Alarm List.

After the acknowledgement, the alarm accompanying is turned off, and it is shown against a natural background.

The principles of displaying alarms and warnings in the Alarms List are set forth in the table below:

Alarm status	Alarm List	Sound generation
Active unacknowledged alarms (no operator actions taken)		Continuous sound signal
Active acknowledged alarms		None



Active unacknowledged warnings	14:40 Switching to the Next WP	Sound signal lasting 2-3 seconds
Active acknowledged warnings	No	None
Non-active alarms and warnings (regardless of acknowledgement)	No	None

8.4. “COMPASS ROSE” CONTROL AND FUNCTIONALITY

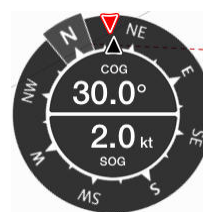


“Compass Rose” button and control.

The “**Compass Rose**” button is intended for the display of the interactive compass card (for the iPad version only!)

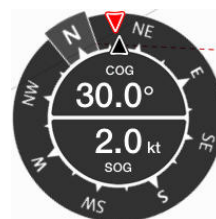
Depending on the selected chart orientation the card will be shown as follows:

- **North Up** – North up, True North is on top;
- **COG Up** – Current Course-Over-Ground is on top:





- **Route Up** – Current Leg of Route is on top:



The black needle shows the current COG, and the red one – the Bearing To the next WP (only shown with the selected route).

In the centre of the card the following current parameters are displayed digitally:

- **COG - SOG:**

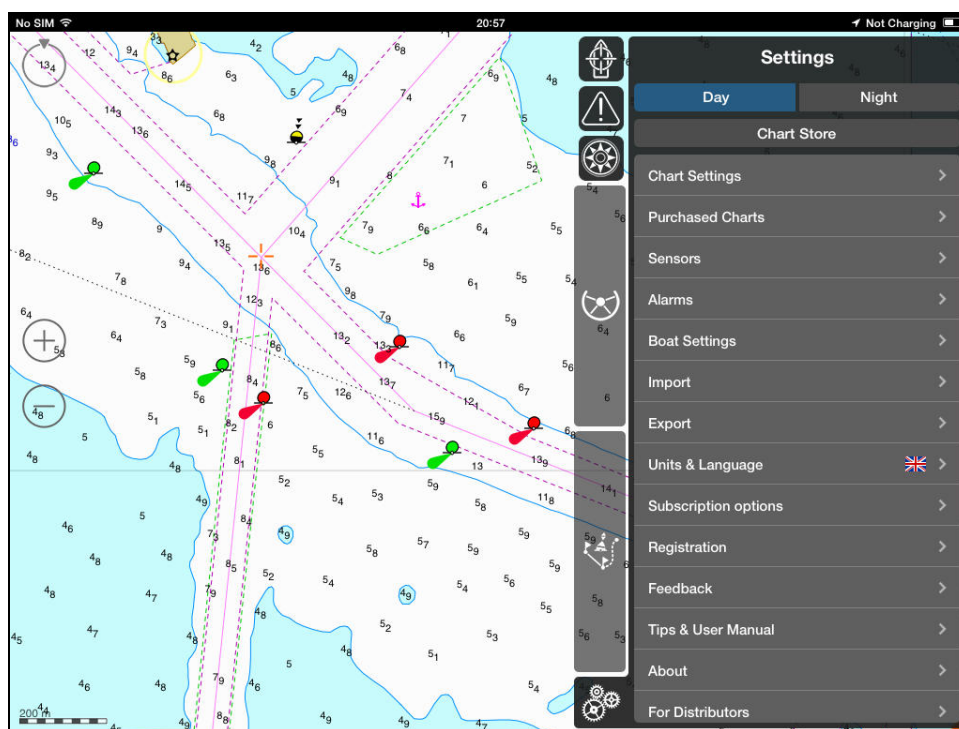
If **AIS** is selected as source of positioning system and there are not valid heading data, but valid GPS data is available;


If **IOS** is selected as source of positioning system and valid GPS data is available (external Bluetooth, internal iPad GPS or calculated by Wi-Fi triangulation).

If any data are absent, the **Compass Rose** looks as follows:



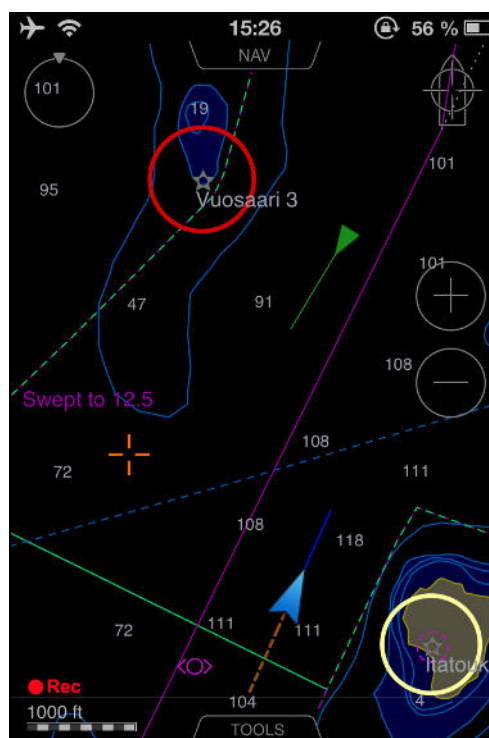
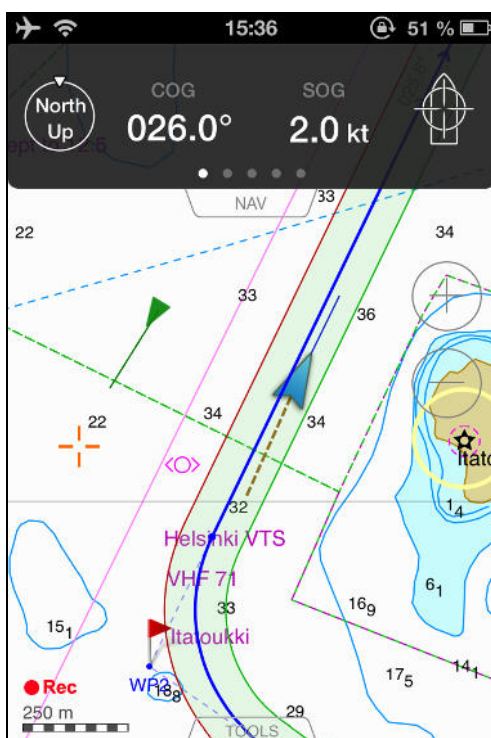
8.5. “SETTINGS” BUTTON



The “**Settings**”  button allows to open the settings menu (see **Section 7, "Settings menu and User Settings"**).



8.6. IPHONE LAYOUT



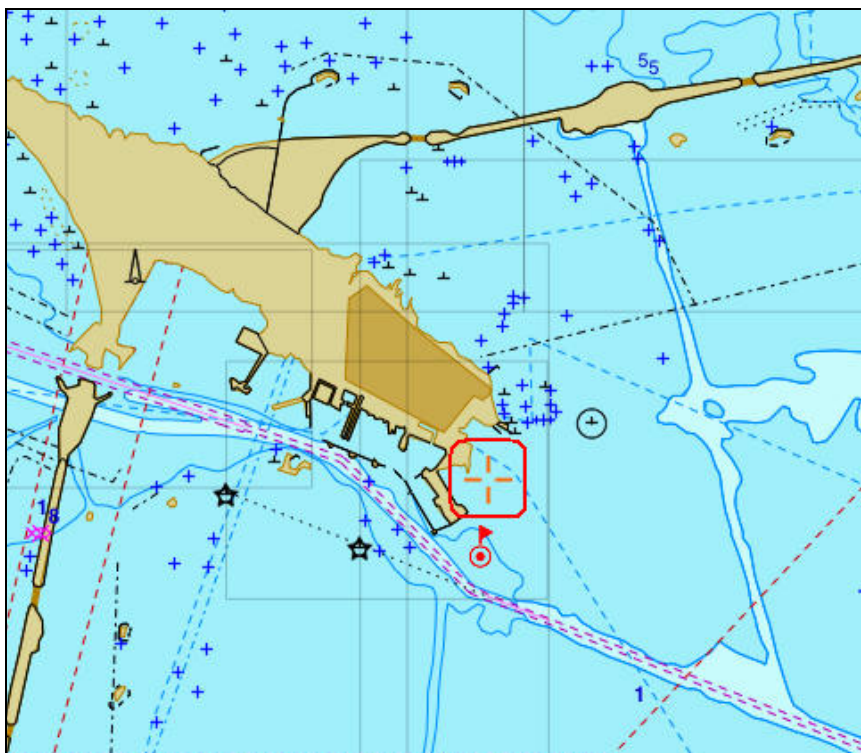
Button and Controls.

- **Ahead** (top right corner) – return to the display with the own boat position;
- **Zoom in / Zoom Out** (middle right side) – chart zooming function;
- **Azimuth indicator** (top left side) – Azimuth indicator with the North mark; tap indicator to return into adjusted Chart Orientation mode after manual rotation (if enabled);
- **NAV bar** (top visor) – tap the **NAV** visor to turn ON / OFF the Navigation pages. Slide **Navigation pages**; bottom page control shows the currently selected page.
- **TOOLS bar** (bottom visor) – tap the **TOOLS** visor to turn ON / OFF the **Users Tools** pages and “**Settings**” menu. Their functionality is equal to the iPad version, described herein.

9. OPERATION WITH ADVANCED CURSOR

9.1. FREE CURSOR AND POP-UP WINDOW

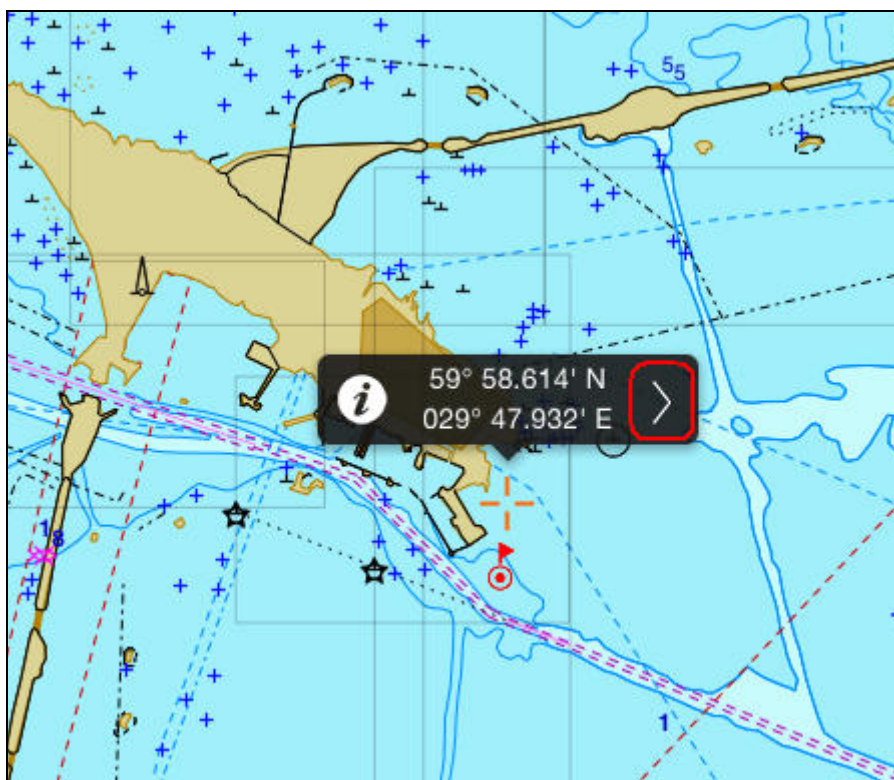
The free cursor and pop-up windows are intended for obtaining information about the latitude and longitude of a point on the screen, and also indicates the place of applying other functions, e.g., Chart Info. The free cursor is appeared by a short tap on the screen.



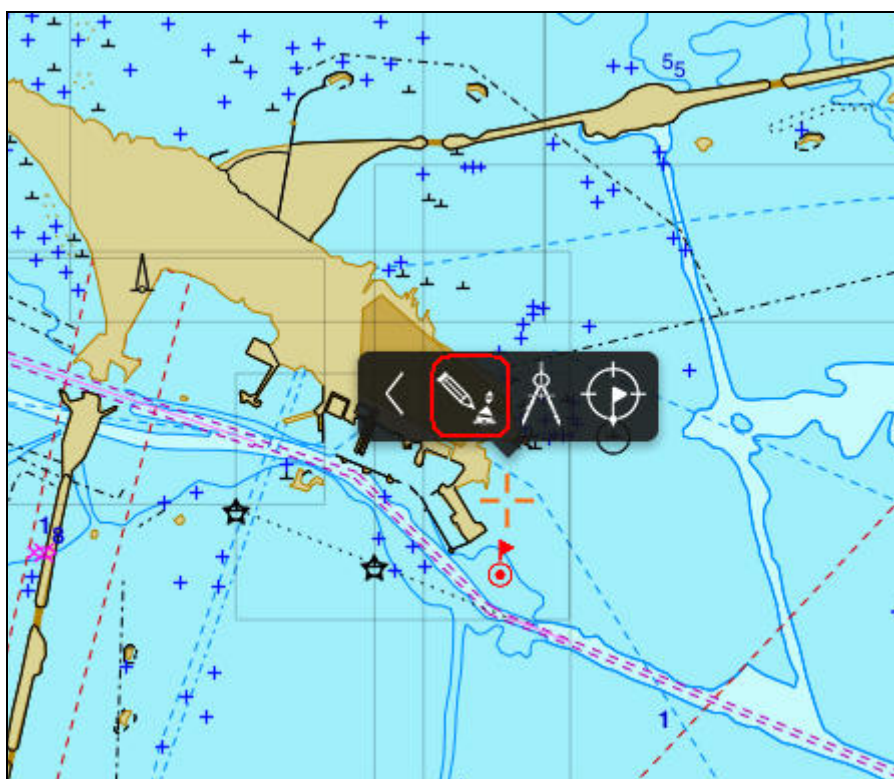
Put the free cursor on the necessary object.



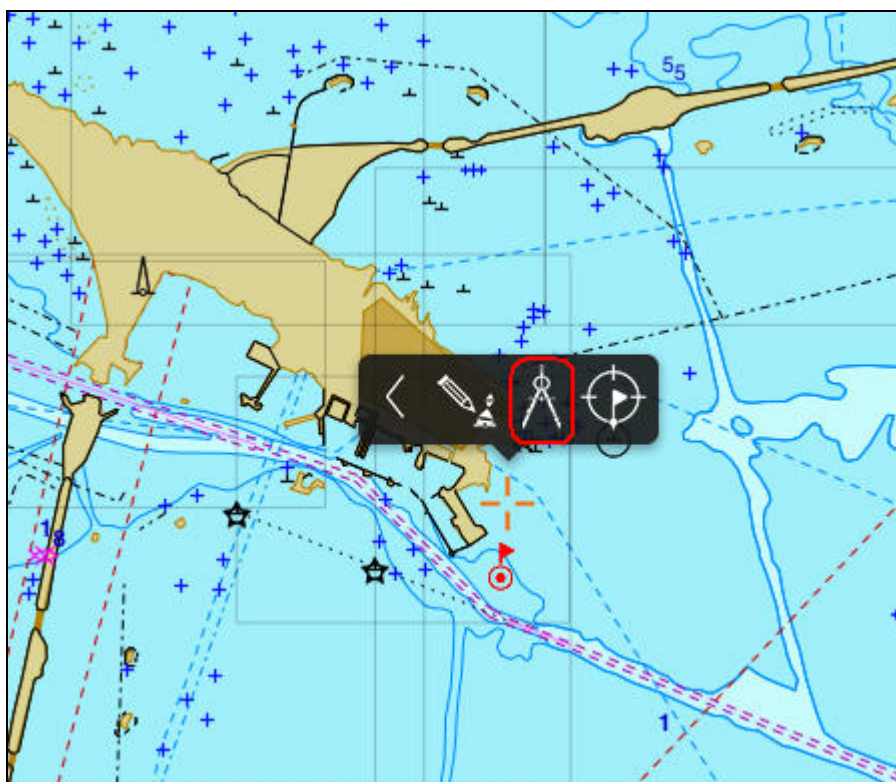
Tap the free cursor and in the pop-up window, select “Info” icon. For information, see **Chapter 9, paragraph 9.4. Chart “Info” function.**



Press the arrow.



In the open pop-up window, select the “**User Object**” icon.
For information, see **Chapter 9, paragraph 9.6. “User Object” creation.**



Select the “Point-To-Point ERL” icon.

For information, see **Chapter 9, paragraph 9.3. Point-To-Point ERL.**



Select the “Go To” icon.

For information, see **Chapter 9, paragraph 9.5. How to Create Go To Route.**



Tap the own ship symbol and in the pop-up window, select the “Ownship ERBL” icon.
For information, see **Chapter 9, paragraph 9.2. Ownship ERBL.**



Tap the route waypoint, the following pop-up window appears.
For information, see **Chapter 11, paragraph 11.1. Route layout.**

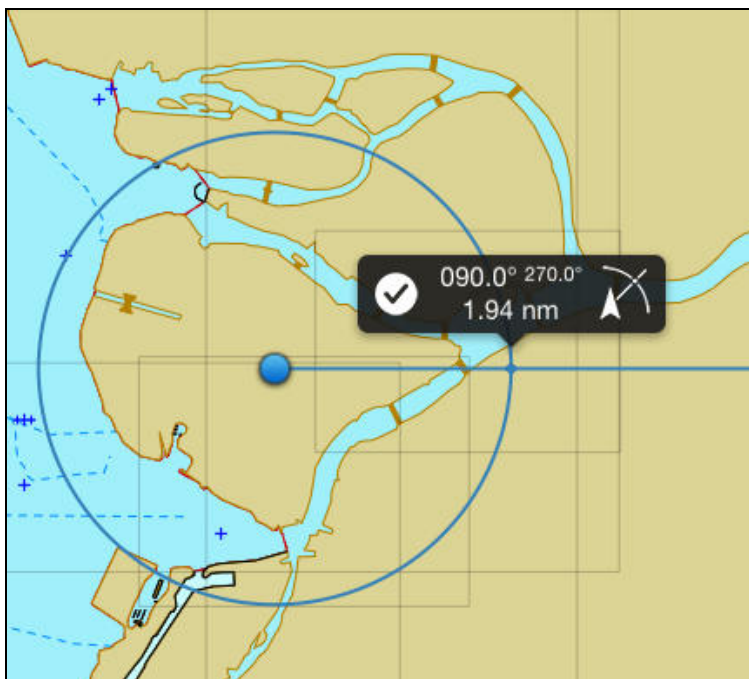
9.2. OWNSHIP ERBL

The function is intended for obtaining values of bearing and distance from the own ship to the selected point. As the own ship moves, the reference point moves together with the ship.

ERBL – Electronic Range and Bearing Line.



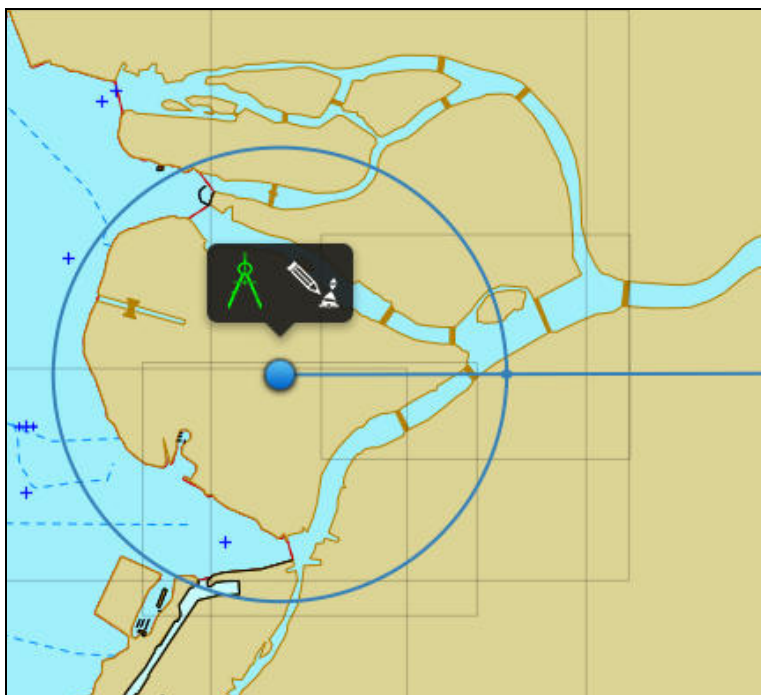
To use the **Ownship ERBL**, tap the own ship symbol and in the pop-up window select the “**ERBL**” icon.



The blue-colored circle and reference point will appear. By keeping the finger on the screen move it to the necessary direction. As the own ship or reference point moves on the screen, values of bearing and distance from the own ship current position to the geographic coordinates on the circle will be displayed in a black rectangle in the pop-up window on the screen.



The icon is intended for switching of the **Ownship ERBL** into “movable” mode - for detection of the dangerous target by its bearing value.

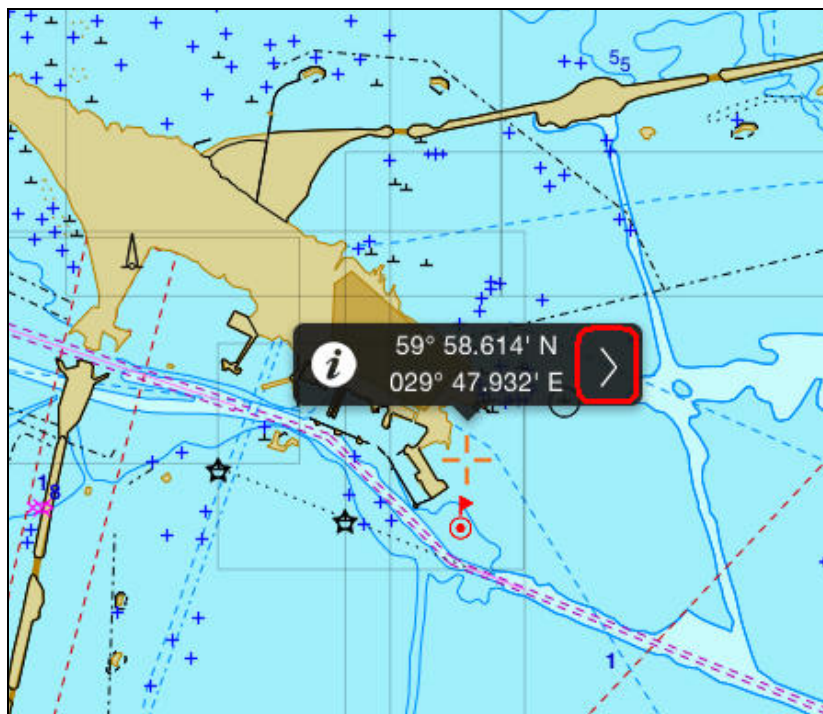


To turn off the **Ownship ERBL**, tap the own ship symbol and in the pop-up window select the green-colored “**ERBL**” icon.

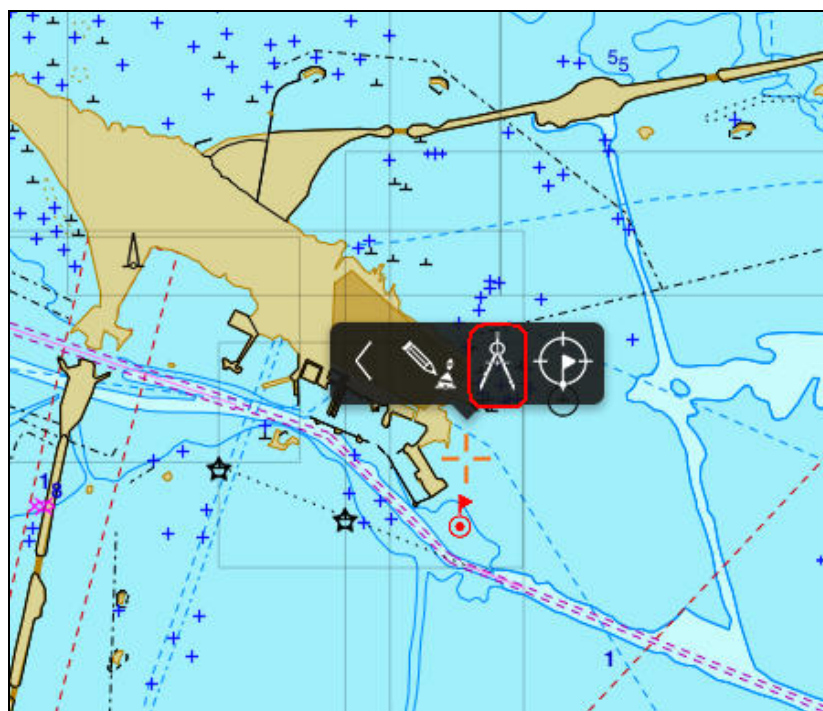


9.3. POINT-TO-POINT ERBL

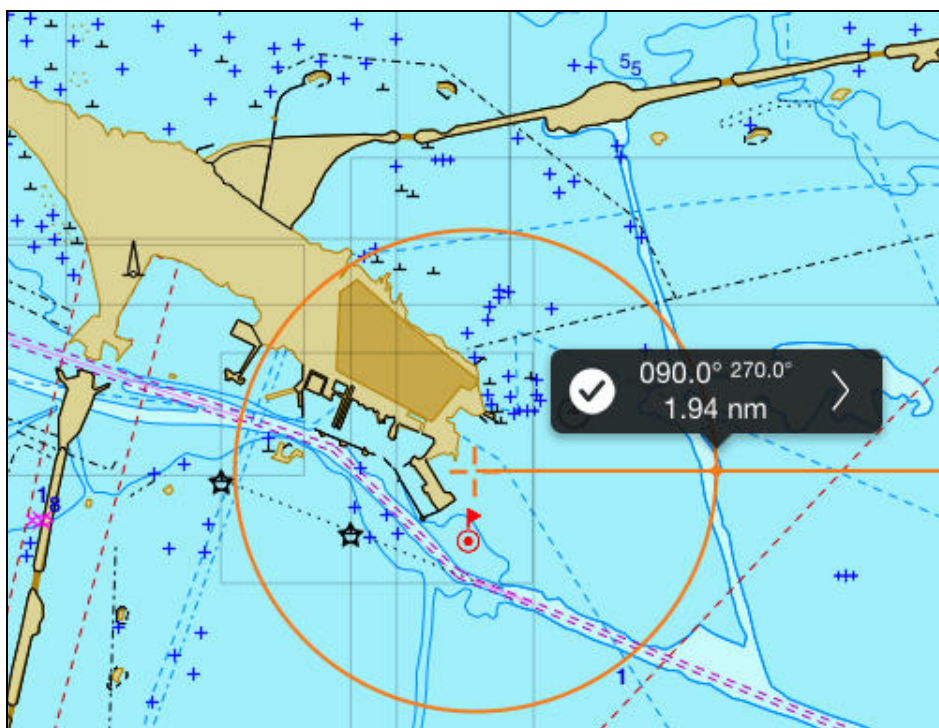
The function is intended for obtaining bearing and distance from the center of the free cursor to the selected point. It operates jointly with the free cursor.



To use the **Point-to-Point ERBL** (Electronic Range and Bearing Line), position the free cursor to the necessary object and tap the arrow.



In the pop-up window select the “**Point-To-Point ERBL**” icon.

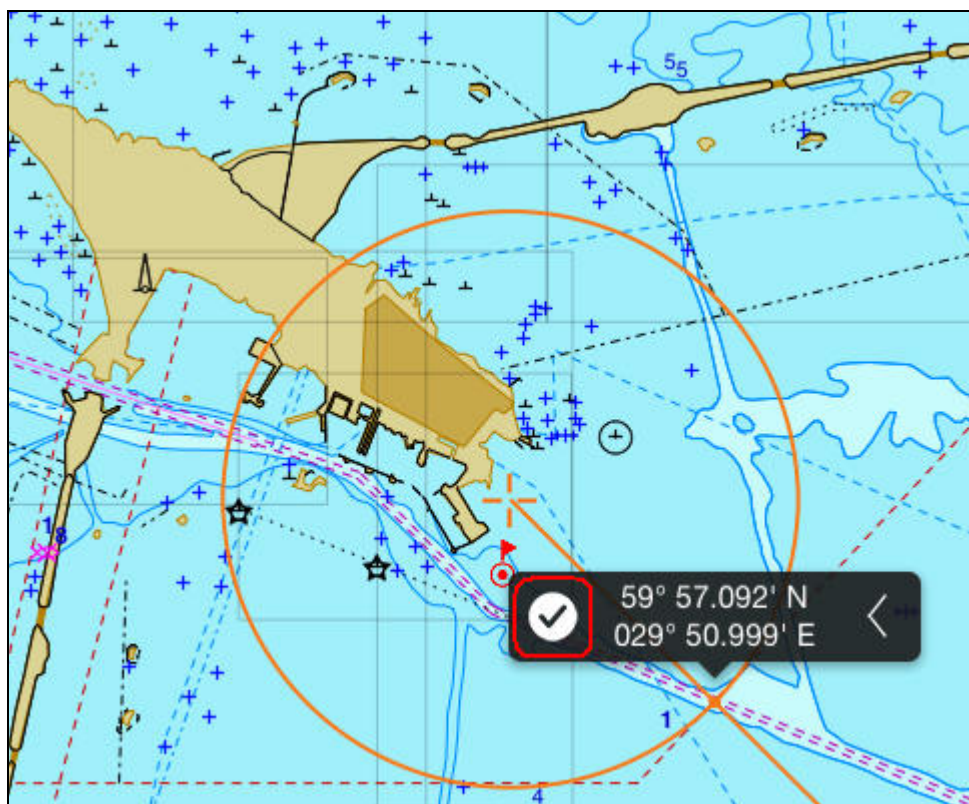
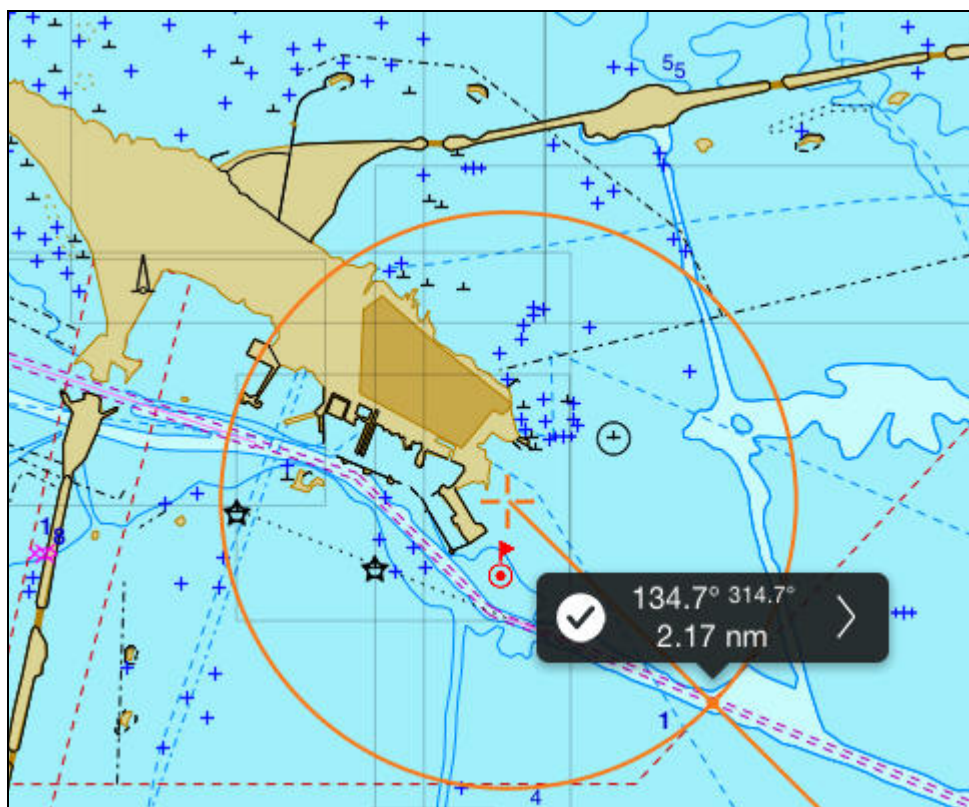


or



The orange-colored circle and reference point will appear.

By keeping the finger on the screen move it to the necessary direction. As any of points moves on the screen, values of bearing / opposite bearing and distance from the cursor center point to the point on the circle will be displayed in a black rectangle on the screen.

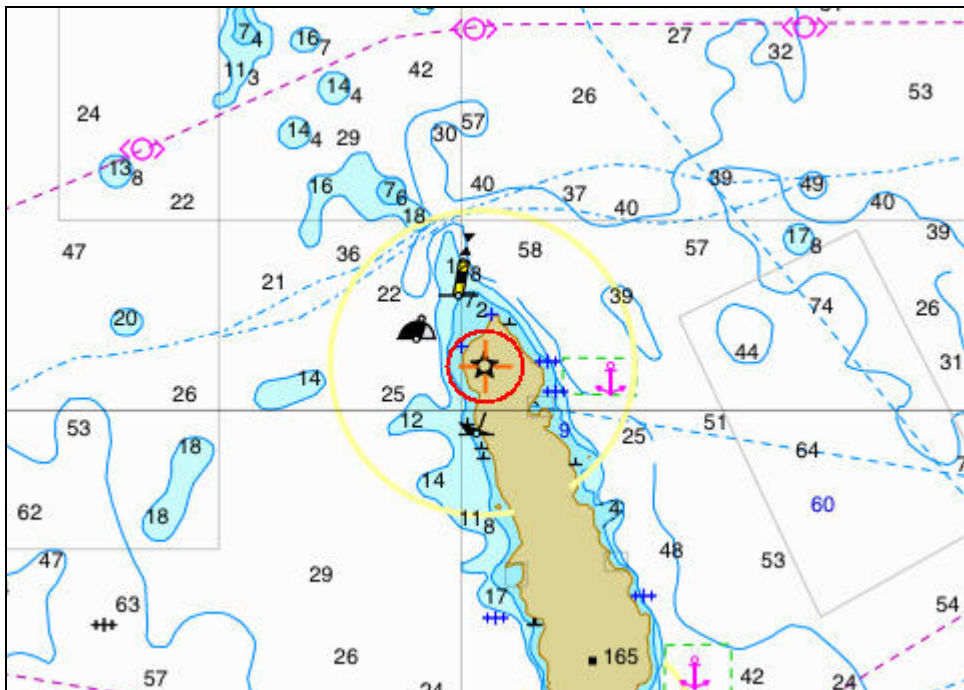


To turn off the **Point-To-Point ERBL**, press the “**Done**” icon in the pop-up window.

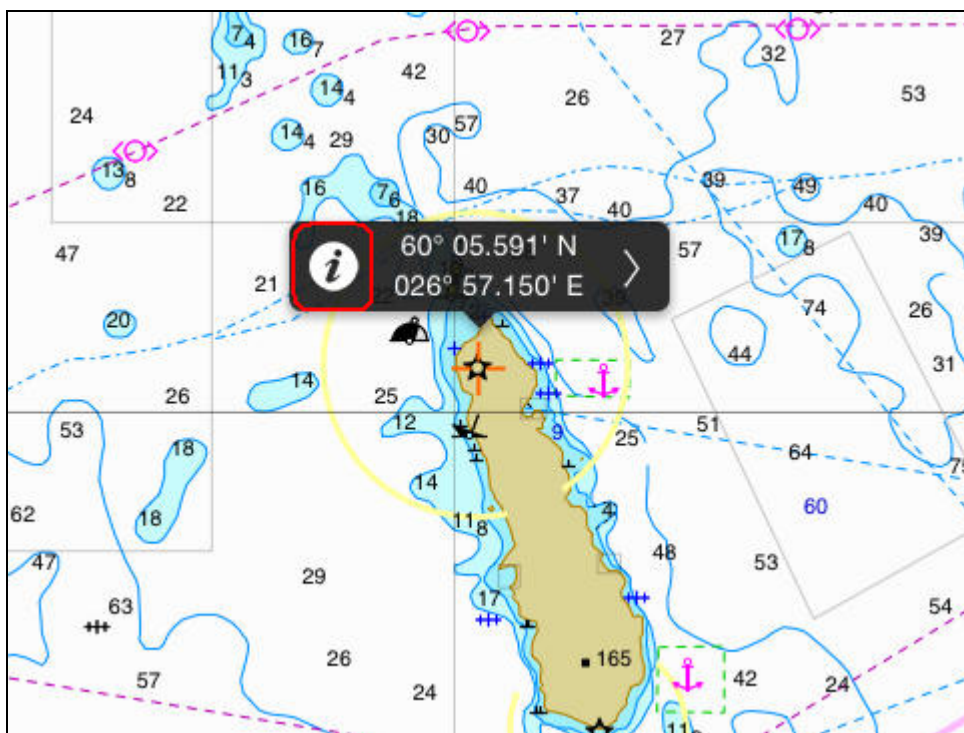


9.4. CHART “INFO” FUNCTION

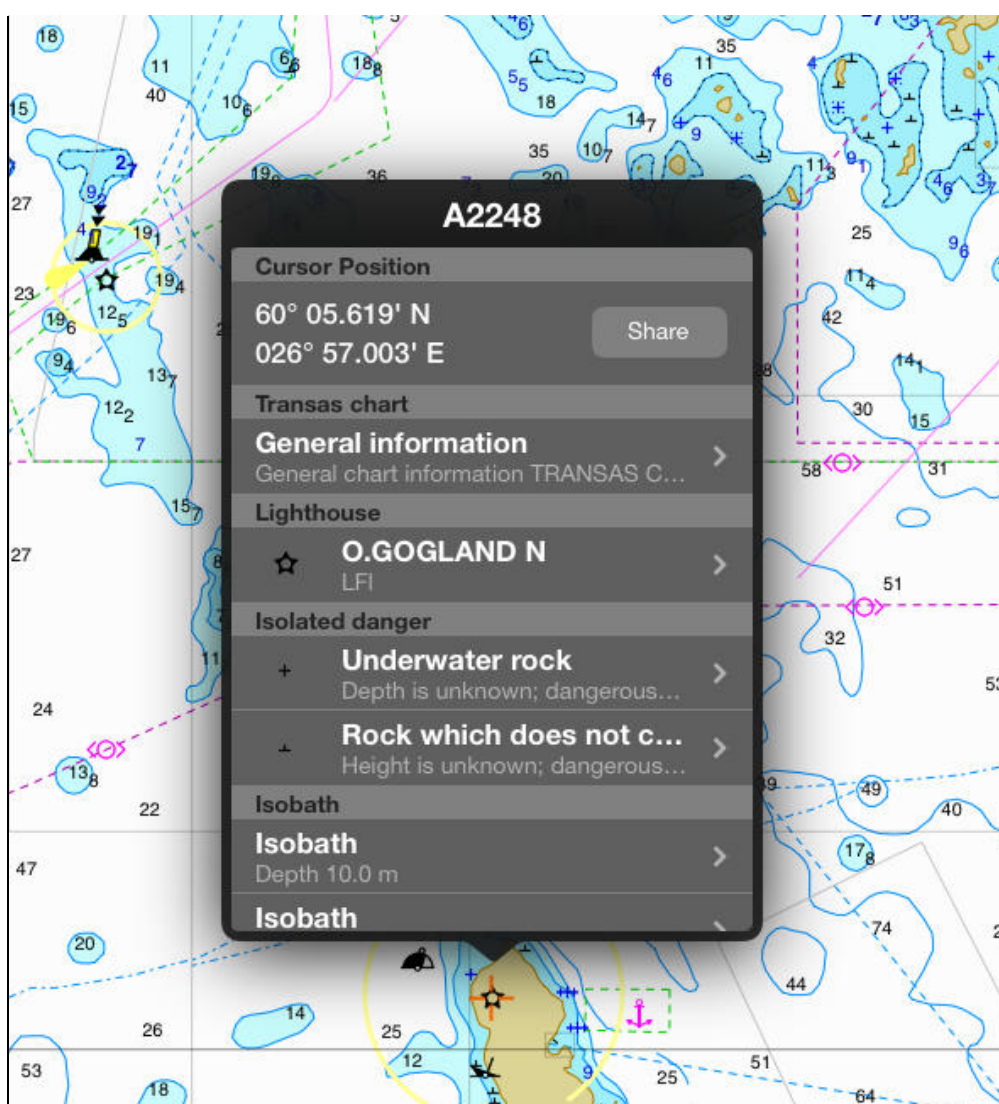
The function is intended for obtaining reference information about the electronic chart objects. It operates jointly with the information cursor: free cursor.



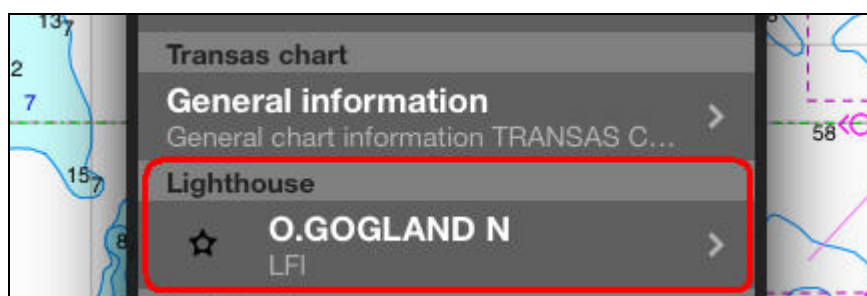
Position the free cursor on the necessary point.

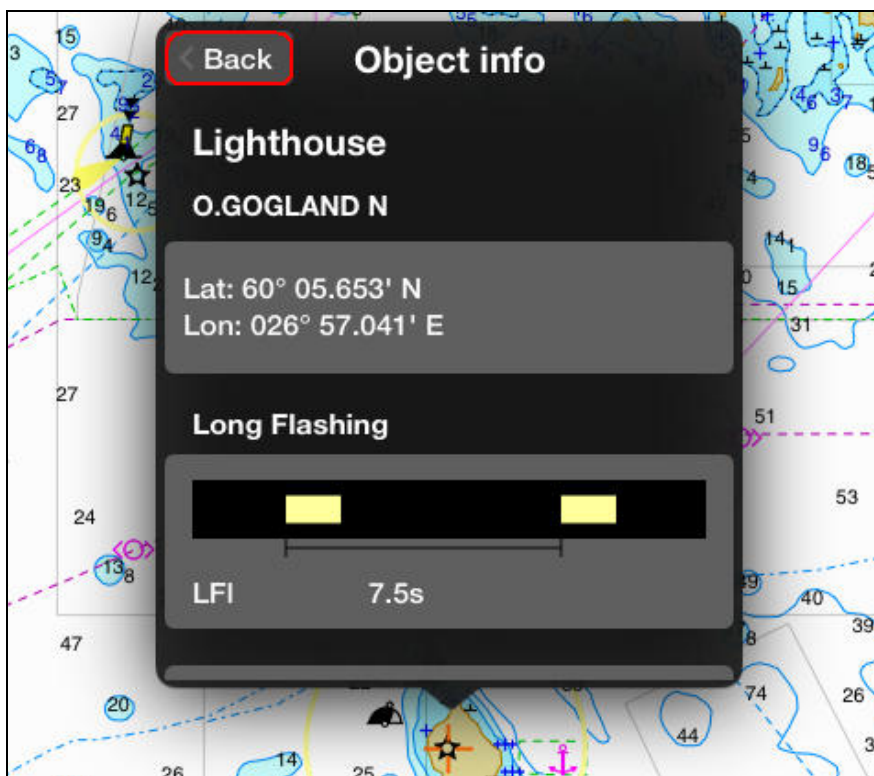


Tap the cursor. In the pop-up window select “INFO” icon.



For obtaining the reference information about the object, tap the necessary menu item in the pop-up window.

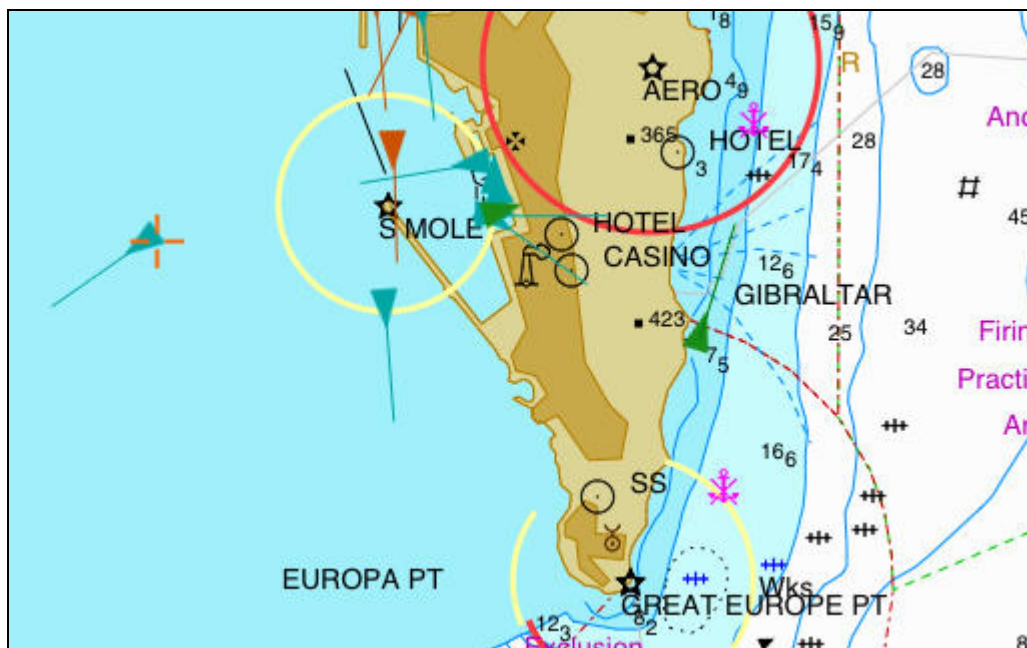




To return to the main menu, press the **"Back"** button. To turn off pop-up window, tap the chart layer.

9.5. AIS TARGET DATA

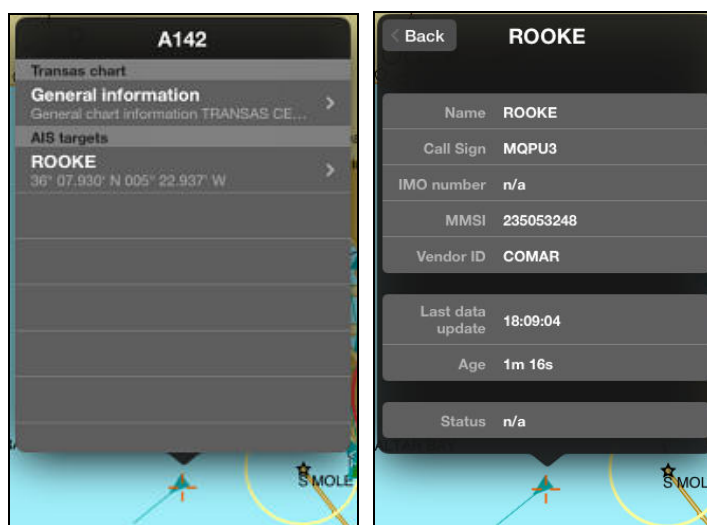
Turn on the display of AIS targets (see paragraph 7.5)



Position the free cursor on the necessary AIS target.



Tap the cursor. In the pop-up window select “INFO” icon.



In the “AIS targets” menu item select the necessary target and tap the arrow. AIS target data card will appear.



Lost AIS targets are shown with the “red cross” symbol on top.

It means that AIS target information was not updated in the defined time period, given in the below mentioned table. After the corresponding timeout the “Lost AIS target” symbol will be dropped from the chart.

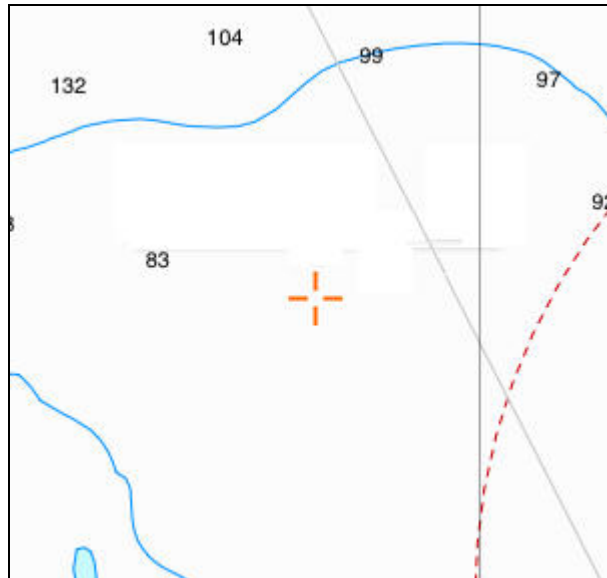
“Lost” and “Drop” timeouts for AIS Class A and Class B targets:

Type	Status	Lost target timeout from latest received VDM message	Drop target timeout from latest received VDM message
Slow speed	Target speed is less than 3 kn	380 sec	410 sec
Middle speed	Target speed is in range of 3-23 kn	40 sec	70 sec
High speed	Target Speed is more than 23 kn	30 sec	60 sec



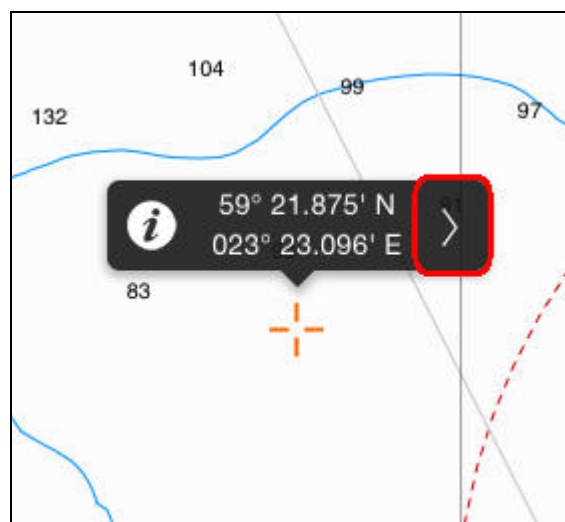
9.6. USER OBJECT CREATION

9.6.1 How to add the “User Object” on the Chart.

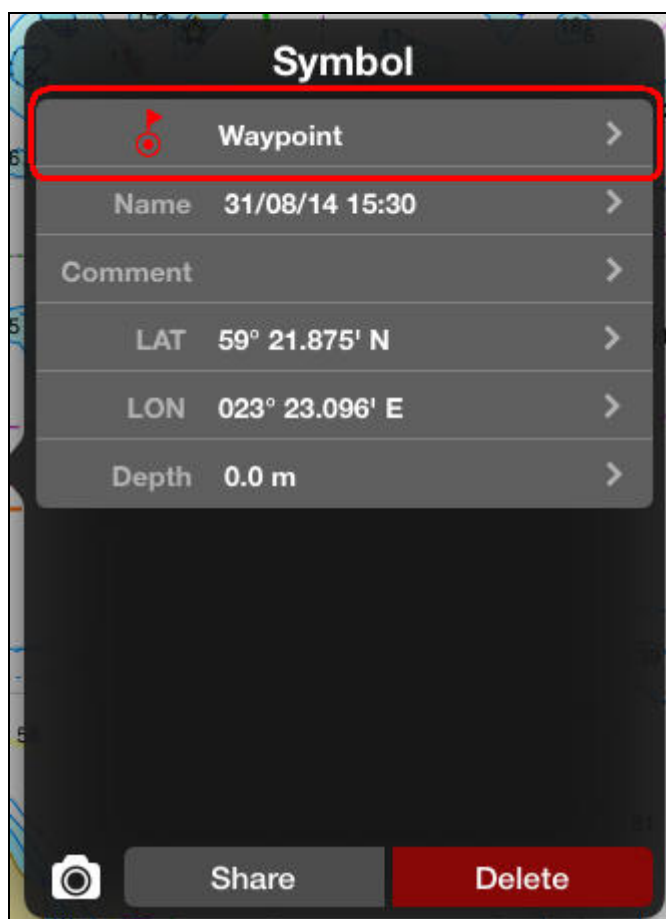


To add new “**User Object**” position the free cursor in the required coordinates.

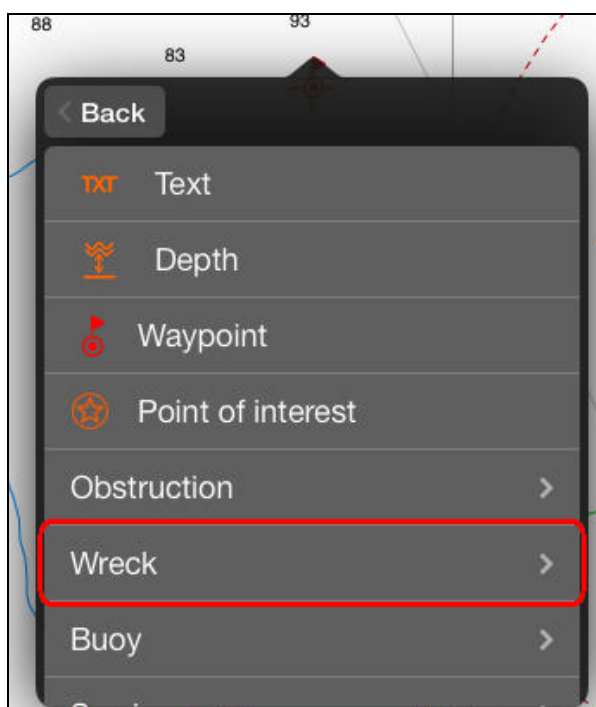
Tap the cursor. In the pop-up window press the arrow.



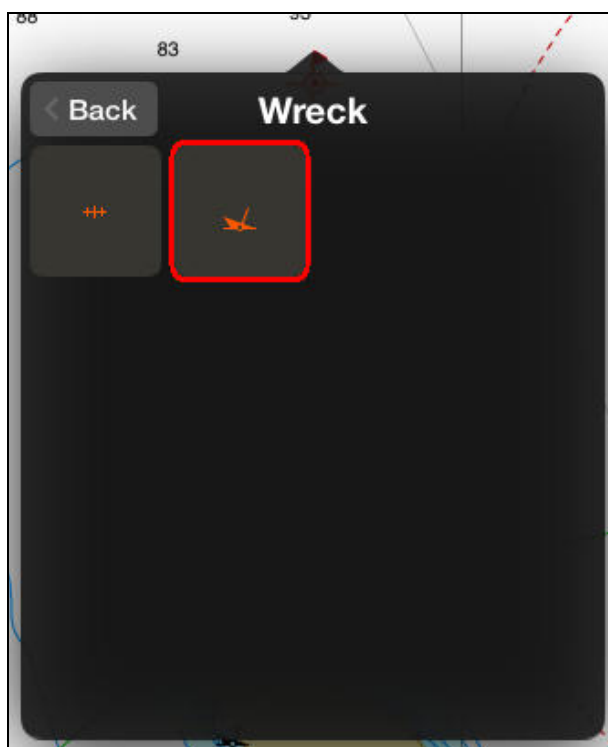
In the pop-up window select the “**User Object**” icon.



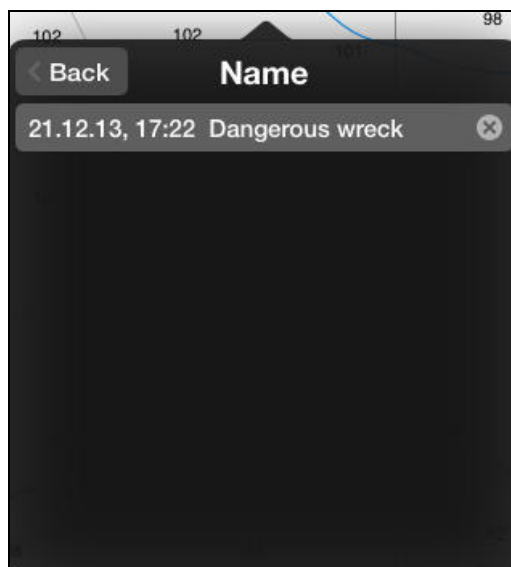
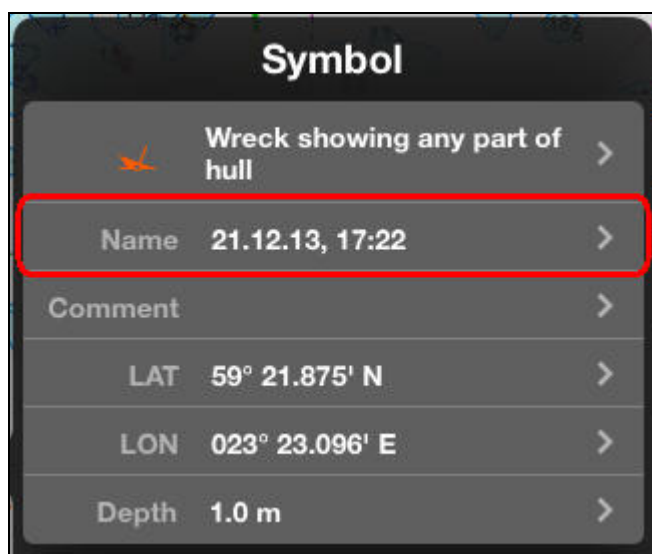
Tap the user object **type** menu.



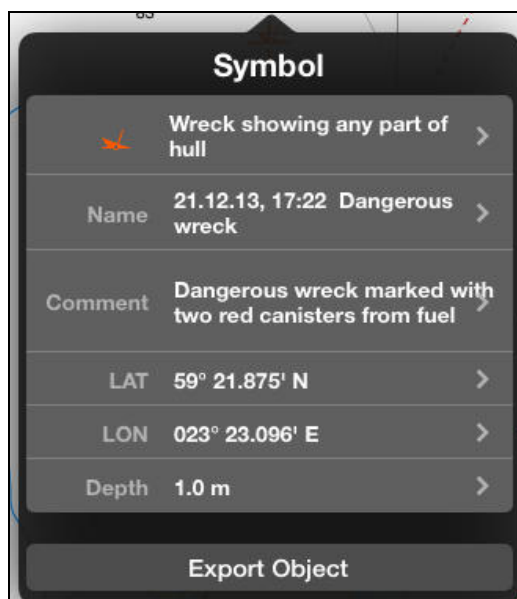
Select the user object type from the list (e.g. "Wreck" on example above).



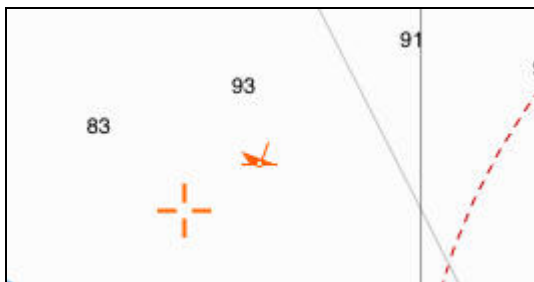
Select user object.



By default the user object is named as time of its creation, if necessary change the user object name. For this tap the **"Name"** menu item. Type the user object name. Tap **"Back"** button. In the same manner add additional info (Comments or Depth) or correct position of the object if necessary:

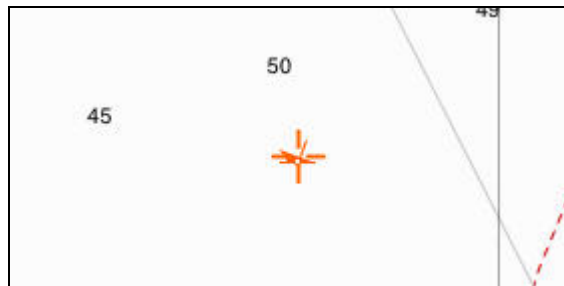


Tap the any point of the chart. User object is ready.

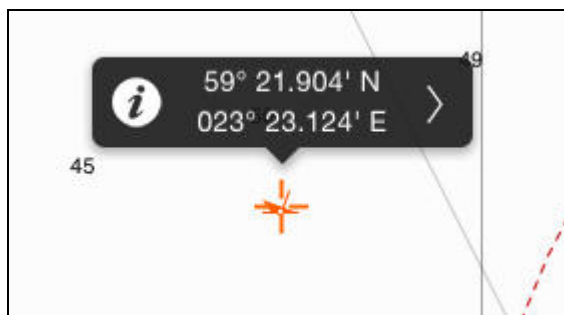




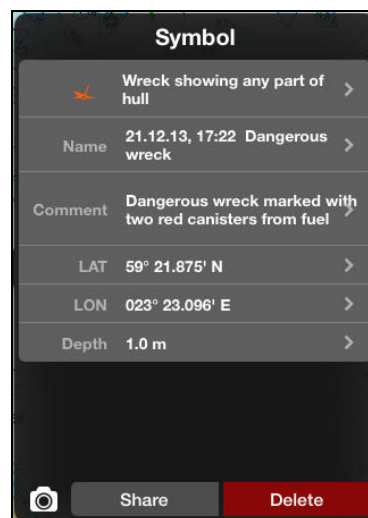
9.6.2 How to delete the User Object from the Chart.



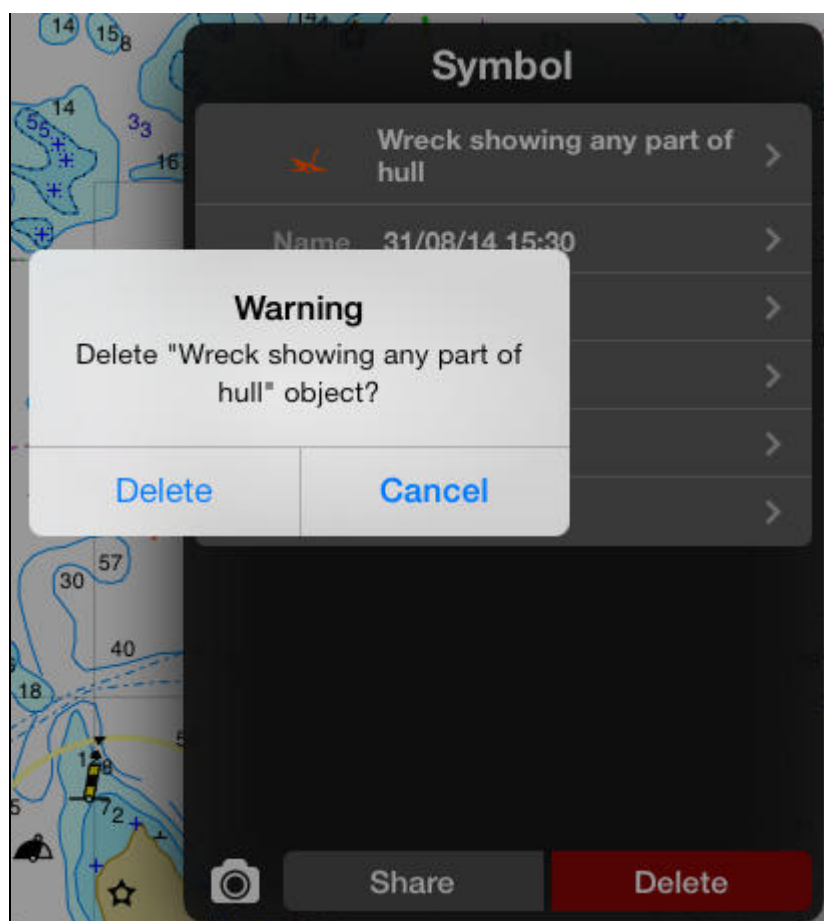
To delete the user object position the free cursor on the object to be deleted.



Tap the cursor. In the pop-up window select **"INFO"** icon.



In the pop-up window press the arrow next to the necessary user object. Press **Delete Object** button.

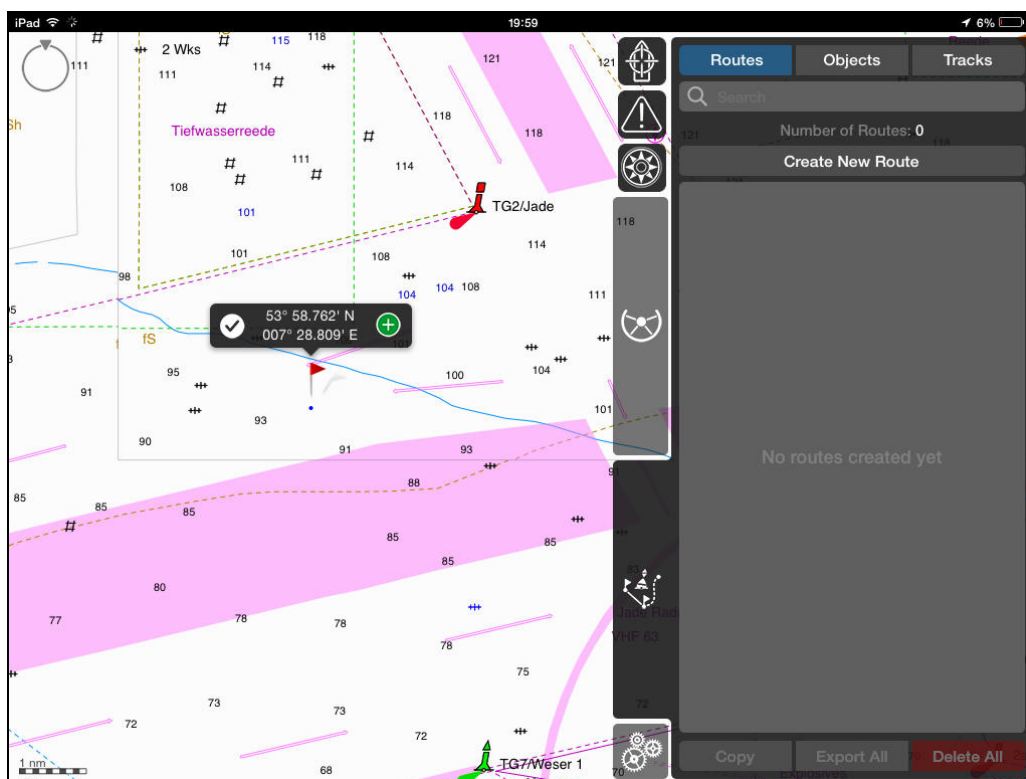


To confirm the deletion press **Delete** button. The user object will be deleted. Tap the any point on the chart to close the Info window.

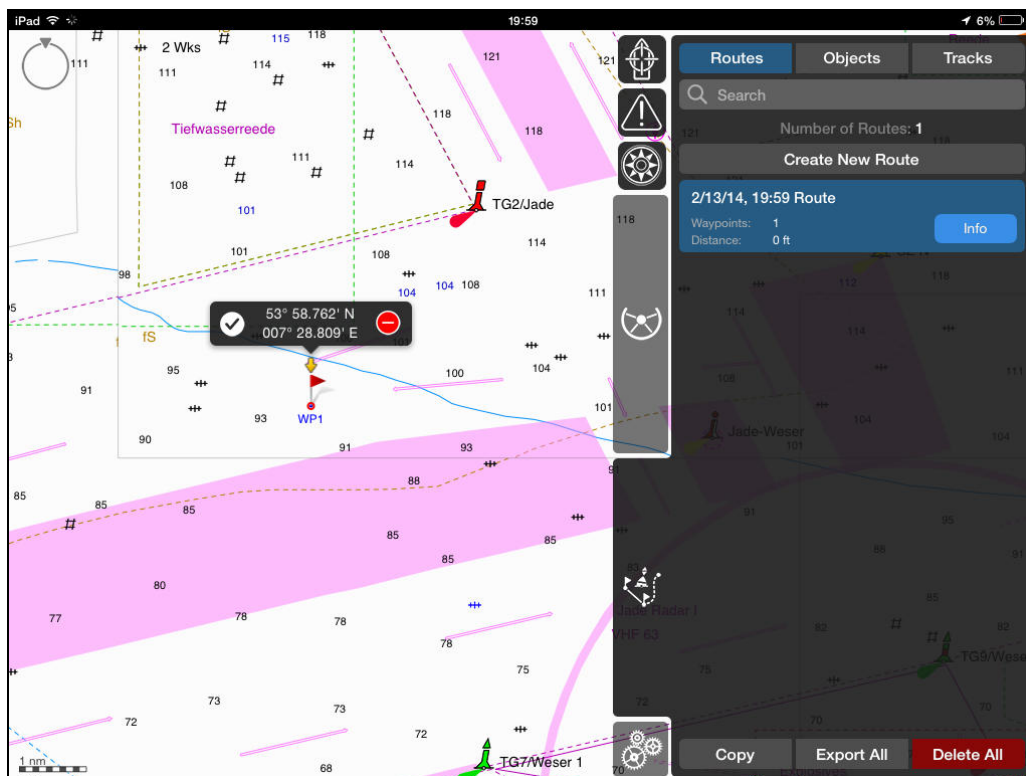


9.7. ROUTE CREATION MODE



9.7.1 How to Create a Route

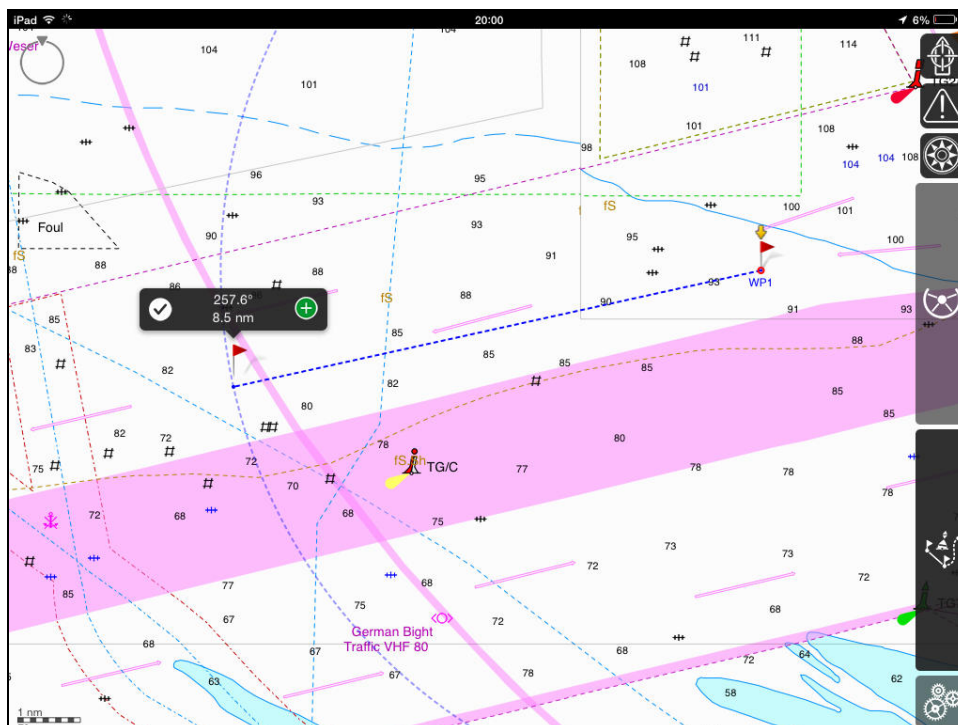



Open the “**User Tools**” page, select the “**Route**” layout. Tap the “**Create New Route**” button. The first waypoint of the route (WP1) will be shown in the centre of the screen with an open pop-up window.

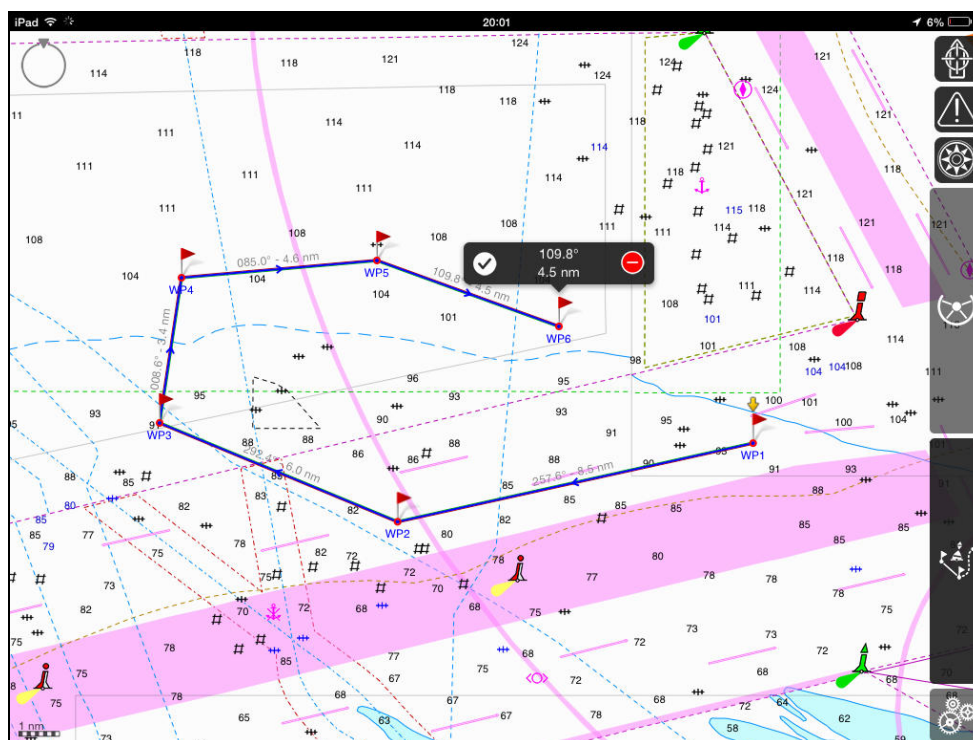





Tap or drag cursor to the accurate position for the first WP and Press “” button. A new route with the first WP will appear in the route list. WP can be deleted via “” button of the cursor call-up window or corrected manually using drag command on the chart layer.



Main Information panel can be closed for convenience. Tap on the chart to plot the second WP. Second WP will be plotted after confirmation via “” button of the cursor call-up window.

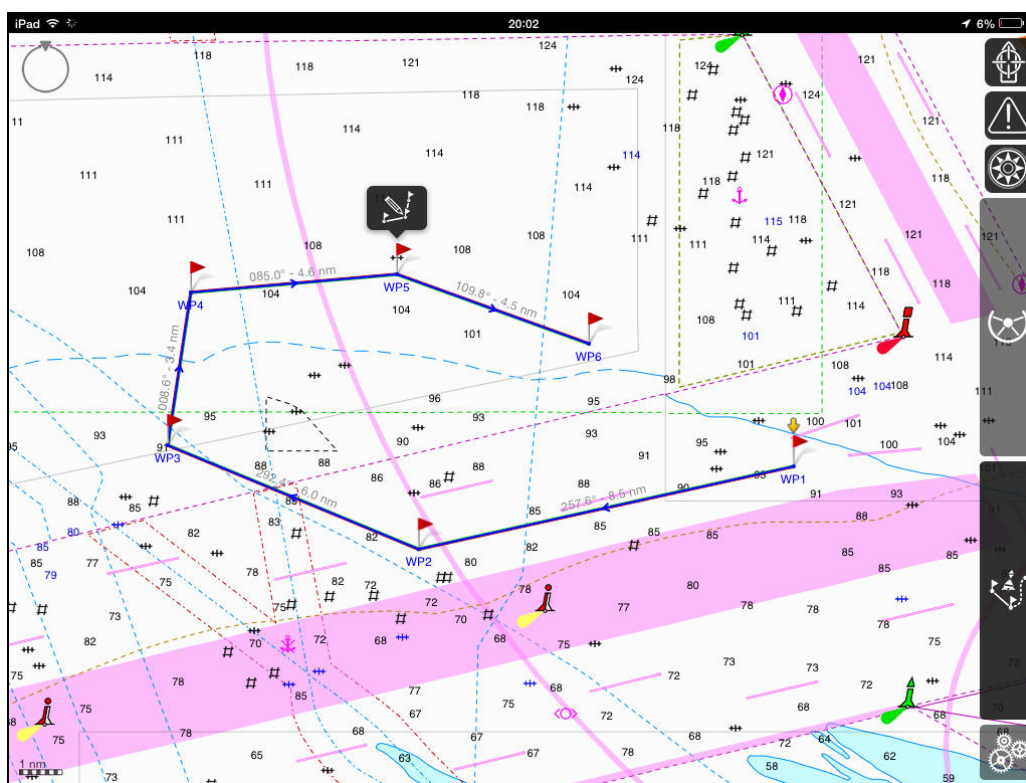


After setting the last point, in the pop-up window tap the “” icon to exit from the plotting mode.

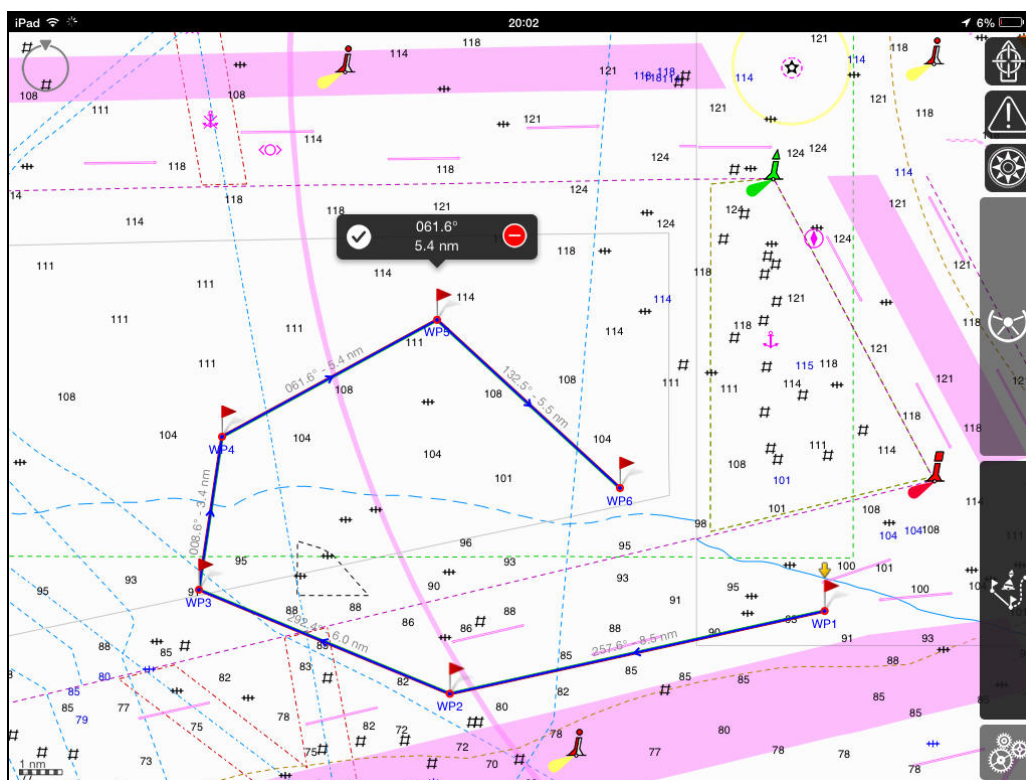


9.7.2 How to Change Coordinates of an Existing WP

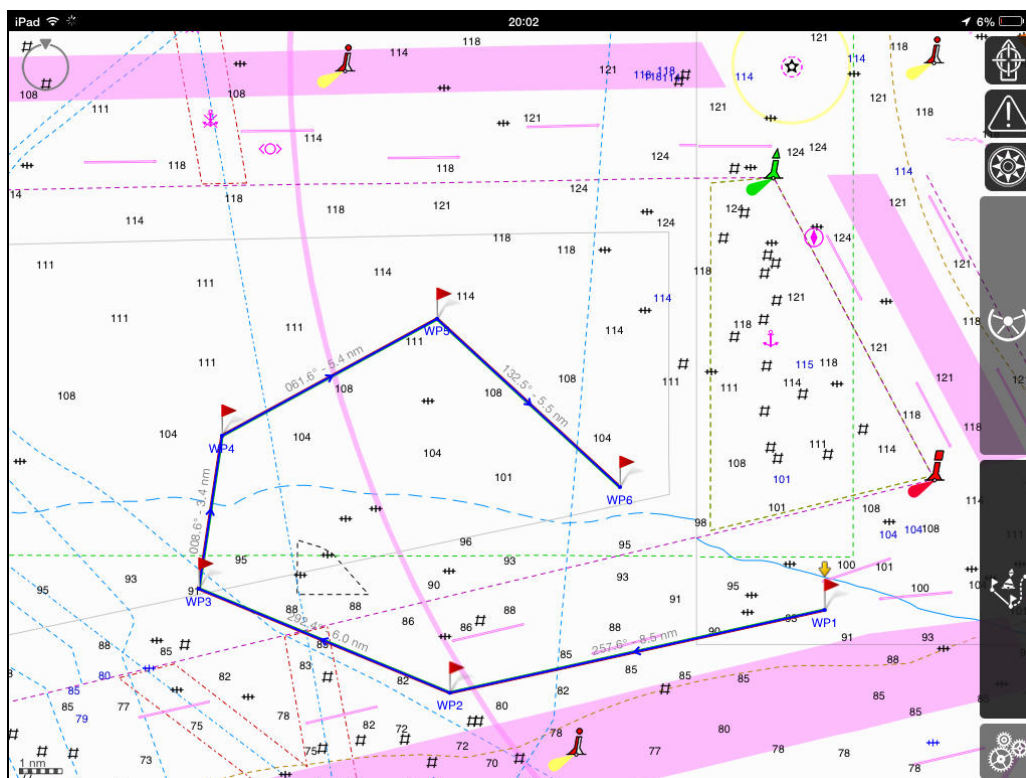
Tap the WP, which coordinates should be changed.



In the pop-up window tap the “**Rout Editor**” icon.



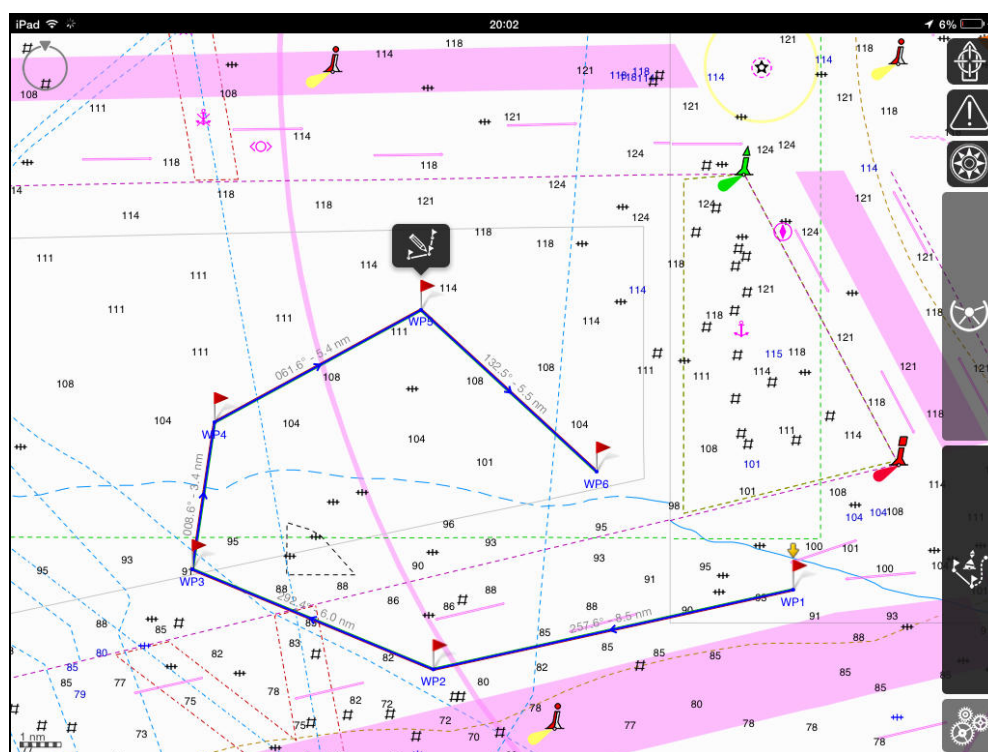
Drag the **WP** to the new position.



In the pop-up window tap the “” icon to exit from the plotting mode.

9.7.3 How to Add a New WP

Tap the start or end waypoint of a route leg where new WP should be added:



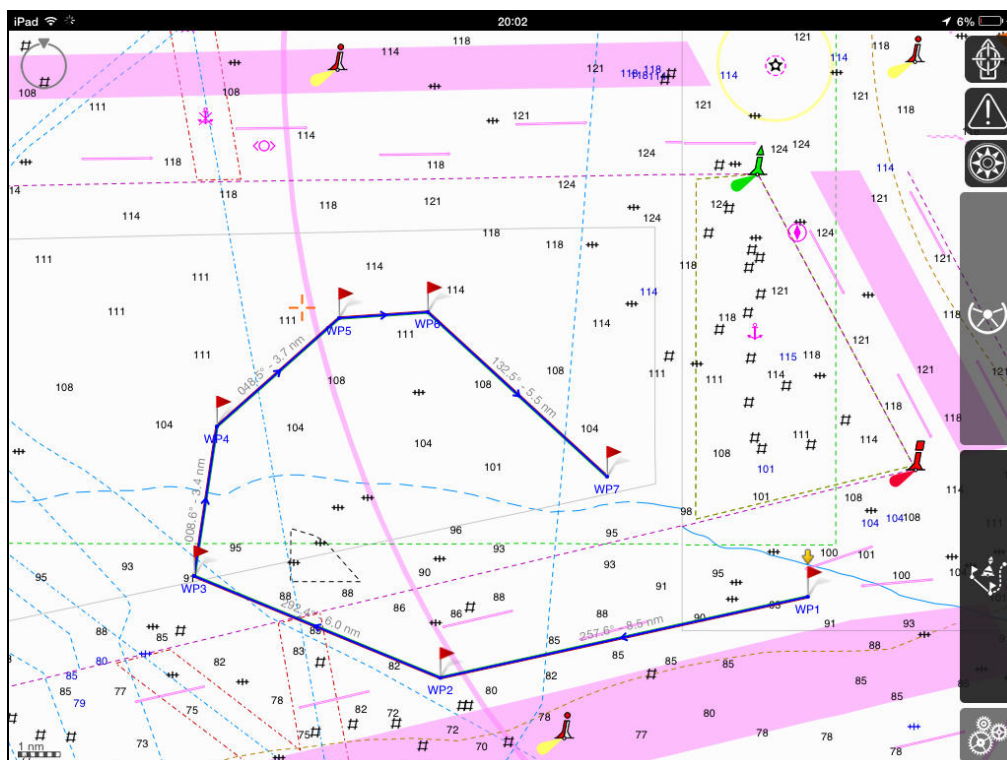
In the pop-up window tap the “**Route Editor**” icon.



Tap any point near the route leg – to add additional waypoint for that leg. The pop-up window will display the “+” icon. Drag the new WP to the necessary position and tap “+” icon.



In the pop-up window tap the “✓” icon to exit from the plotting mode.



9.7.4 How to Delete an Existing WP

Tap the WP which should be deleted.





In the pop-up window tap the “Route Editor” icon.



The pop-up window will display the “” button icon. Tap this icon to deleted WP.



New leg will be shown by the solid line, previous leg – by the dotted line. Tap “” icon to return the previous WP or “” icon to exit from the plotting mode.

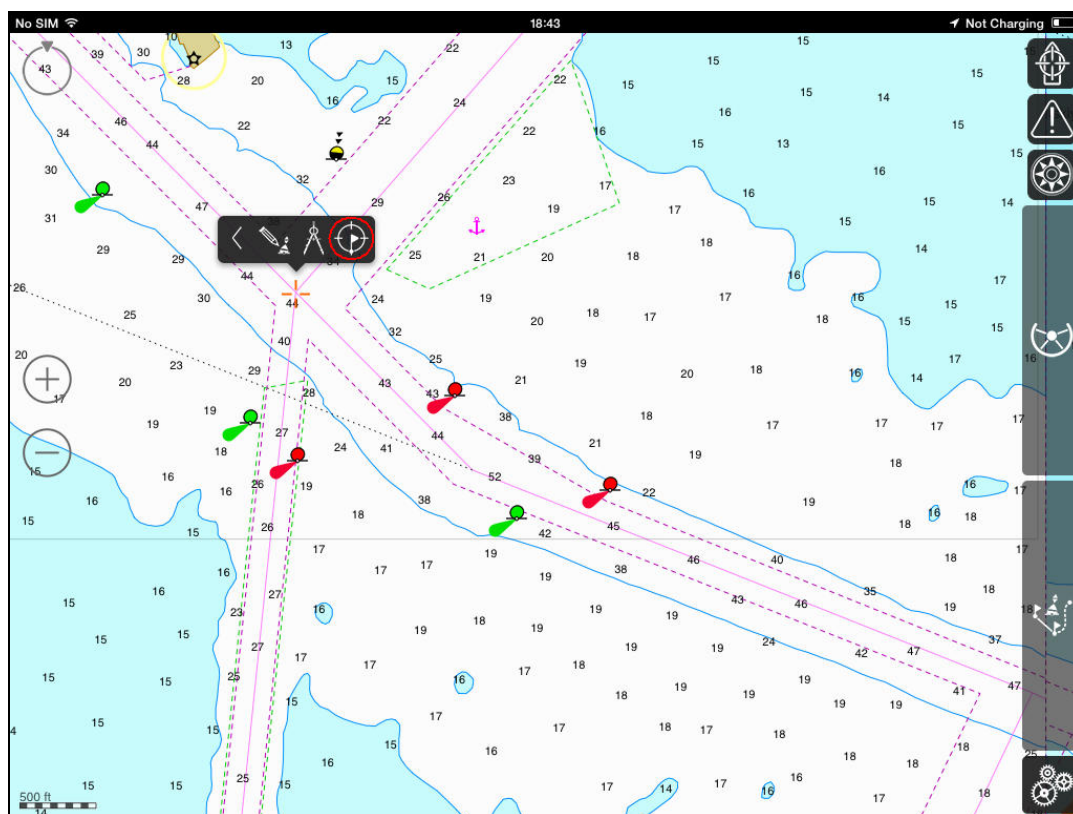


Position the free cursor on the necessary point in the Chart Layer.

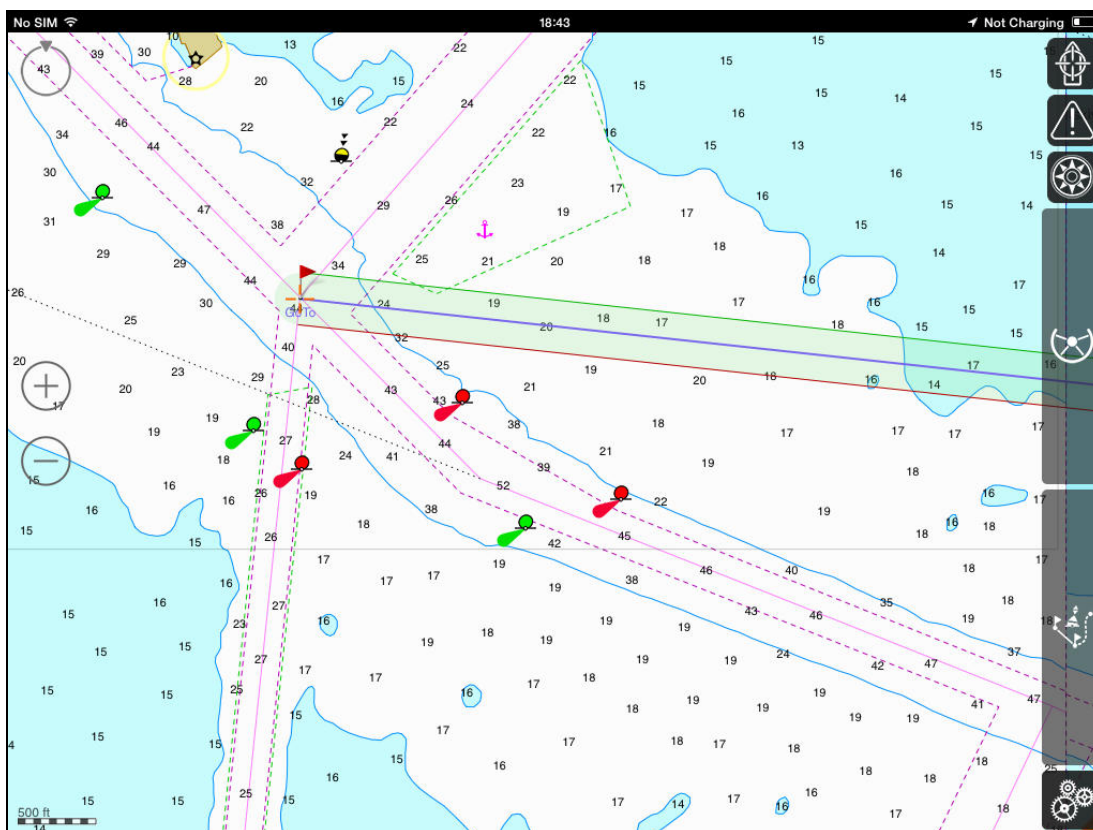


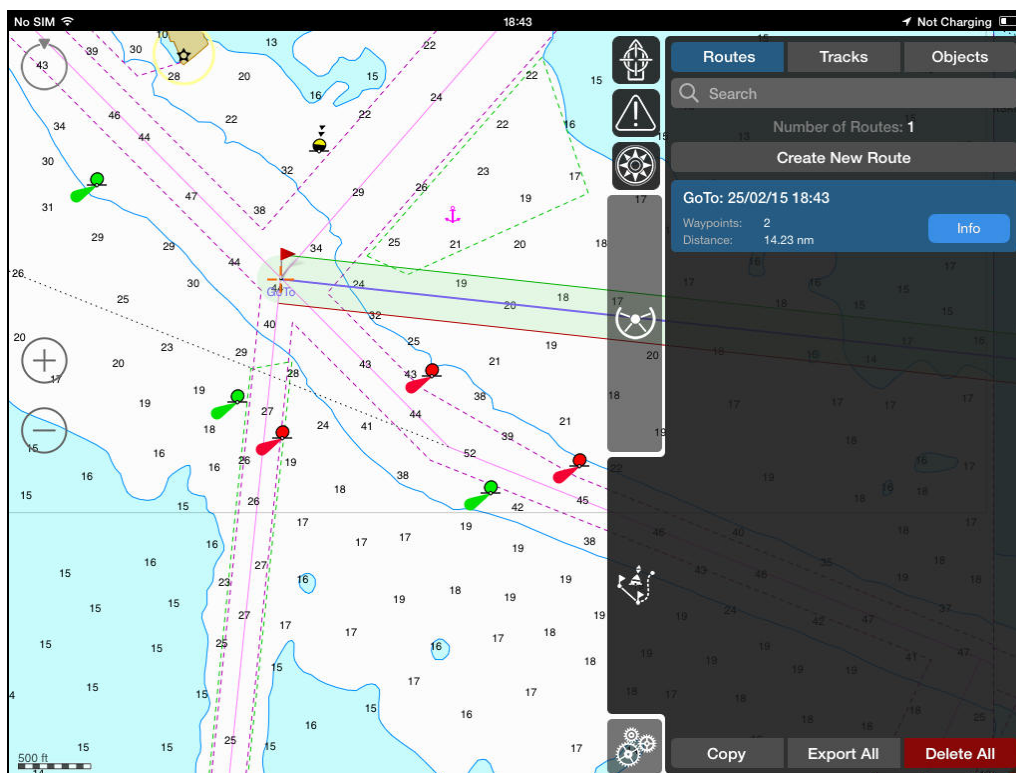


Tap the cursor, in the pop-up window use “arrow” button and select “GoTo” icon:



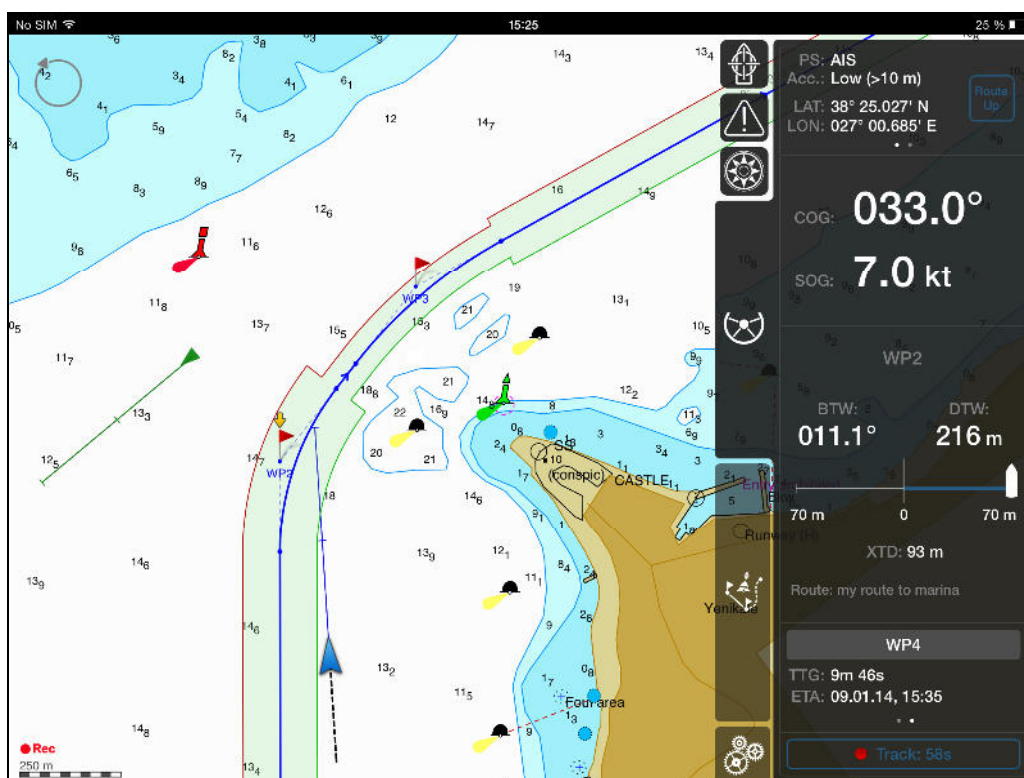
The “Go To” route will be created from Own Ship position automatically, stored in the **List of Routes** and loaded into Monitoring!

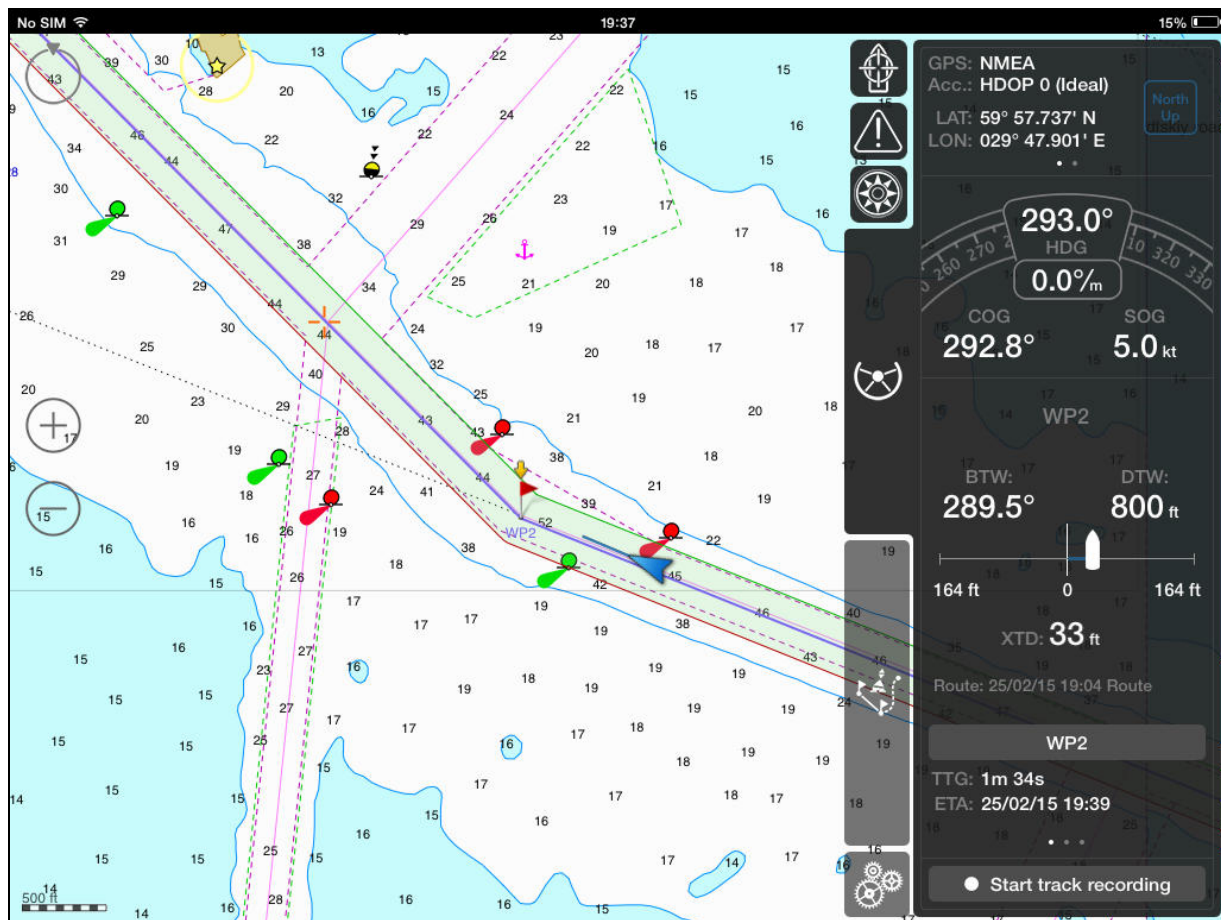




10. “MONITORING” PAGE

To open the “Monitoring” page, press the button as shown in the figure below:

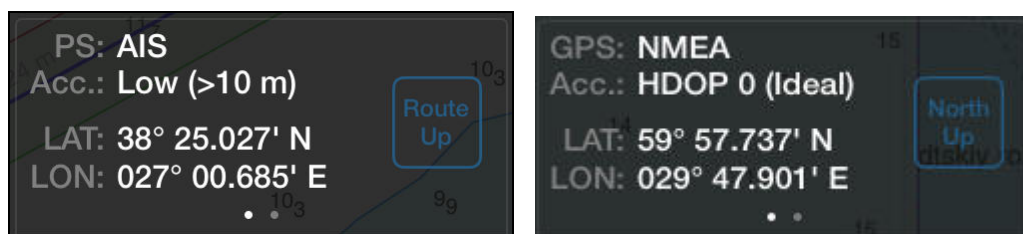




The “Monitoring” page consists of the following widgets:

- “Position Data”;
- “Sensor Data”;
- “Route Data” and “Schedule Information”, “Echo Sounder Data” (option), “Wind Data” (option);
- “Track recording” functionality.

10.1. “POSITION DATA” WIDGET

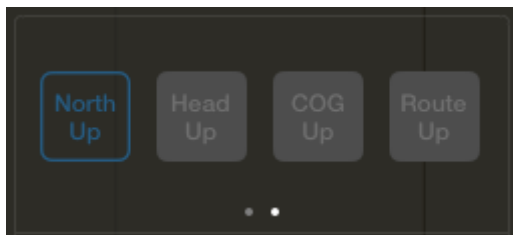


The following information is displayed in the “Position Data” widget:

- PS - display of the positioning system and coordinates obtained from it. AIS or IOS positioning sensors are selected in the “Sensors” menu item (see above Chapter 7, paragraph 7.5. “Sensors” menu item);
- Acc. - the positioning accuracy by IOS or AIS.

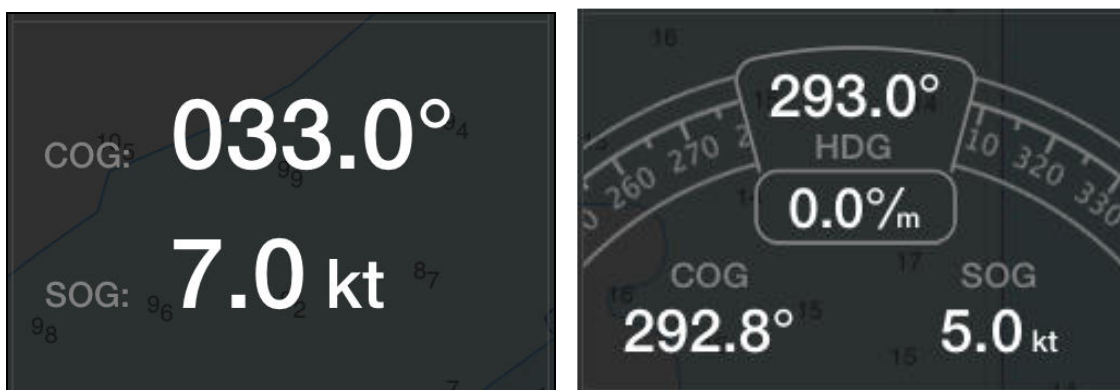


Slide the current page to the right (or left) side to show another page. The following **Chart Orientation** buttons are located on this page:



- **North Up** button - the chart orientation to the True North;
- **Head Up** button - chart orientation set to the Ship's Heading;
- **COG Up** button - the orientation by the Course-Over-Ground data;
- **Route Up** button - the orientation by the direction of the current leg of the monitored route.

10.2. “SENSOR DATA” WIDGET

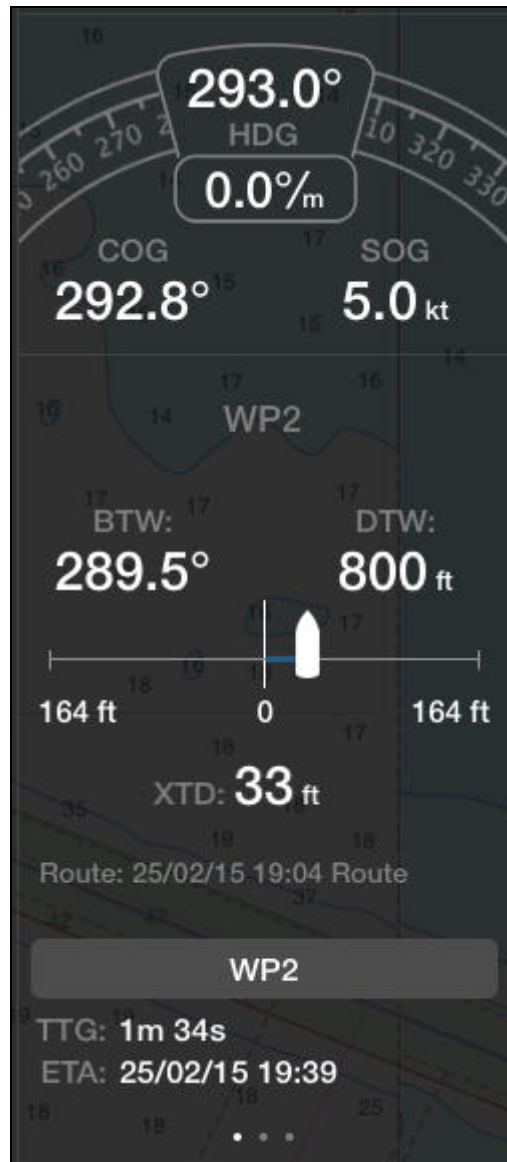


The following data is displayed in the “Sensor Data” widget:

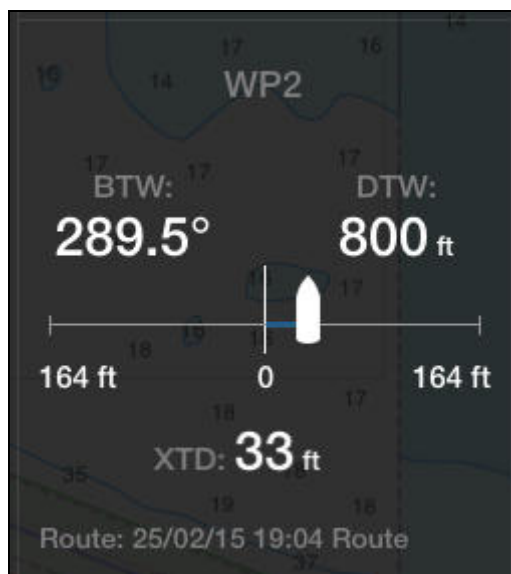
- **HDG** – boat Heading;
- **ROT** – boat Rate of Turn;
- **COG** – boat Course-Over-Ground;
- **SOG** – boat Speed-Over-Ground.



10.3. “ROUTE DATA” AND “SCHEDULE INFORMATION” WIDGETS

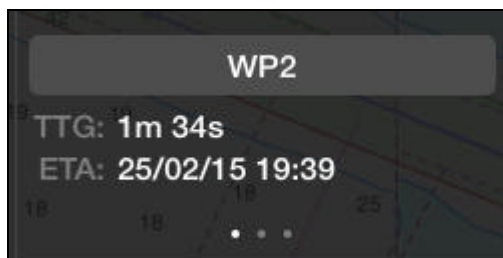


Slide the current page to the right (or left) side to show another page



The next information is displayed in the “**Route Data**” widget:

- **WP(xxx)** - waypoint number and name of the current WP which the ship is proceeding to;
- **BTW** - bearing to the current waypoint;
- **DTW** - distance to the current waypoint;
- **XTD bar** - actual XTD direction and adjusted Cross-Track-Distance limits from the route table;
- **XTD** - actual XTD value;
- **Route** - the name of the monitoring route.



Press to “**WP ...**” button to select the necessary waypoint.

This page of “**Schedule Information**” widget displays the next data:

- **TTG** - time to go to the selected waypoint calculated with regard to the actual ETA;
- **ETA** - estimated time of arrival in the selected waypoint calculated from the remaining distance and SOG.

Slide the current page to the right (or left) side to show another page



10.4. “ECHO SOUNDER DATA” WIDGET



If the additional option of the NMEA Echo Sounder is purchased and the NMEA Echo Sounder device is connected via Wi-Fi, on this widget, will be present: depth range colored bottom profile (history of an echogram), water temperature and the current depth.

The next information is displayed in the “**Echo Sounder Data**” widget:

- **TEMP** – temperature of water under the boat;
- **DPT** – depth under the boat.

Adjustable parameters of this widget are described in
Chapter 7, paragraph 7.7. “Boat Sensors” menu item.



10.5. “WIND DATA” WIDGET



The next information is displayed in the “**Wind Sensor**” widget:

AWA – Apparent wind angle;

TWA – True wind angle;

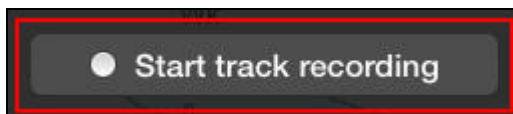
TWD – True wind direction;

TWA is shown in the “magnifier” mode instead of the TWD value.

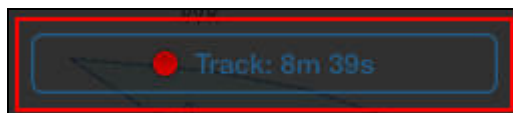
TWD is still available in the standard presentation mode.



10.1. “TRACK RECORDING” FUNCTIONALITY



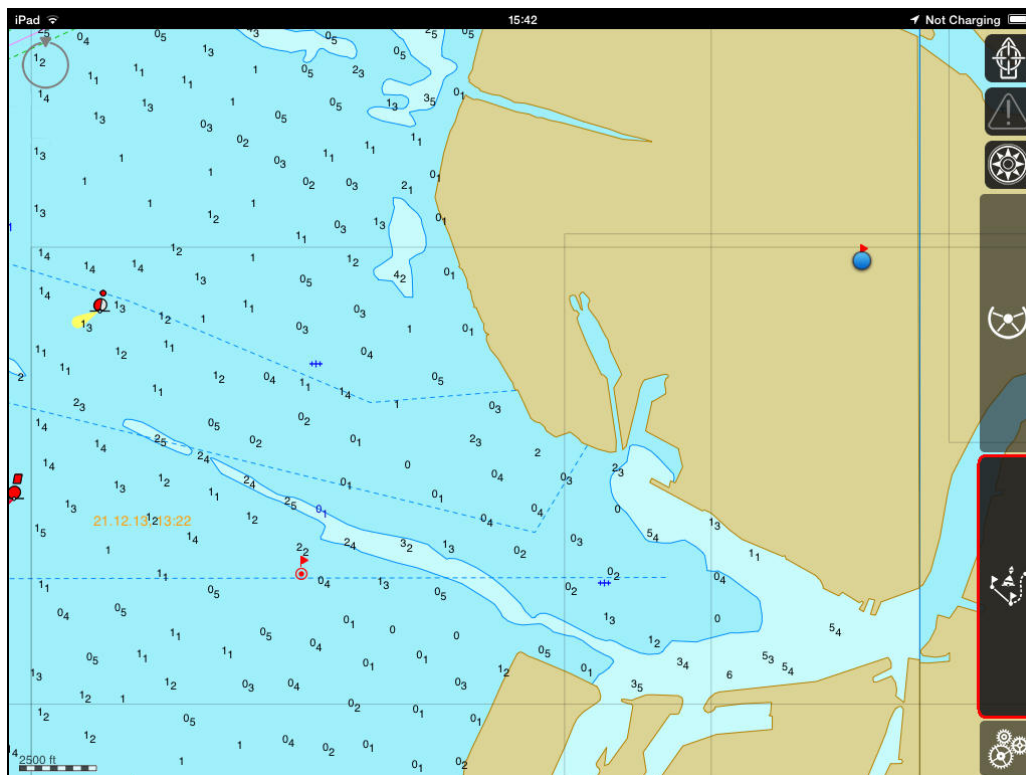
Start track recording button is intended for recording of the own ship detailed track.



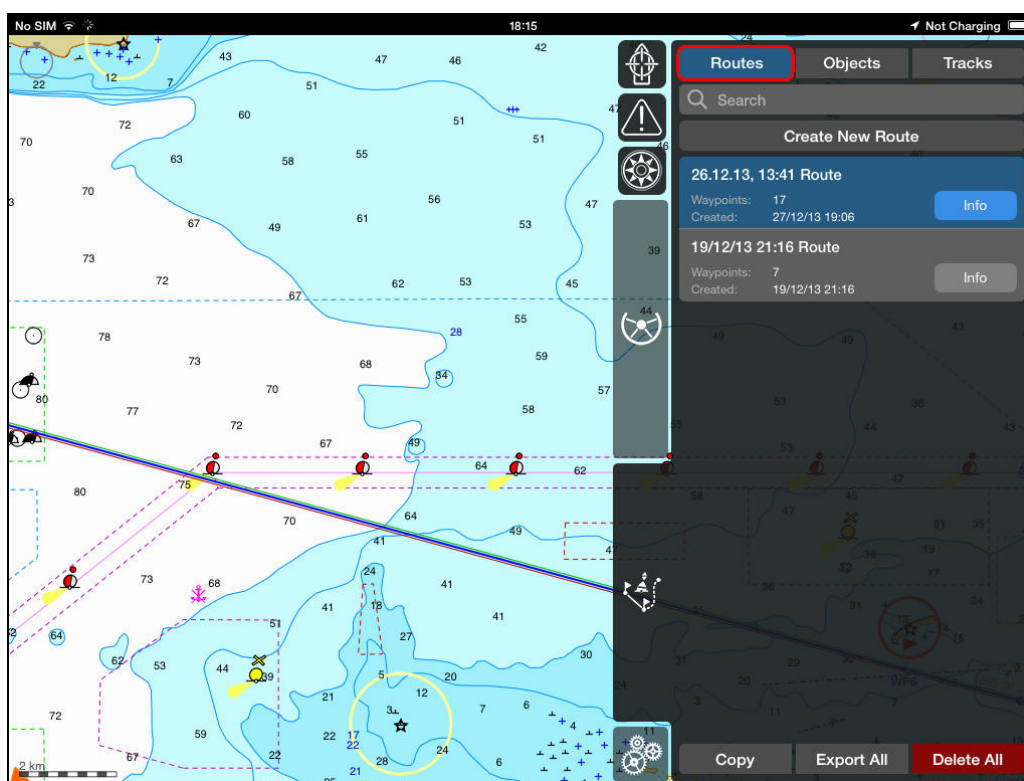
To stop track recording, press this button and in the appeared warning window, confirm the stop recording.

11. “USER TOOLS” PAGE

11.1. “ROUTE” LAYOUT

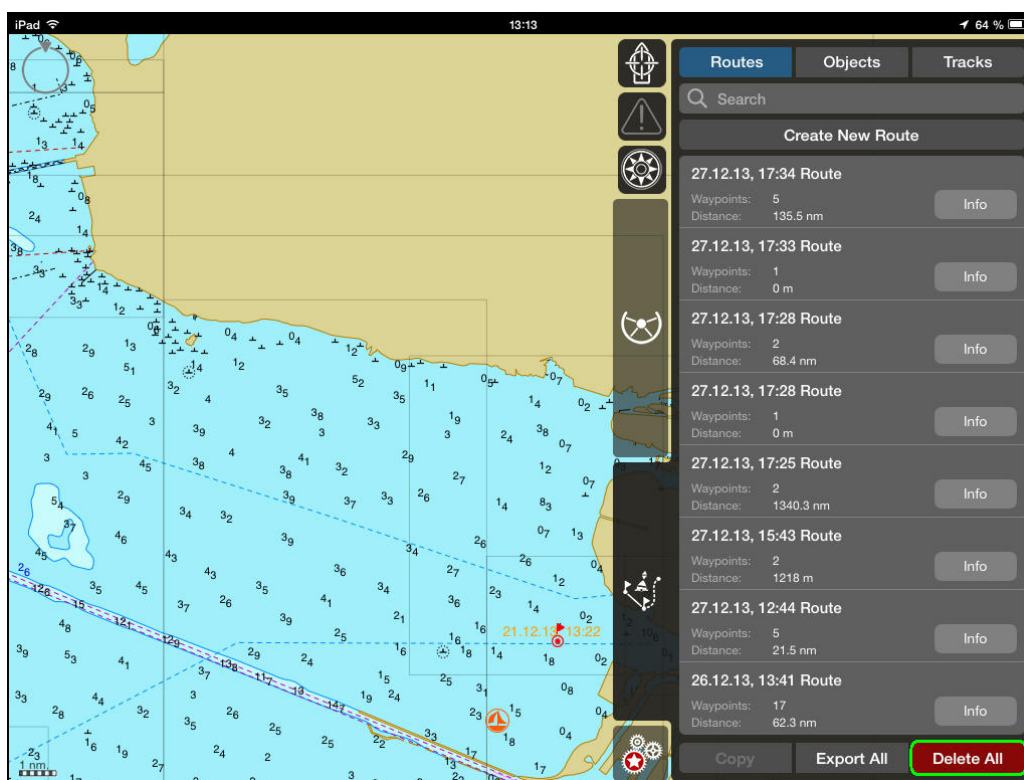


Open the “User Tools” page.

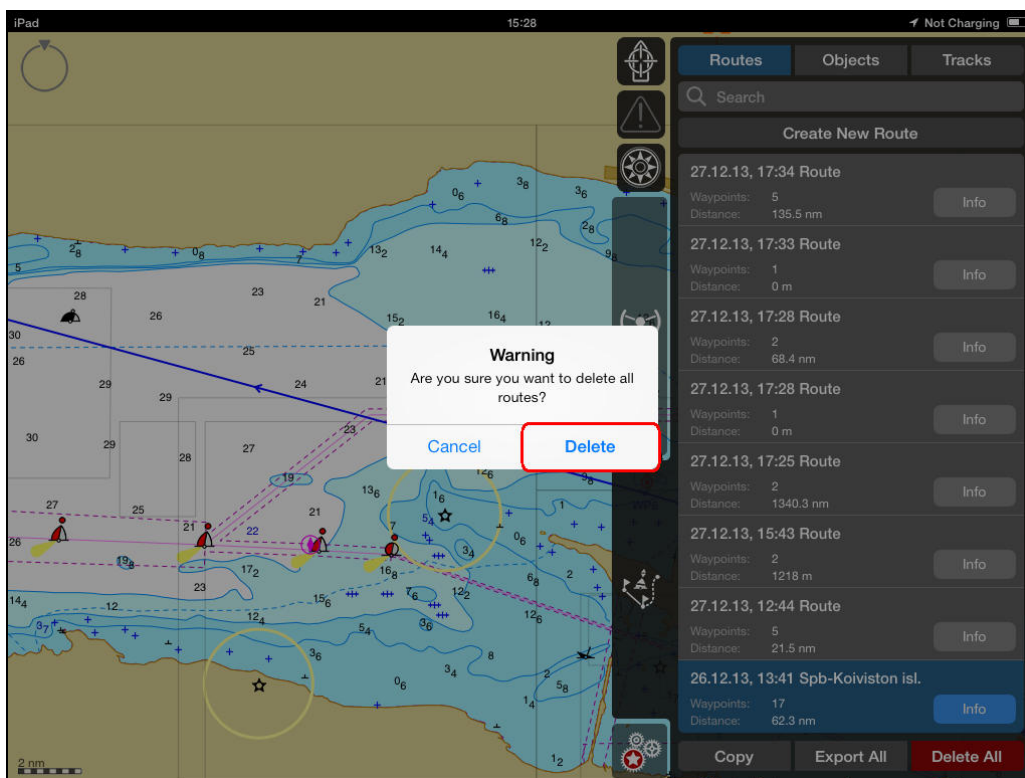


Tap the **“Routes”** button on top. **“Routes”** page is intended for handling routes.

To create new route see paragraph 7.7. To Export all user objects see paragraphs 10.3 and 10.4.



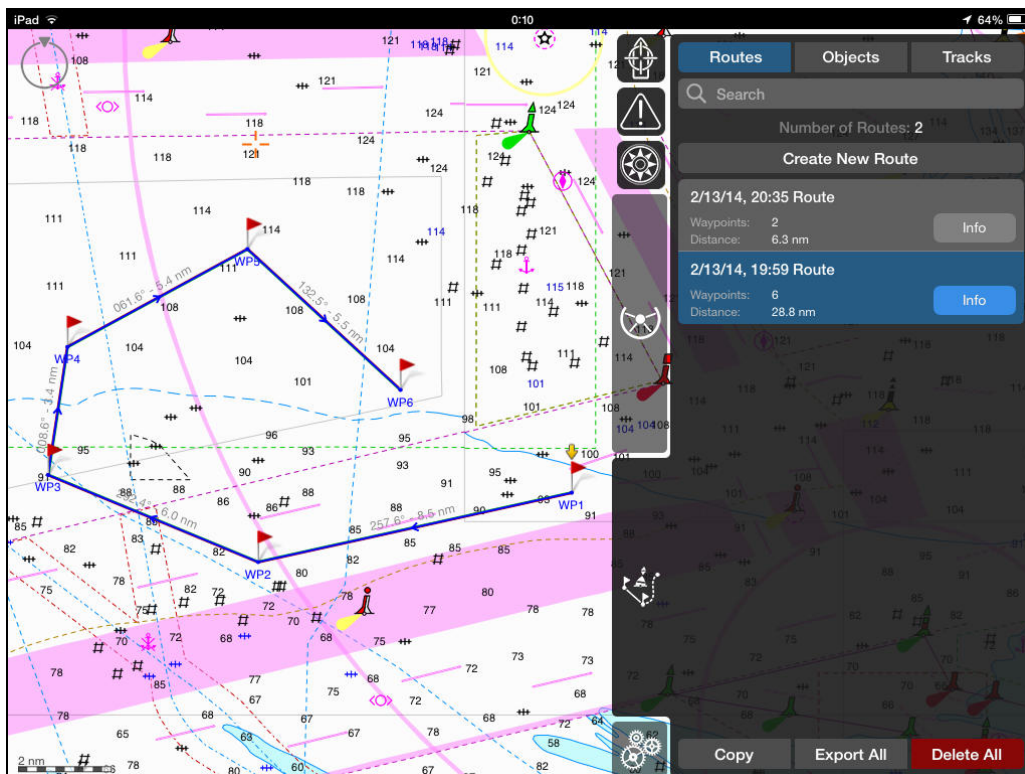
To delete all routes tap the **“Delete All”** button.



To confirm the deletion press “Delete” button. All routes will be deleted.

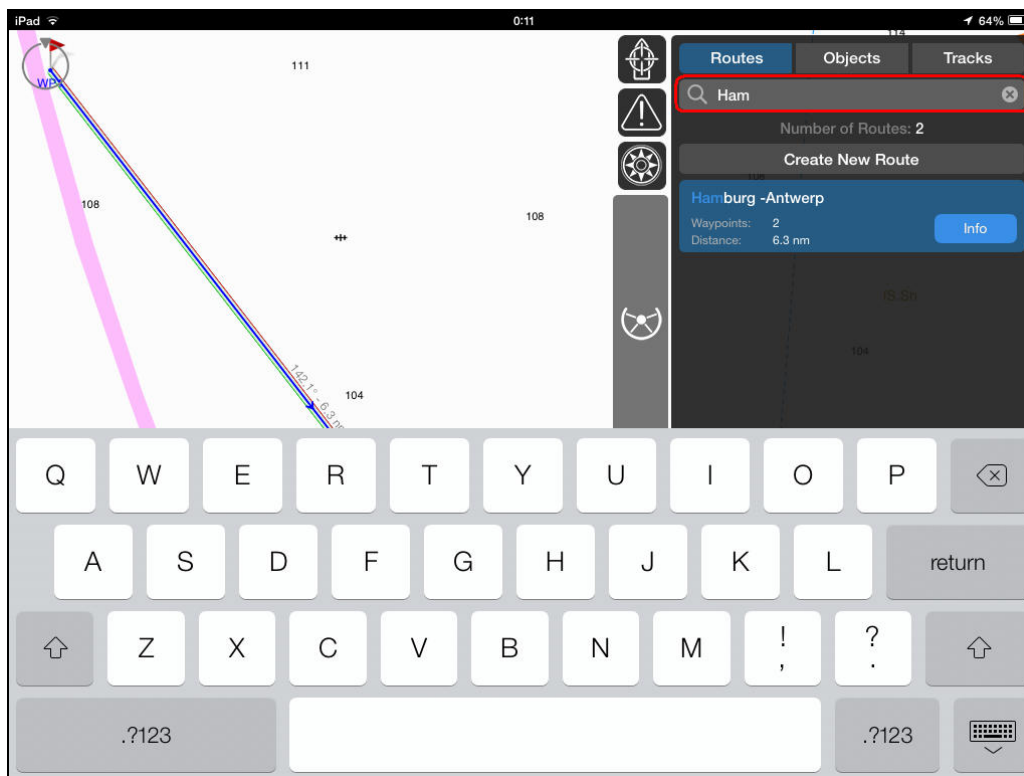
11.1.1 List of Routes

List of routes is intended for selection the route to “load for view and monitoring” and operations with it.

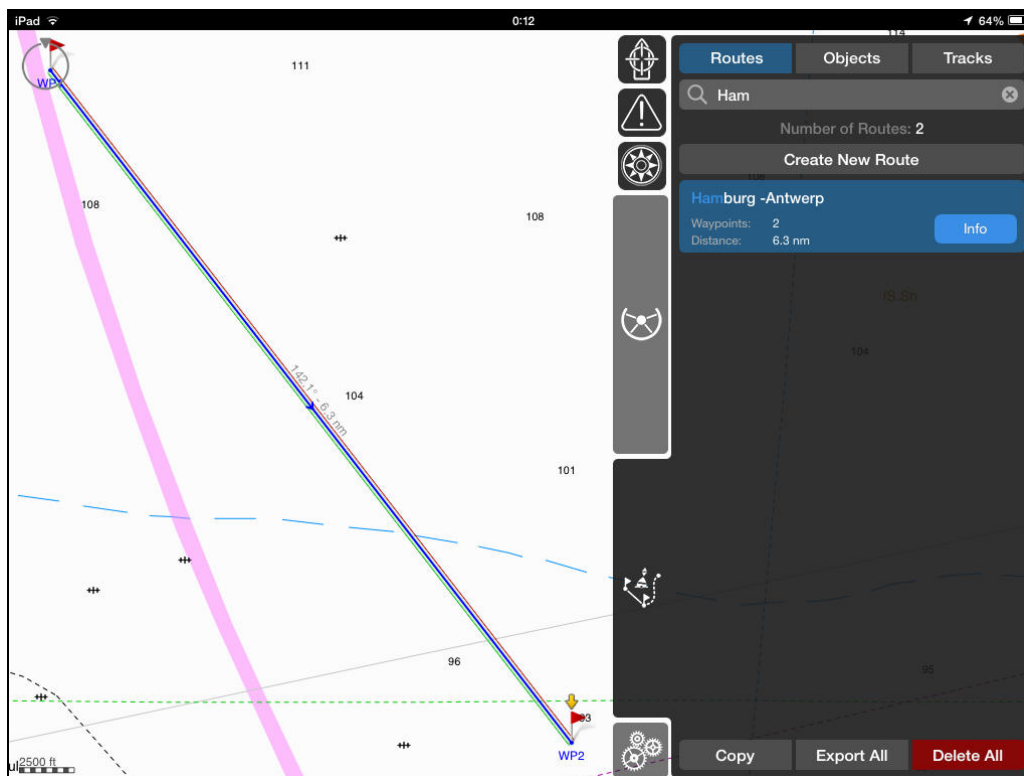




All routes which were stored in the “iSailor” app are presented in the list of routes. Tap any route from the list for selection. **Focus On Route** function is also available after selection.



To search route in the **List of routes** tap the “Search” line. Type the some characters of the route name.

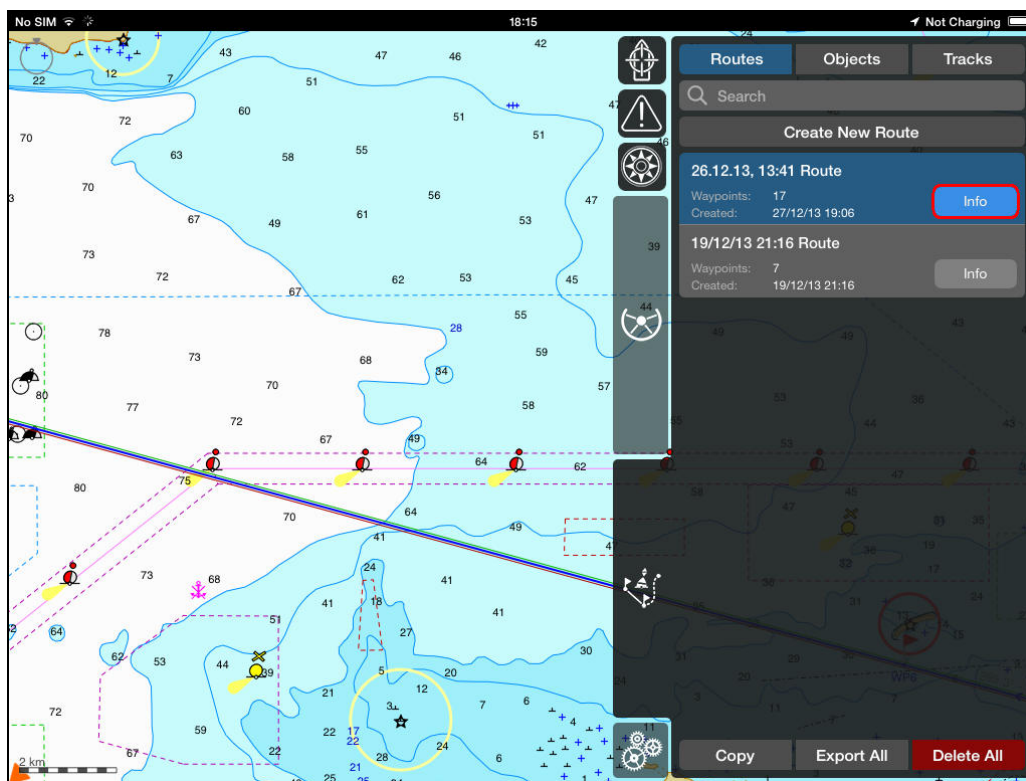


Tap the “return” button and hide keyboard. All routes which name contains the entered characters will be displayed on the screen.

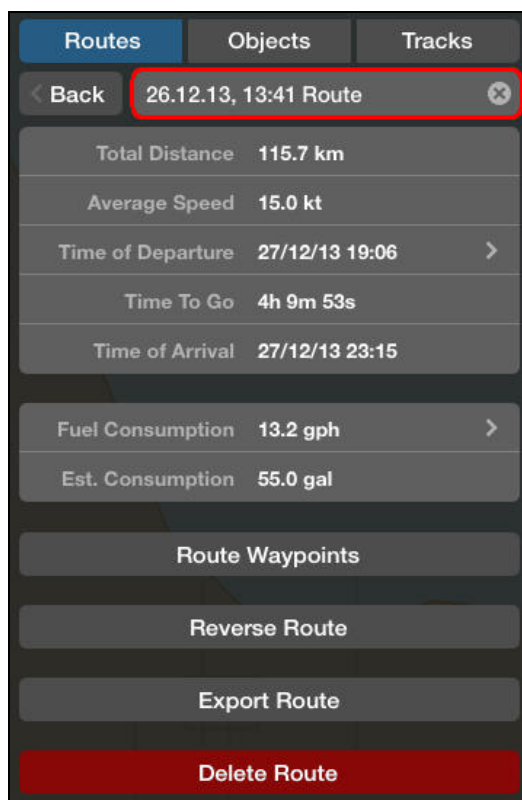


11.1.2 Route Editing mode

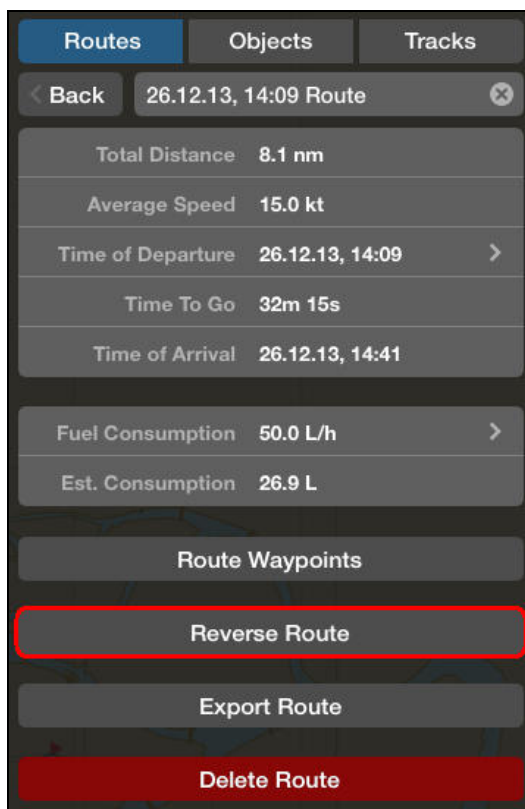
At first the route must be created graphically as it is described in paragraph 7.7.



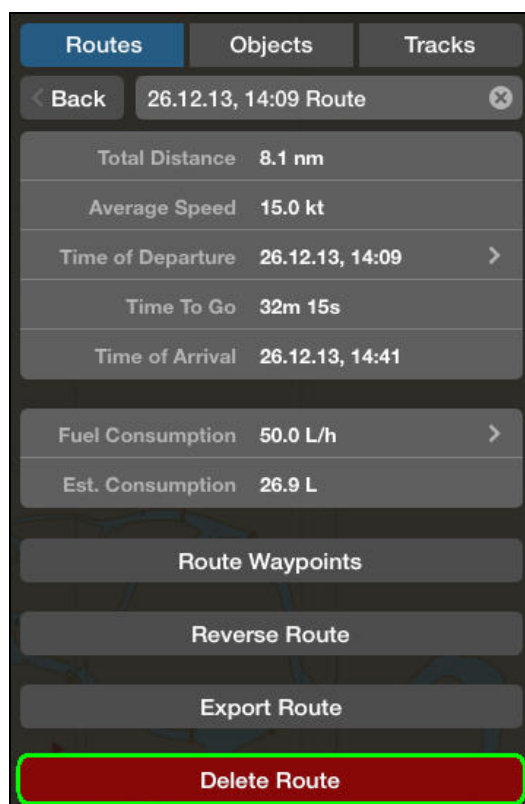
Tap the “Info” button.



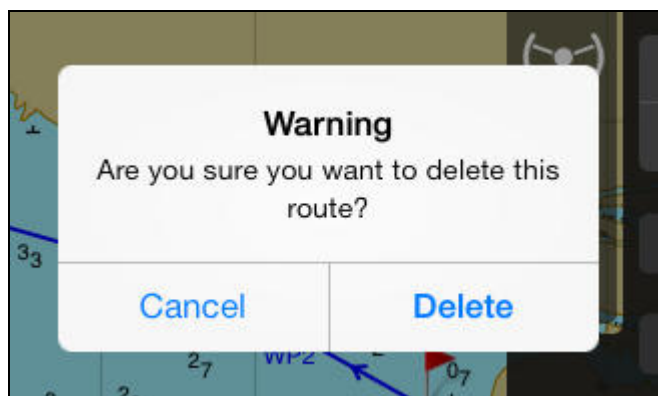
By default the route name contains the time of the route creation. Tap the line with route creation time to modify the name of the route.



To create the route with the WPT order reverse to that in the active route tap the “**Reverse Route**” button.



To delete the route tap the “**Delete Route**” button.

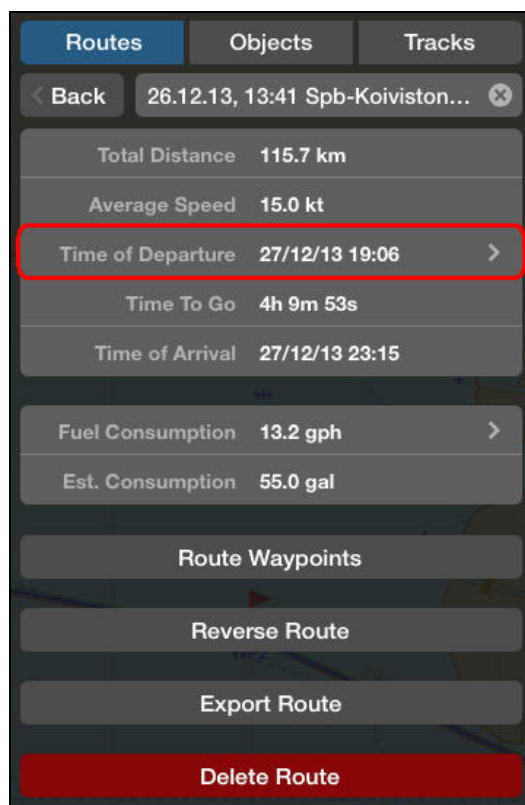


Tap the “**Delete**” button to confirm the deleting. The route will be deleted from the list.

For Route Export see paragraphs 10.3 and 10.4.

11.1.3 Schedule Calculation

Create the route as described in paragraph 9.7



Tap the “**Time of Departure**” line.



Tue Dec 24	15
Wed Dec 25	16
Thu Dec 26	17
Fri Dec 27	18 00
Sat Dec 28	19 01
► Sun Dec 29	20 02
Mon Dec 30	21 03

Set the **Estimated Time of Departure (ETD)**. Tap “**Back**” button.

Routes Objects Tracks

< Back 26.12.13, 13:41 Spb-Koiviston... ✕

Total Distance	115.7 km
Average Speed	15.0 kt
Time of Departure	27/12/13 18:00 >
Time To Go	4h 9m 53s
Time of Arrival	27/12/13 22:09

Fuel Consumption	13.2 gph >
Est. Consumption	55.0 gal

Route Waypoints

Reverse Route

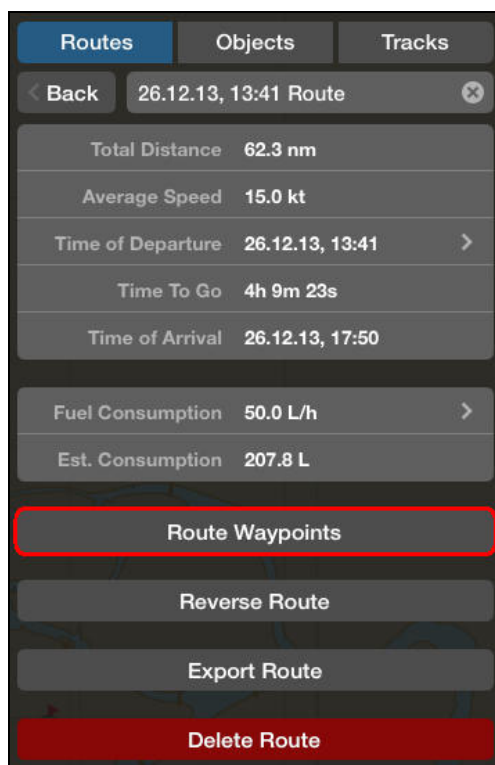
Export Route

Delete Route

The **Route Schedule** will be calculated, Time of departure and the boat speed set in the “**Settings**” menu (see paragraph 7.7) or adjusted separately for the each route leg (see paragraph 11.1.5) are taking into account.



11.1.4 Waypoint List and WP Editing



To open Waypoints List tap the “**Route Waypoints**” button.



The Waypoints List contains all route WPs and their corresponding data:

- **WP** – WP number and name set by the user manually;
- **LAT** – WP latitude coordinate set automatically with the use of the graphic editor;



- LON – WP longitude coordinate set automatically with the use of the graphic editor;
- CRS – course from the previous WP to the current WP;
- DIST – distance from the previous WP to the current WP;
- XTD – safe zone of the route leg, set by the user;
- RAD – user-set turn radius;
- SPD – speed on the route leg from the previous WP to the given WP.

11.1.5 WP editing

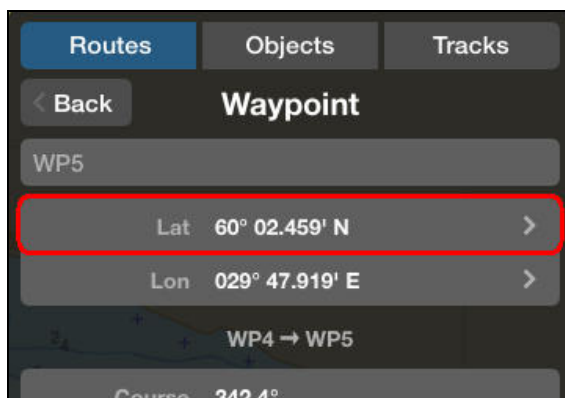
Open **Waypoints List** as this described in previous item.

LAT:	60° 00.771' N	CRS:	306.1°	XTD:	10 m
LON:	029° 48.956' E	DIST:	4.8 nm	RAD:	0.0 nm
				SPD:	10.0 kt
WP5					
LAT:	60° 02.459' N	CRS:	342.9°	XTD:	10 m
LON:	029° 47.919' E	DIST:	1.8 nm	RAD:	0.0 nm
				SPD:	10.0 kt
WP6					
				XTD:	10 m

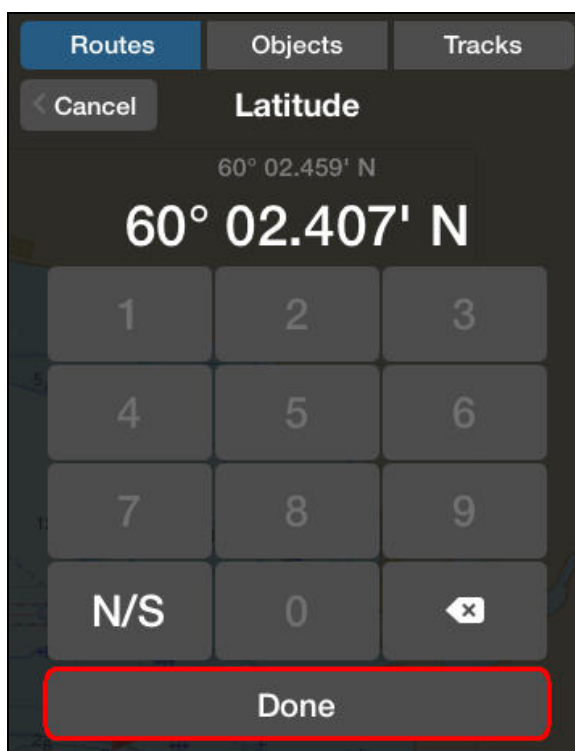
To edit WP tap the necessary WP.

This method can be used for the WP editing in the digital format. I.e. the route must be plotted graphically at first – as preliminary route (see paragraph 7.7), and later all Waypoints can be corrected manually in the digital format, by corrections of their latitude, longitude data and other related data.

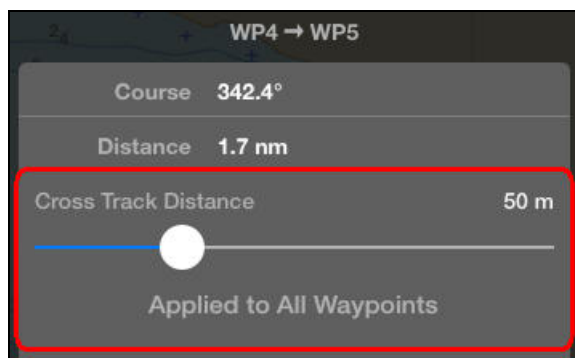
Tap the **Route name** line. Type the WP name and tap **Done** button.



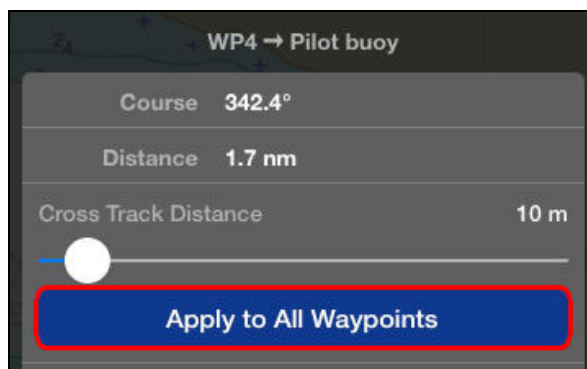
Tap the “**Lat**” or “**Lon**” line to edit the WP latitude or longitude in the digital format.



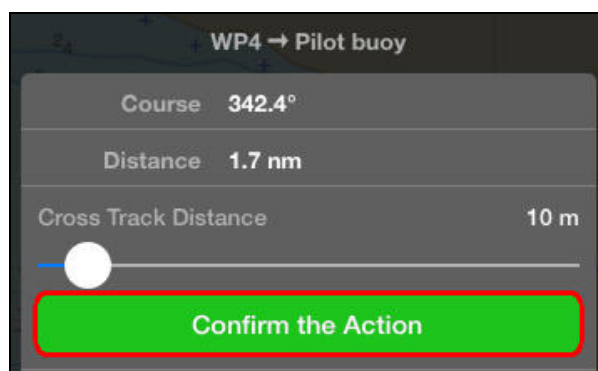
Edit the WP latitude (or longitude) and tap “**Done**” button.



Move the slider in “**Cross Track Distance**” line to set the necessary XTD zone (by default 50 m).



To apply this **XTD** to all route waypoints tap activated “**Apply to All Waypoints**” button.

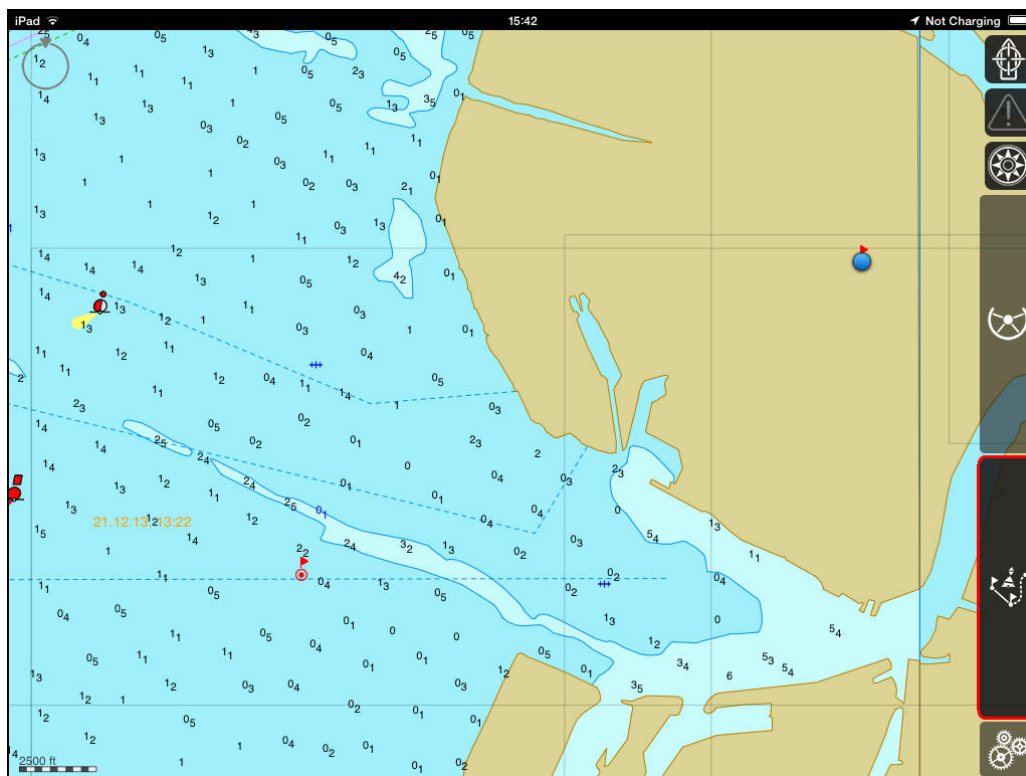


Tap the “**Confirm the Action**” button to confirm the changes you have made or you can adjust a different **XTD** for the all route legs separately, if necessary.

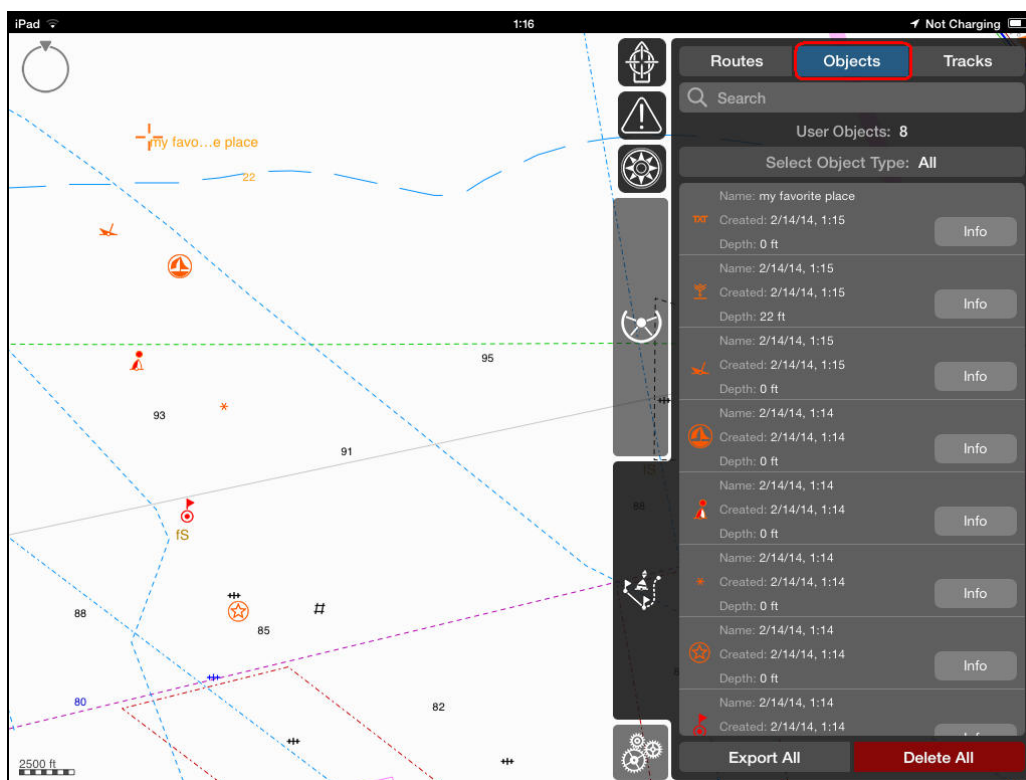
In the same manner set the necessary “**Speed on Led**” and “**Turn Radius**” parameters.



11.2. “USER OBJECTS” LAYOUT



Open the “User Tools” page.

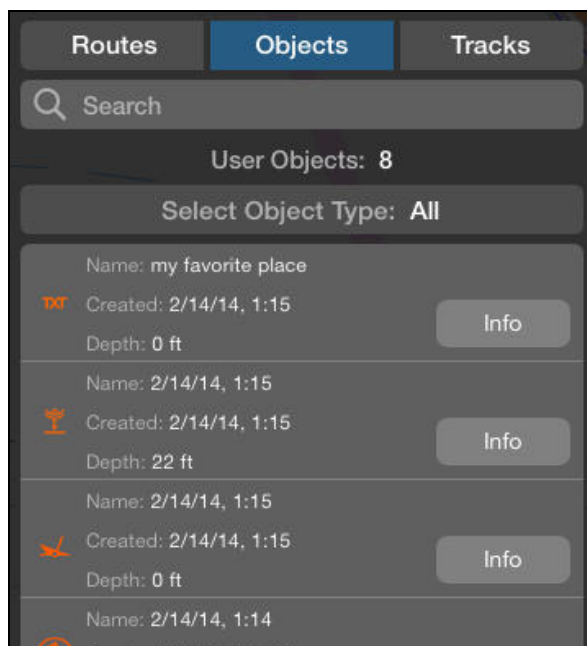


Tap the “Objects” button on top. “Objects” page is intended for handling user objects.

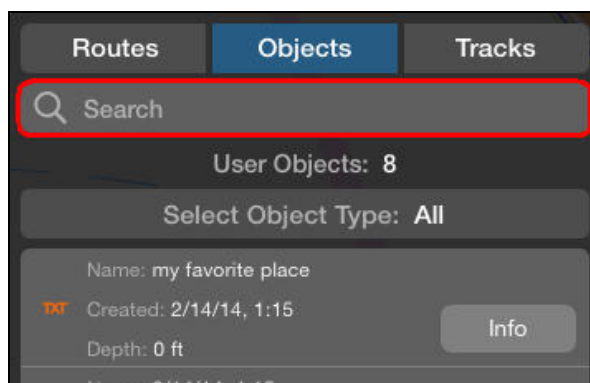


11.2.1 List of Objects and Their Types

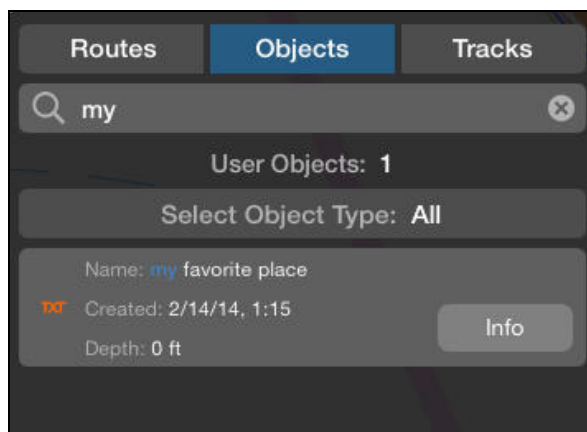
List of objects is intended for selection the user objects for displaying and editing.



All user objects which were stored in the “iSailor” app are presented in the List of objects.



To search the user object in the List of objects tap the “**Search**” line. Type the some characters of the user object name and tap the “return” button.

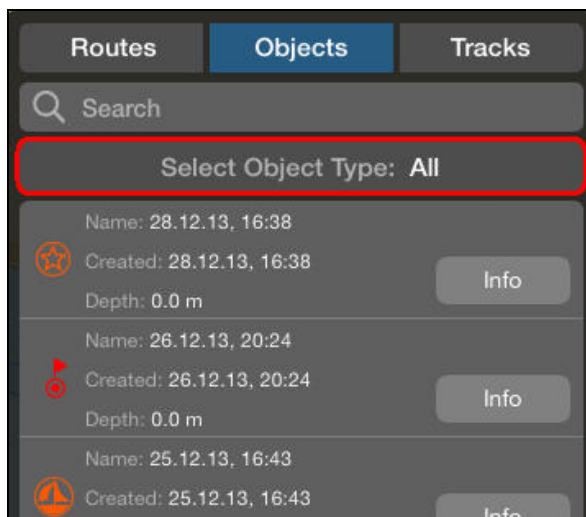


All user objects which name contains the entered characters will be displayed on the screen.

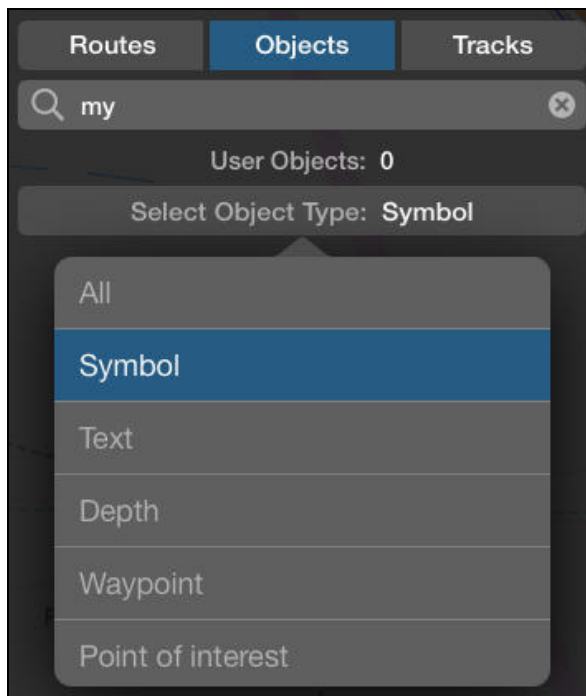


The “**iSailor**” app has a capability to display all user objects at once or their separate types. There are the following user object types:

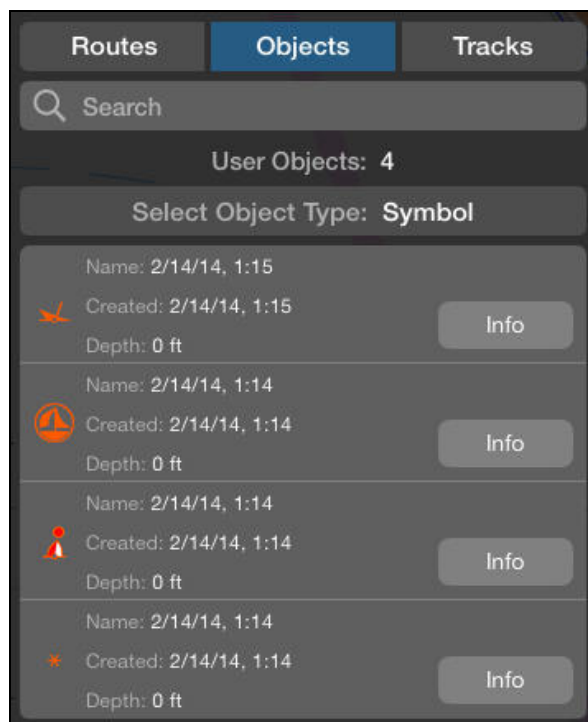
- Symbol;
- Text;
- Depth;
- Waypoint;
- Point of interest.



Tap the “**Select Object Type**” button.

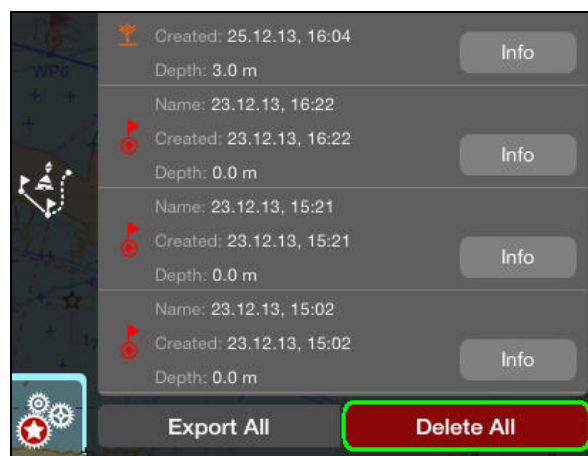


From the menu select the user objects type (e.g. “**Symbol**” on the example above).

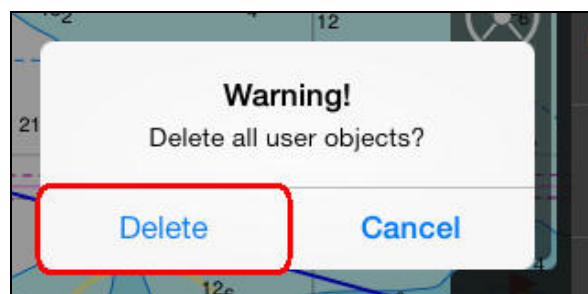


The user objects of the selected type will be displayed in the List of objects.

To export all user objects see paragraphs **12.3** and **12.4** of this manual.



To delete all user objects tap the “**Delete All**” button.

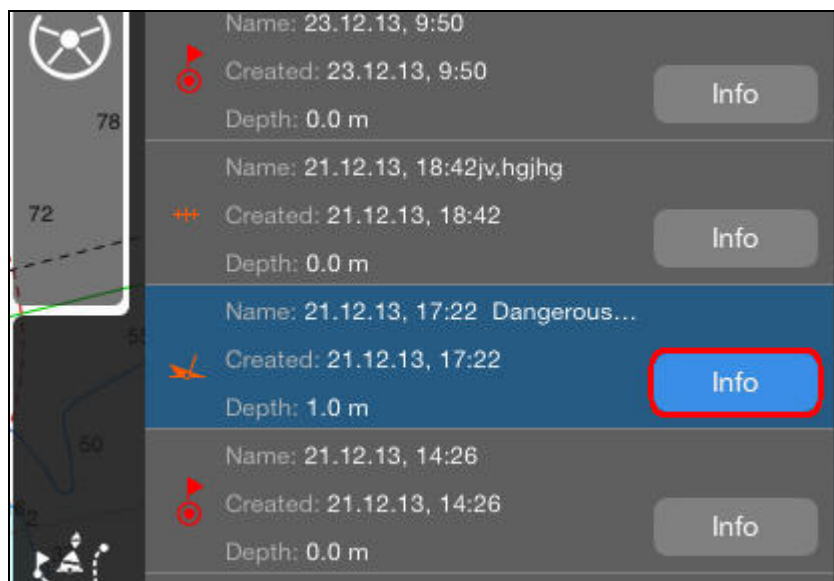


To confirm the deletion press “**Delete**” button. All user objects will be deleted.

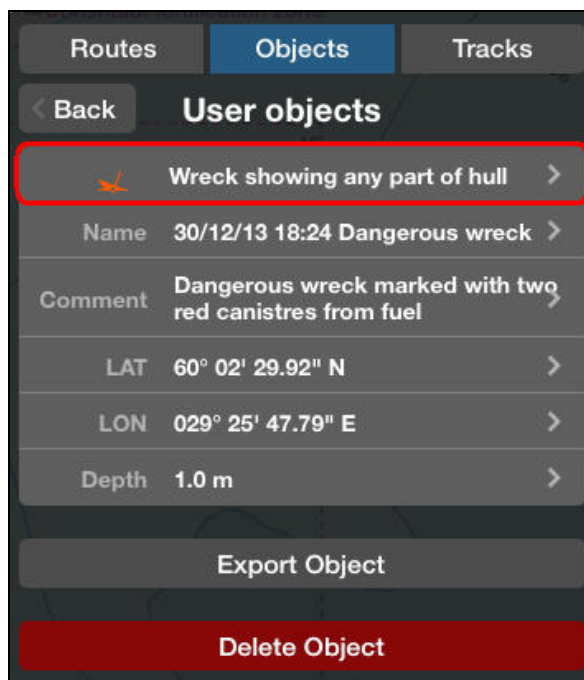


11.2.2 Object editing

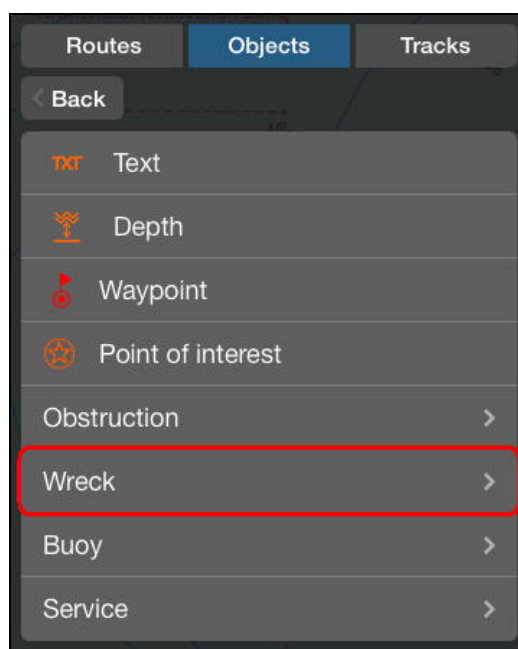
For user object creation see paragraph 7.6.



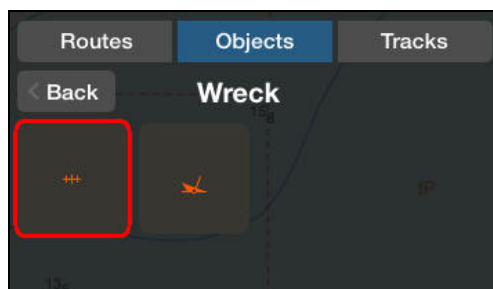
In the List of objects select the user object you are going to edit and tap it. User object will be displayed in the center of the screen (focused on the chart layer) if selected from the list. Tap the **"Info"** button.



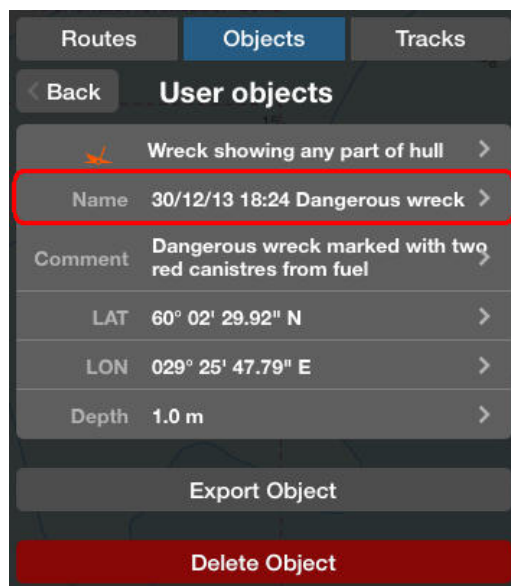
To change the user object type tap the line with user object symbol.



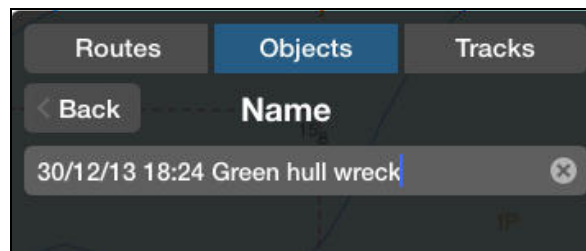
Select the user object type from the menu and tap it (e.g. "Wreck" for example).



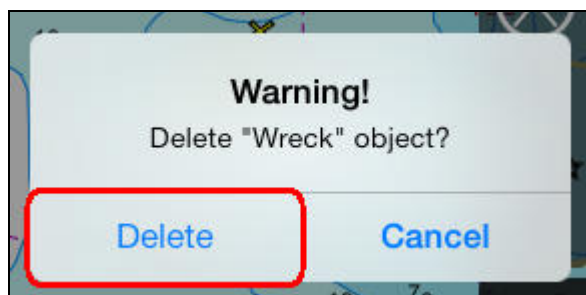
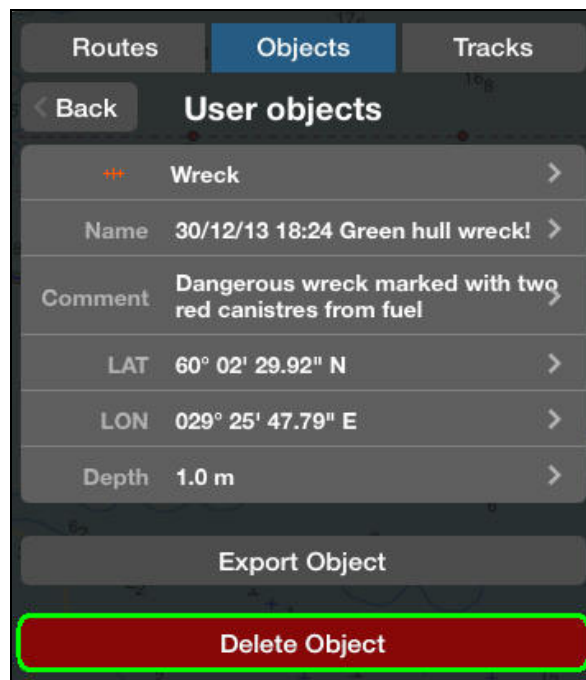
Select the other user object symbol.



To edit user object name tap the "**Name**" line.



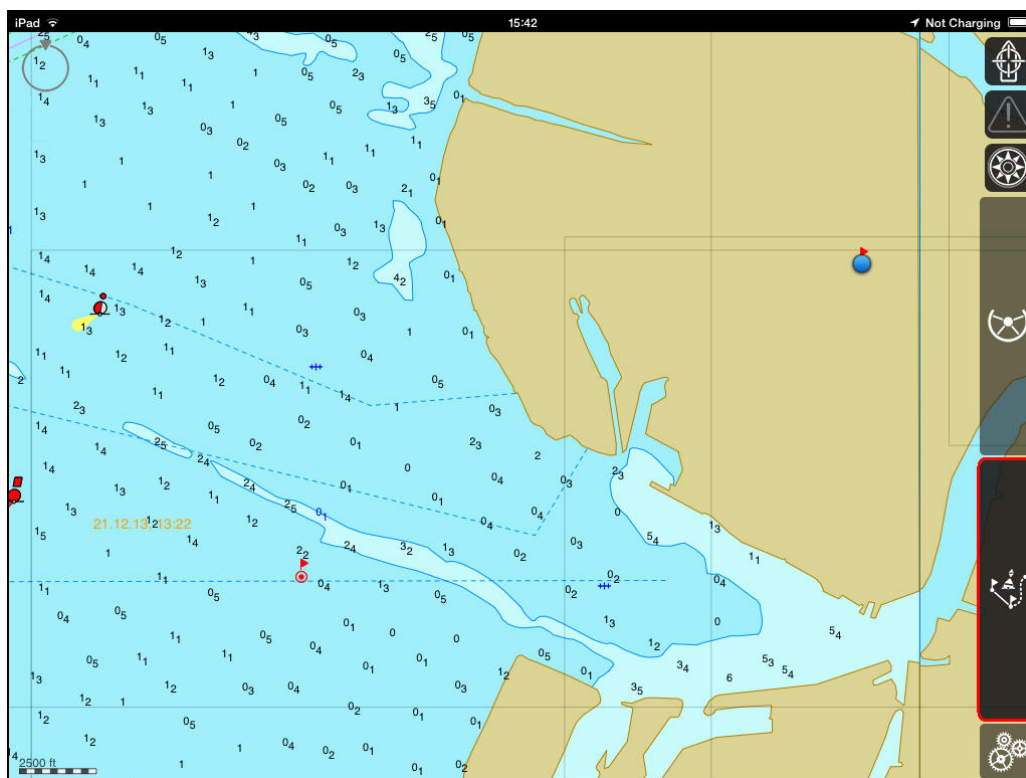
Edit the user object name and tap the “return” button. In the same manner edit additional info (**Comments** or **Depth** line) or correct position of the object, if necessary. To export user object see paragraphs 12.3 and 12.4 of this manual. To delete a single user object tap the “**Delete Object**” button:



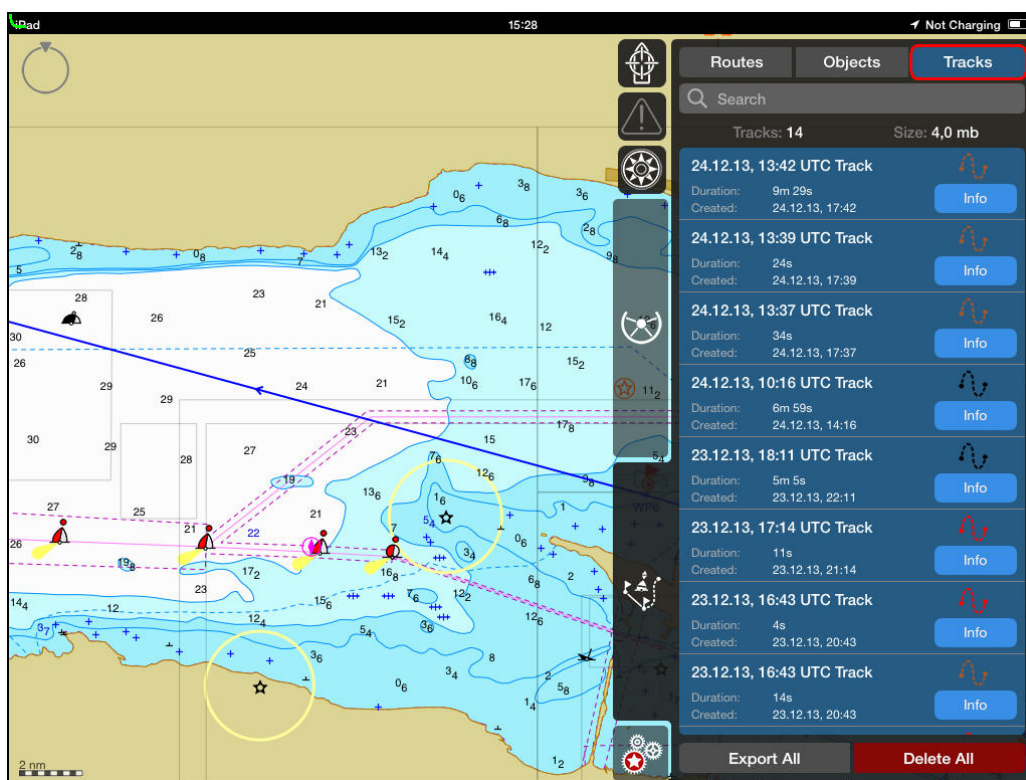
Tap the “**Delete**” button to confirm the deleting.



11.3. “TRACK” LAYOUT



Open the “User Tools” page.



Tap the “Tracks” button. “Tracks” page is intended for handling tracks.

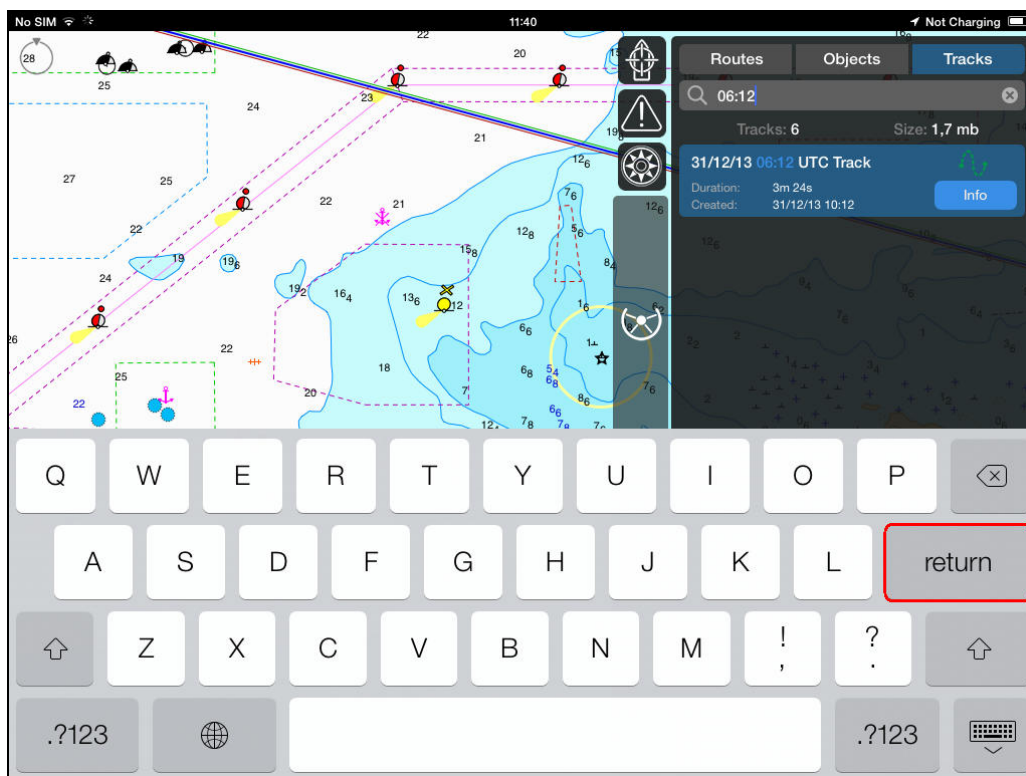


11.3.1 List of Tracks

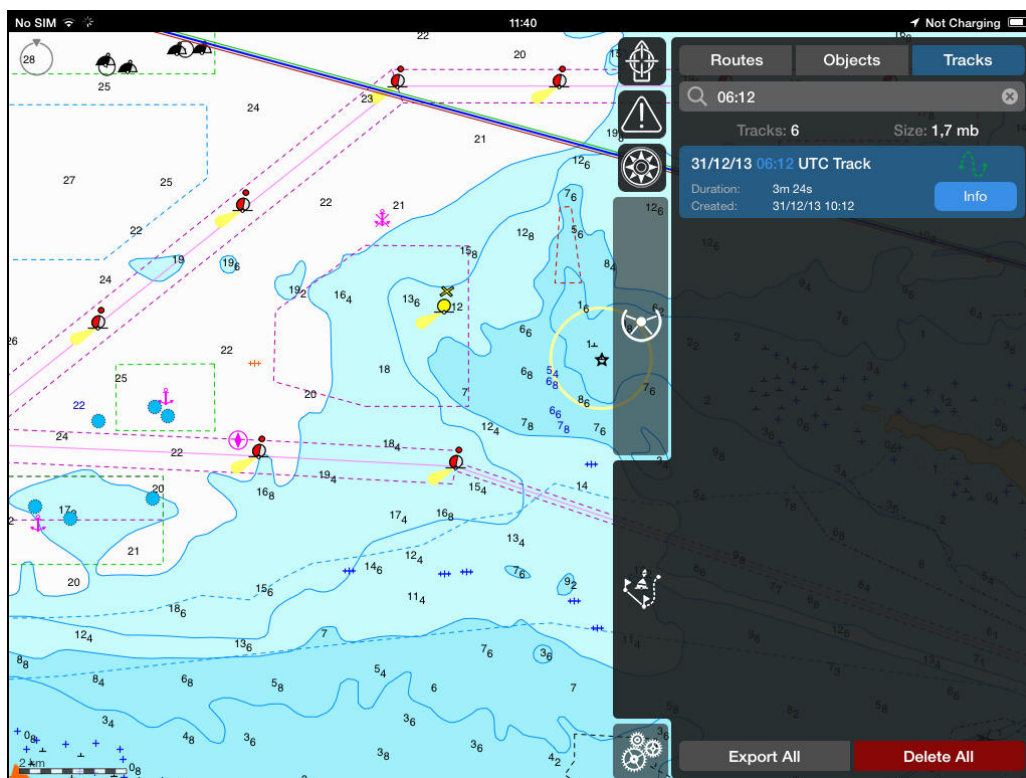
List of tracks is intended for selection the tracks information and displaying. All tracks which were created in the “iSailor” app are presented in the List of tracks.



To search the track in the List of tracks tap the “Search” line.

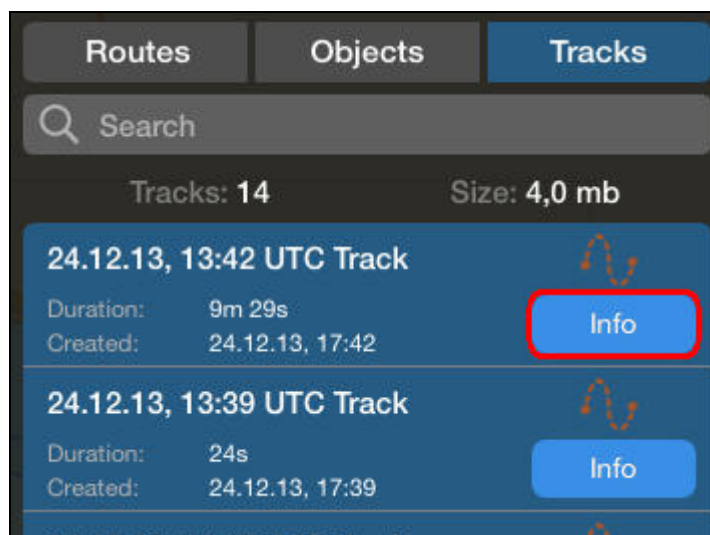


Type the some characters of the track name and tap the “return” button.

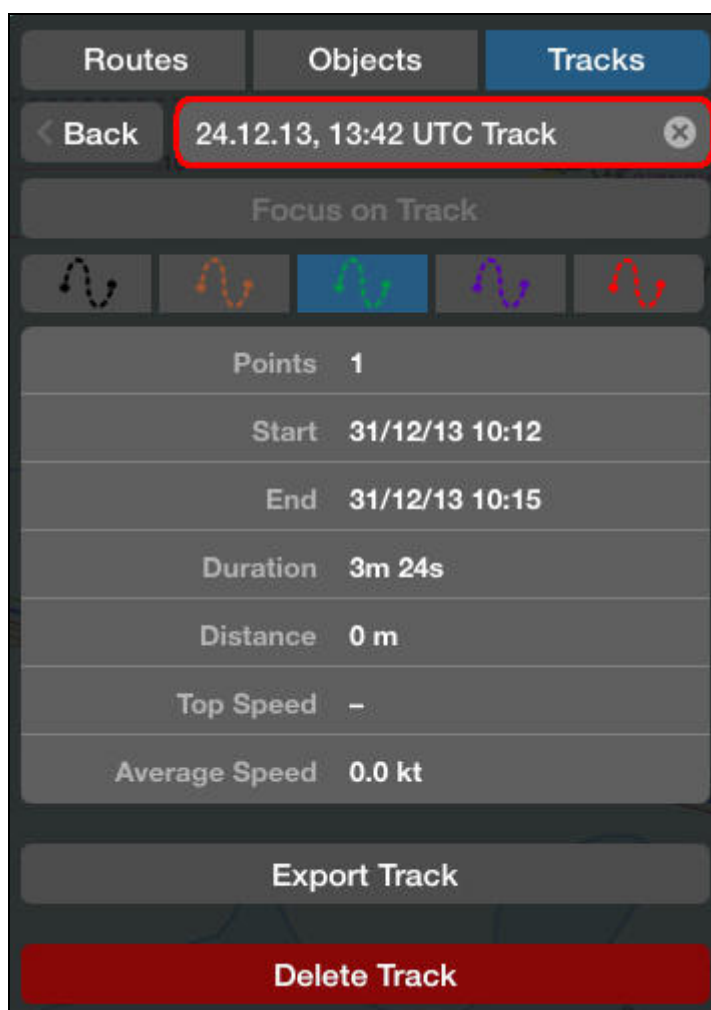


All tracks which name contains the entered characters will be displayed on the screen.

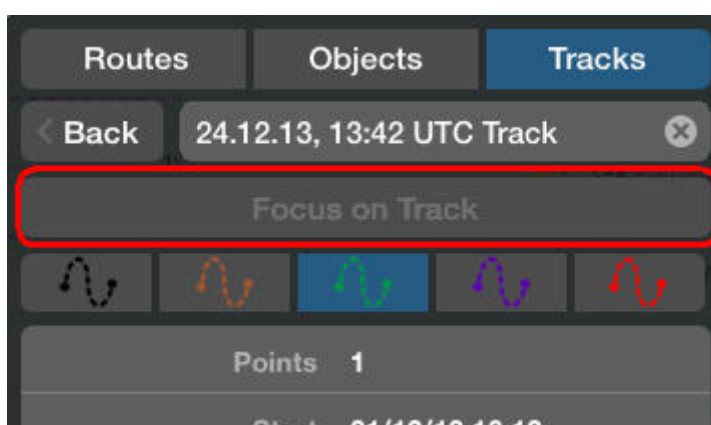
11.3.2 Track Information



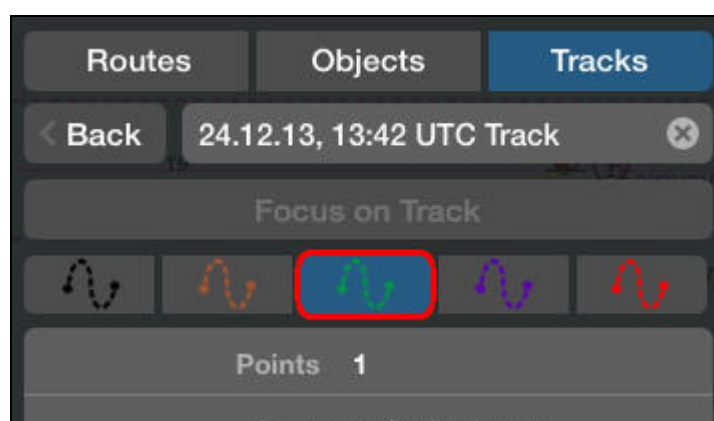
To obtain track information select the necessary track in the List of tracks and tap the **"Info"** button.



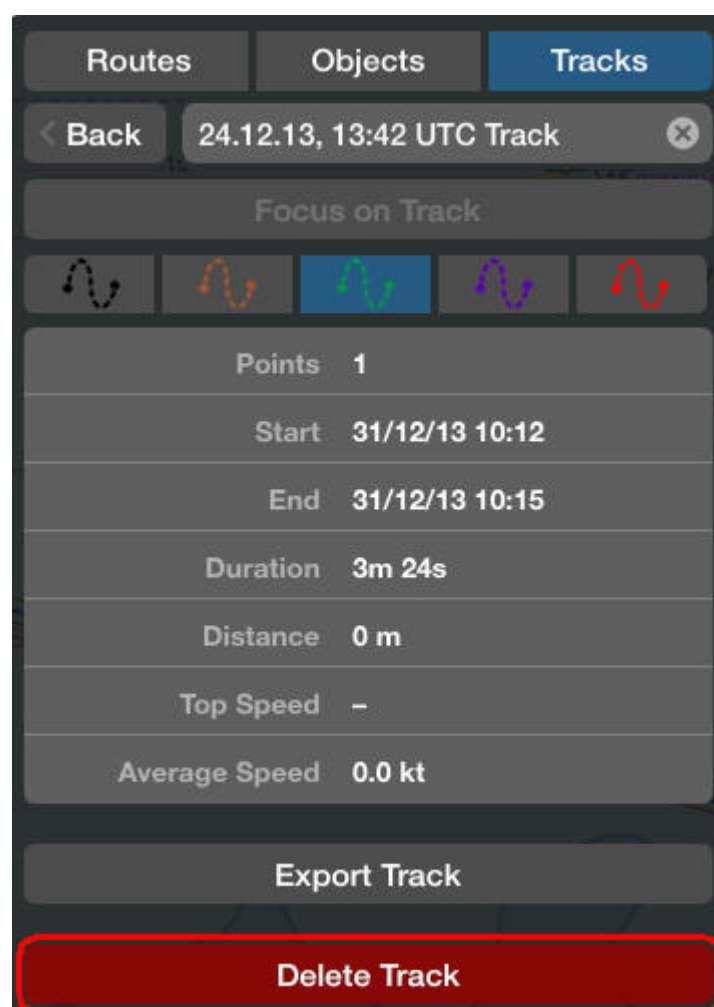
To edit track name tap the **"Name"** line. By default the track name contains the local time of its creation. Edit the track name and tap the **"Done"** button.



To display the entire track on the suitable scale chart tap **"Focus on Track"** button. Recorded track will be focused on the chart layer.



To change track color tap the appropriate button. To export track see paragraphs 12.3 and 12.4.



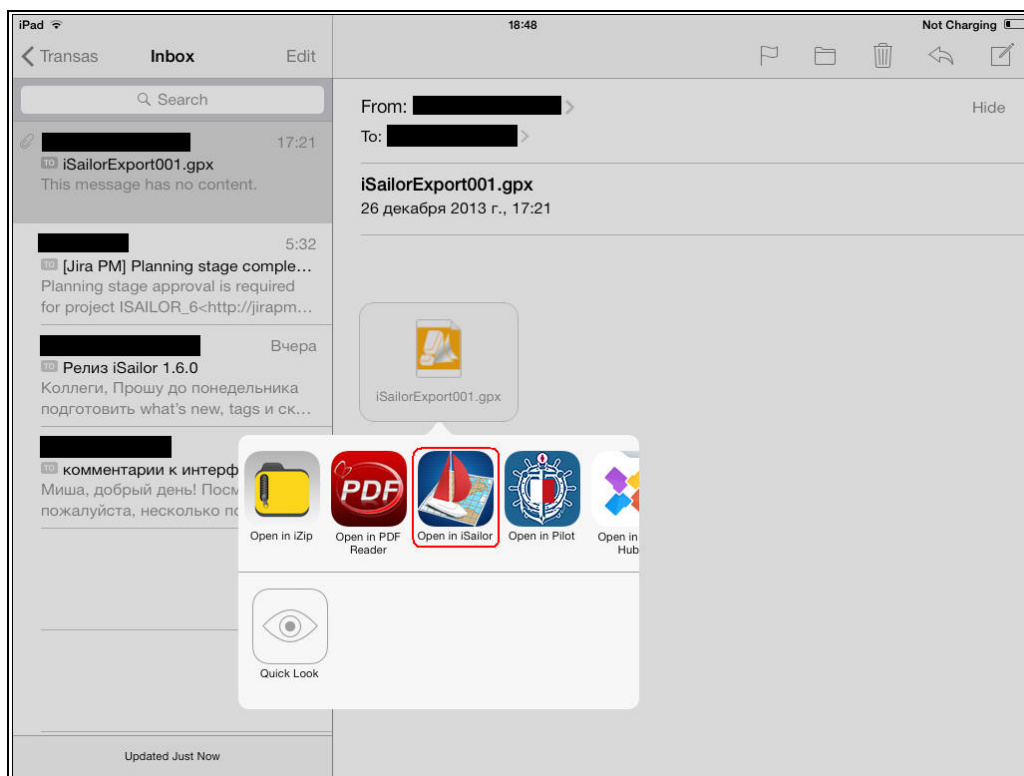
To delete the track tap the **"Delete Track"** button. Tap the **"Delete"** button on the pop-up window to confirm the deleting. The track will be deleted.



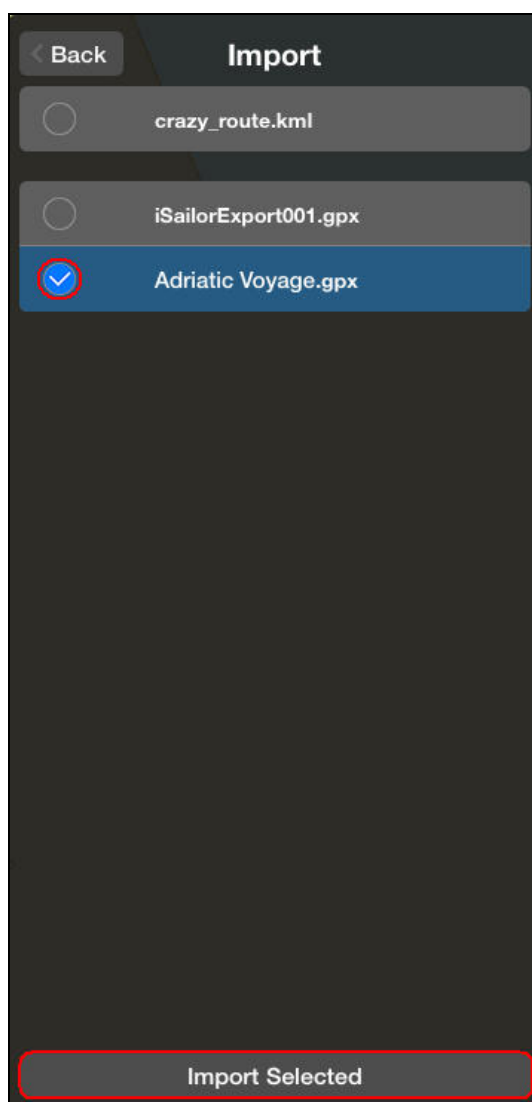
12. ROUTES, TRACKS AND USER OBJECTS: DATA IMPORT AND EXPORT

12.1. IMPORT DATA BY E-MAIL

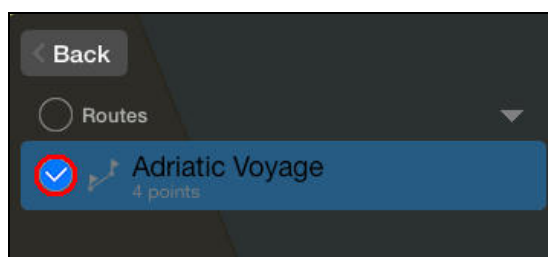
You can Import external data via e-mail with attached *.GPX, *.KML or *.KMZ file. Open E-mail service on the device and select the required attachment.



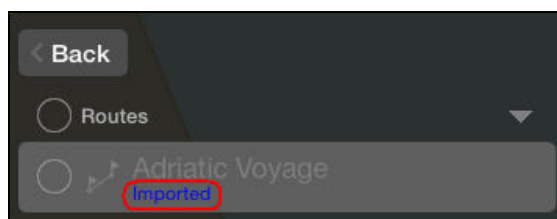
Long tap on attachment and select “**Open in iSailor**” option.



The “iSailor” app will be automatically started. In the “iSailor” app select attached *.GPX file and press “Import selected” button. The “iSailor” app will automatically identify the content and type of data in *.GPX file (**Track**, **Route** or Standalone **User Objects**). Route “**Atlantic Voyage**” with 4 waypoints is detected on example below:



Select the required data and press again the “Import selected” button on the bottom side of that window.



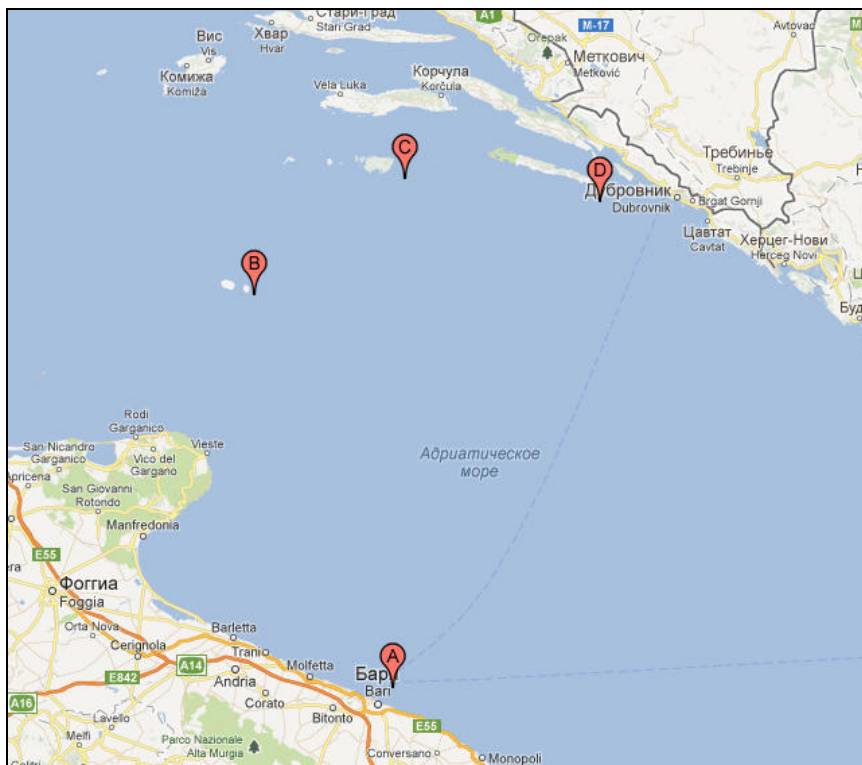
Check the “Imported” status and press the “Back” & “Done” buttons to close the “Import” window.



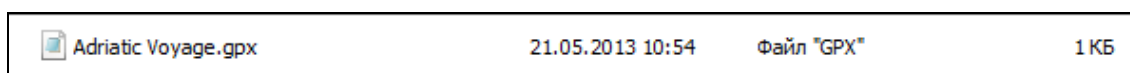
12.2. IMPORT DATA BY “ITUNES” APPLICATION VIA MAC OR PC

You can import external data via connected Mac or PC and “iTunes” application. Import format is the same as described above in the **Chapter 10.1: *.GPX, *.KML or *.KMZ** file.

- First of all, you **Route**, **Track** or **User Object** has to be created somewhere (for example, in the 3rd party application) and stored on mac or PC in ***.GPX, *.KML or *.KMZ** format.

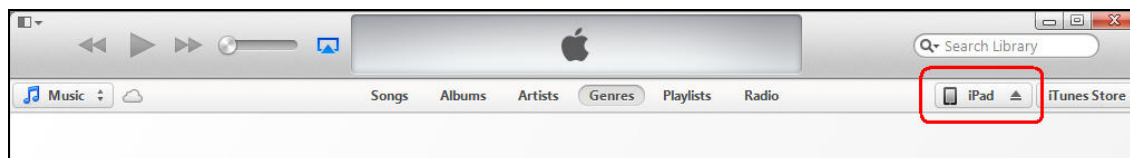


As example, web geoplaner web app can be used for that purposes (<http://www.geoplaner.com/>):



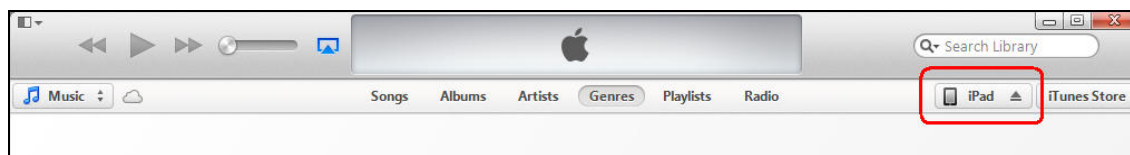
Create your route using external app and save on PC as ***.GPX, *.KML or *.KMZ** file. Stored “**Adriatic Voyage.GPX**” file on the local drive as example above.

- Then, run “**iTunes**” application on your PC. Connect your device (using USB cable) and make sure that device is recognized by the “**iTunes**” app:



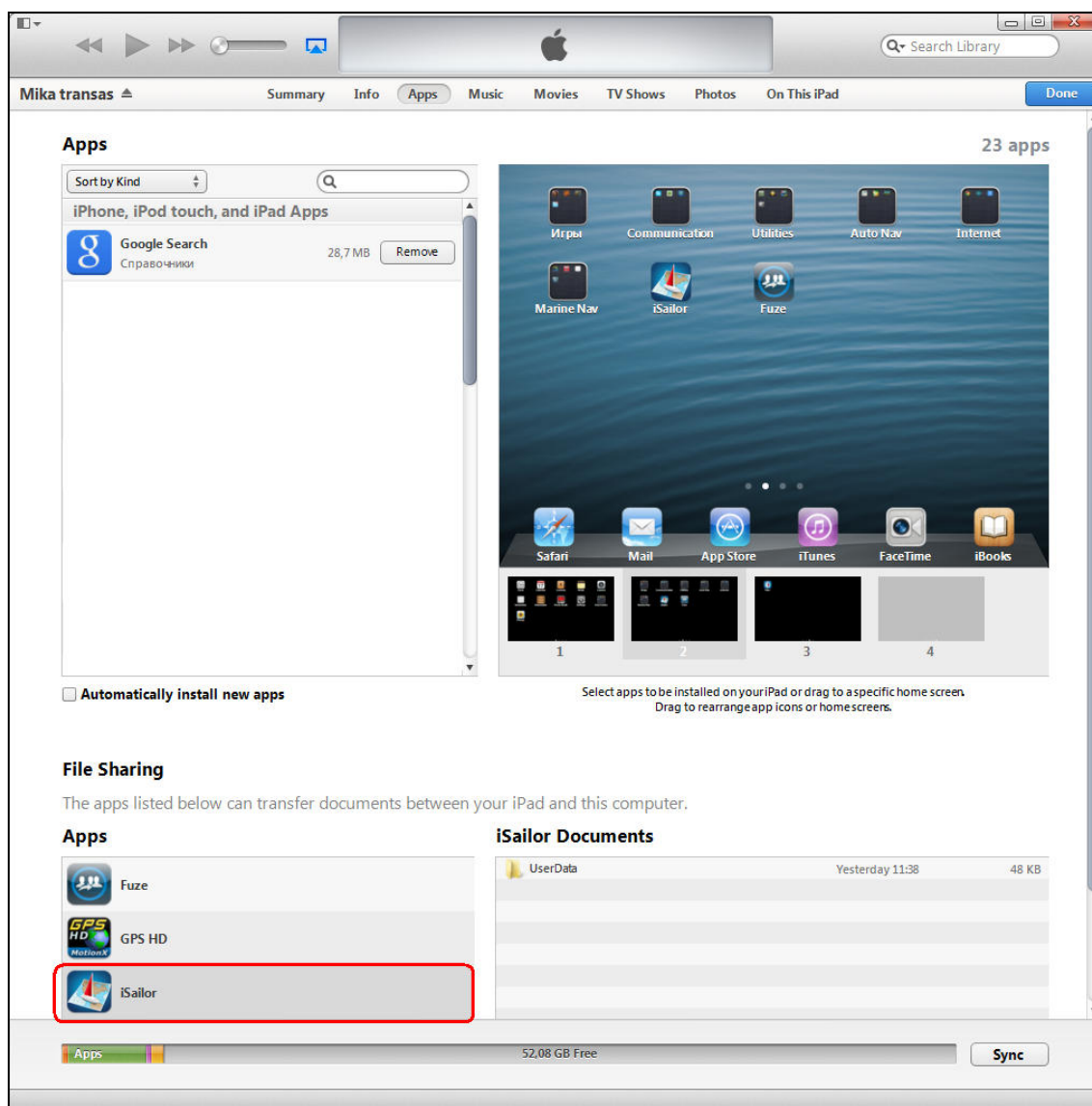
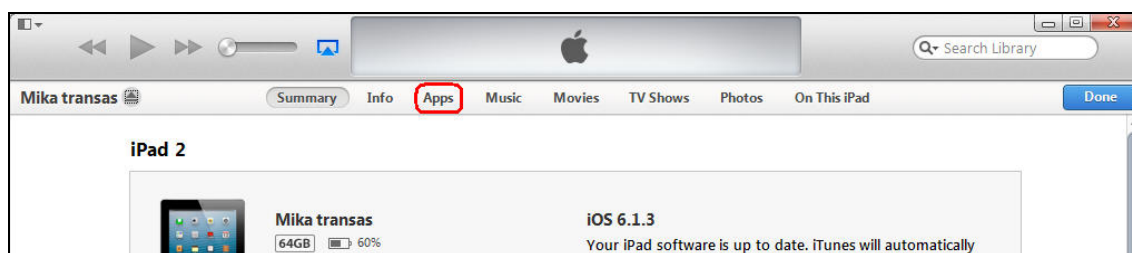
“iPad” button showing that Apple device is connected to PC via USB cable.

- Press on device button (mentioned above) and select “**Apps**” page:

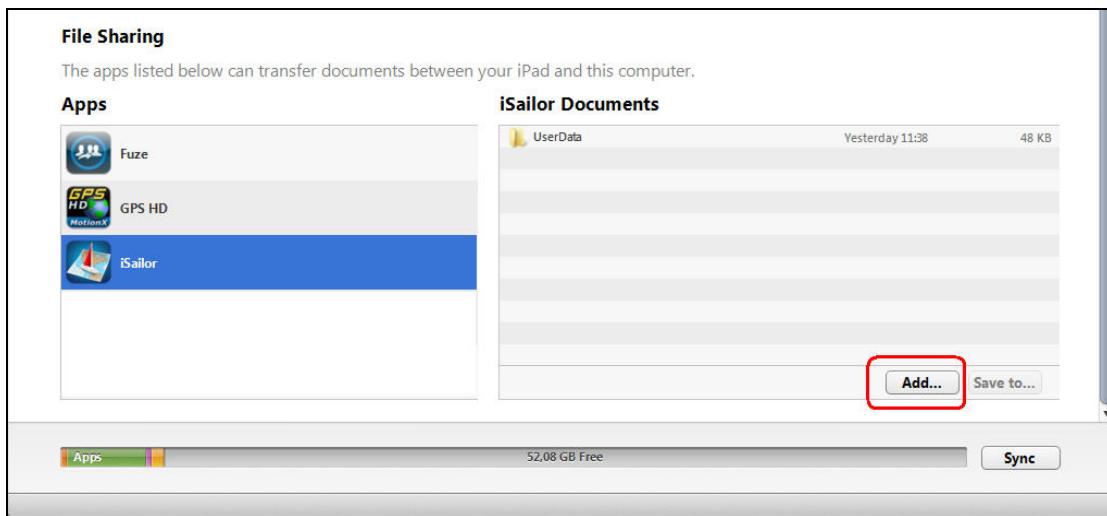




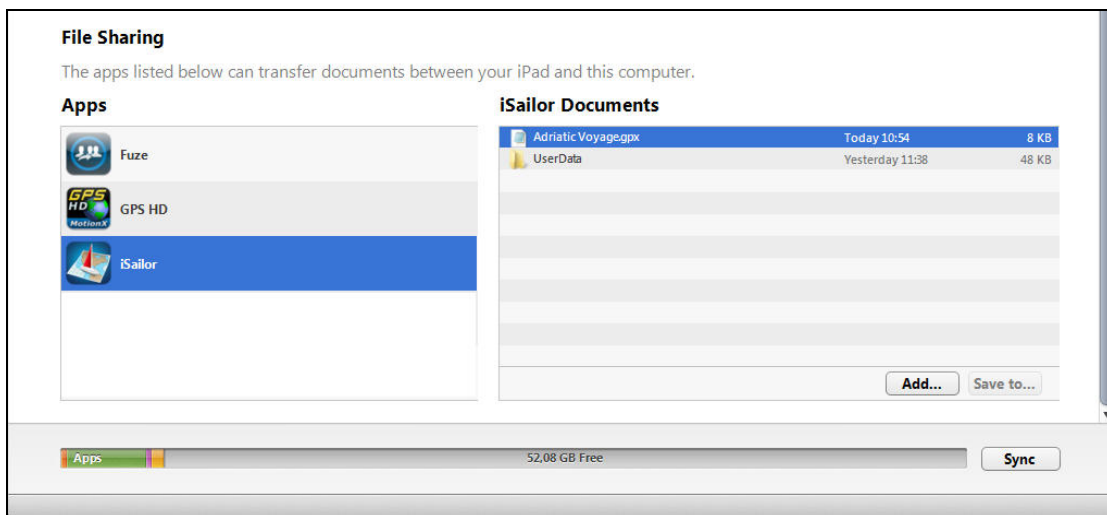
Press “**Device**” button (“**iPad**” on example above).



Press “**Apps**” button and select installed “**iSailor**” app in the list below.

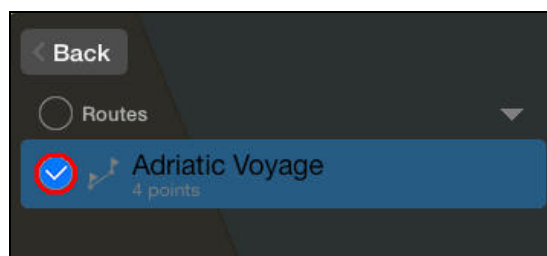


Press “Add” button.



The “Adriatic Voyage.GPX” is added into “iSailor” documents folder.

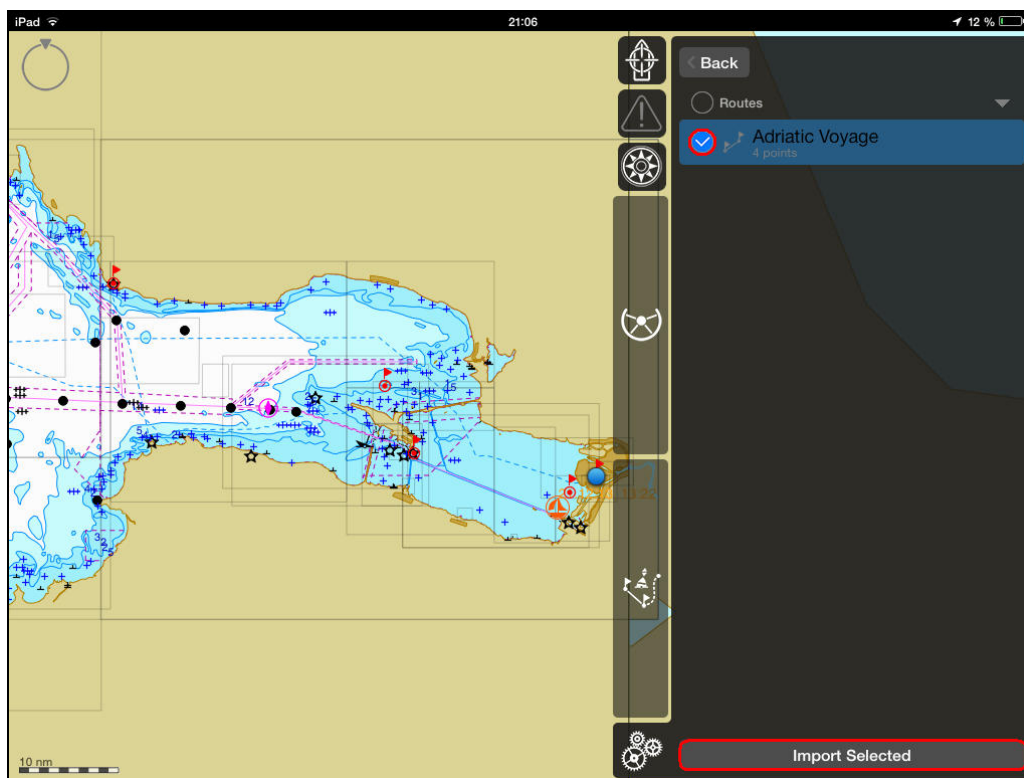
- Then, run the “iSailor” application on your device (do not disconnect the USB cable), go to the “Settings” layout and tap on “Import” menu item. *.GPX, *.KML and *.KMZ files will be automatically detected on the “Import” page:



Tap and select the required *.GPX, *.KML or *.KMZ file (“Adriatic Voyage.GPX” on example below) and tap on “Import selected” button on the bottom side.

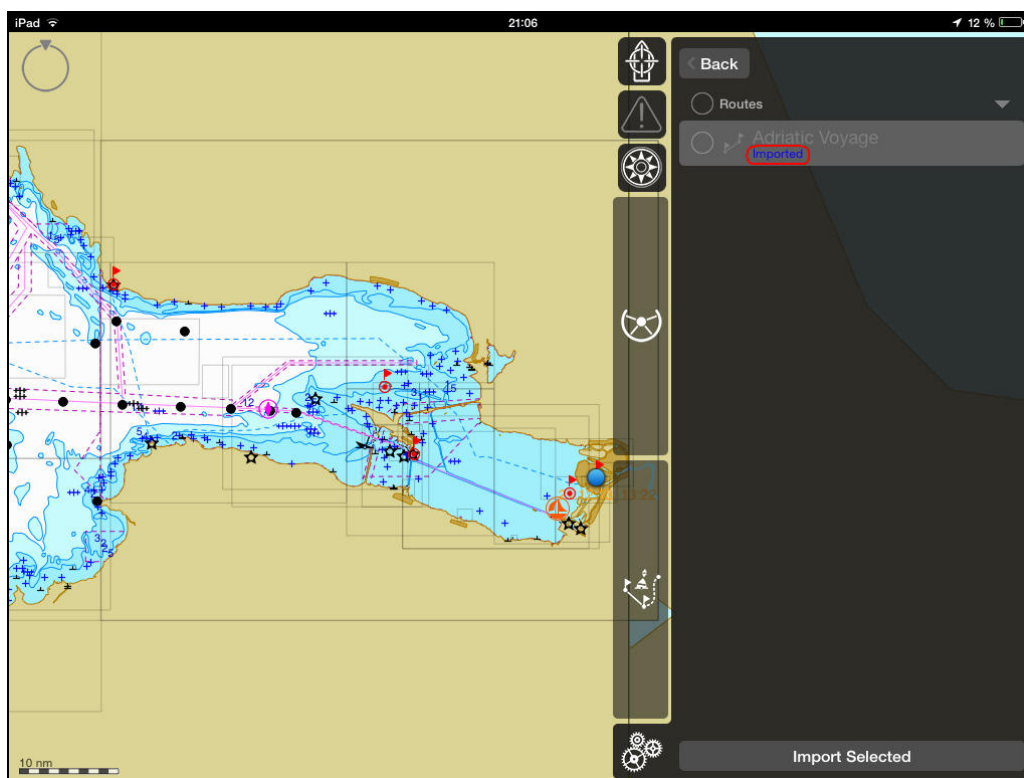


- Route with 4 WPs is detected on the example below:



Select the Route and tap on **"Import selected"** button again to convert selected route into "iSailor" app.

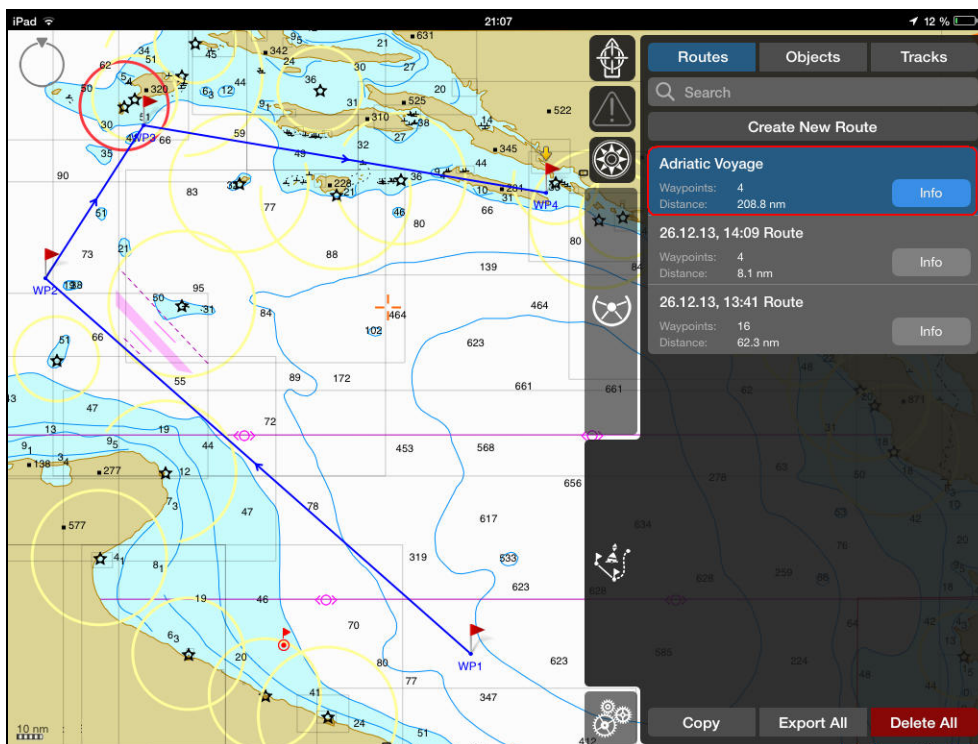
- Conversion status set as **"Imported"**:



Selected Route is converted into **"iSailor"** app".

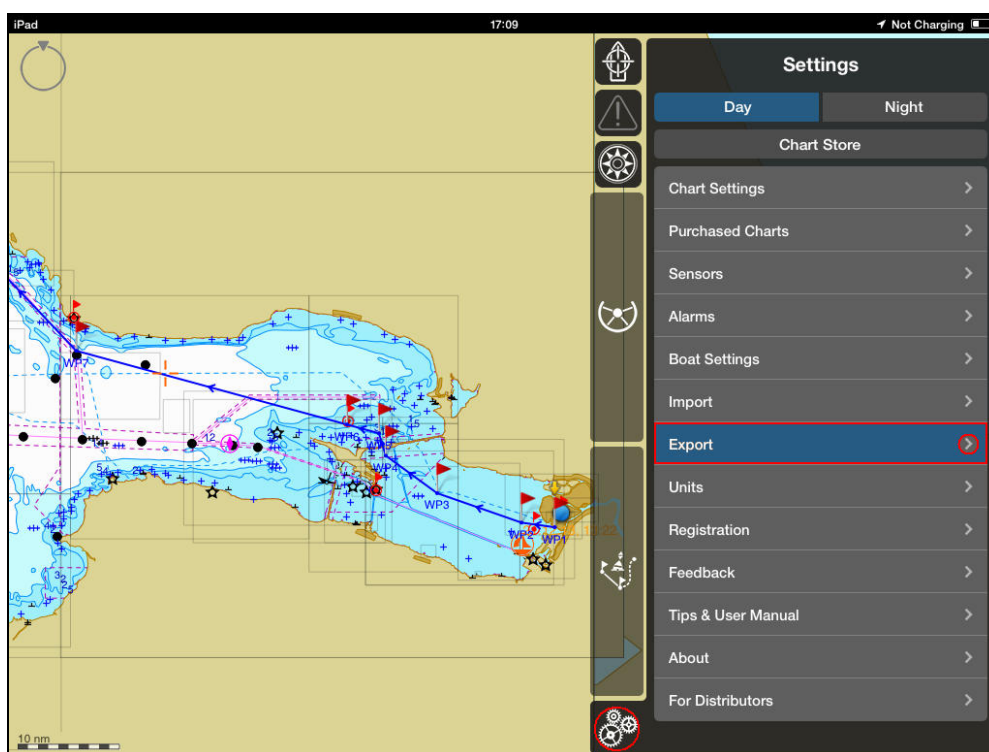


- Check imported Route in the “iSailor” app. “Route” layout on example below:



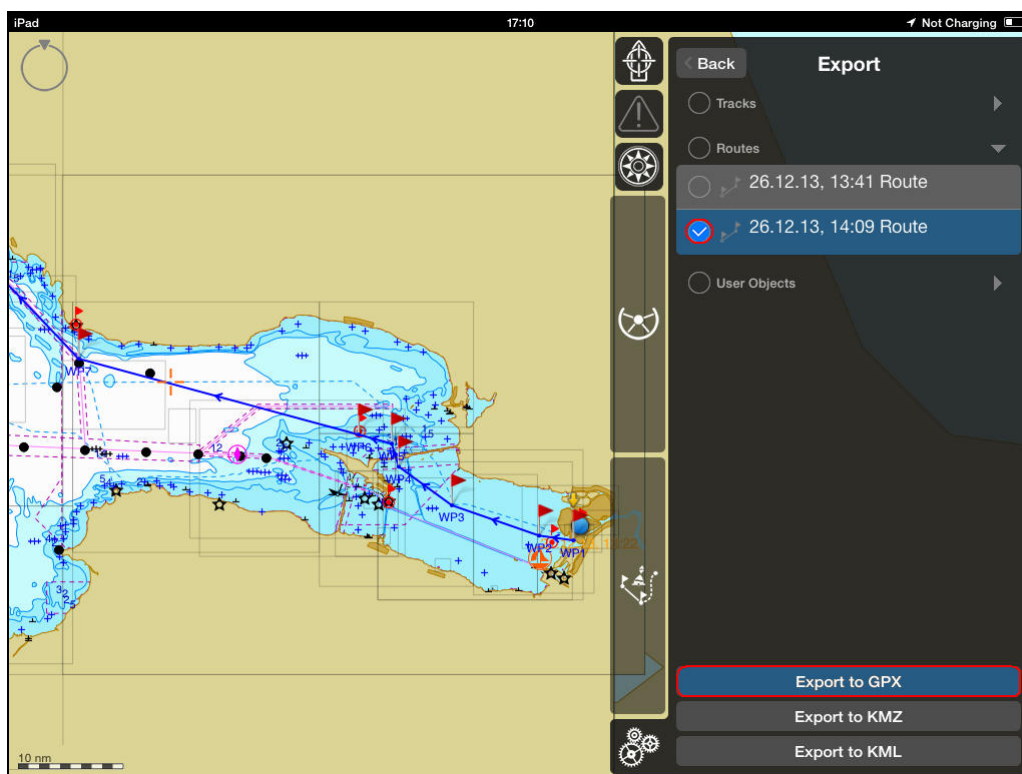
12.3. HOW TO EXPORT DATA FROM DEVICE AND IMPORT IT ON ANOTHER DEVICE

You can create **Route**, **Track** or **User Object** on your device and export it via E-mail and import on another your device or share with friends. Run the “iSailor” app.

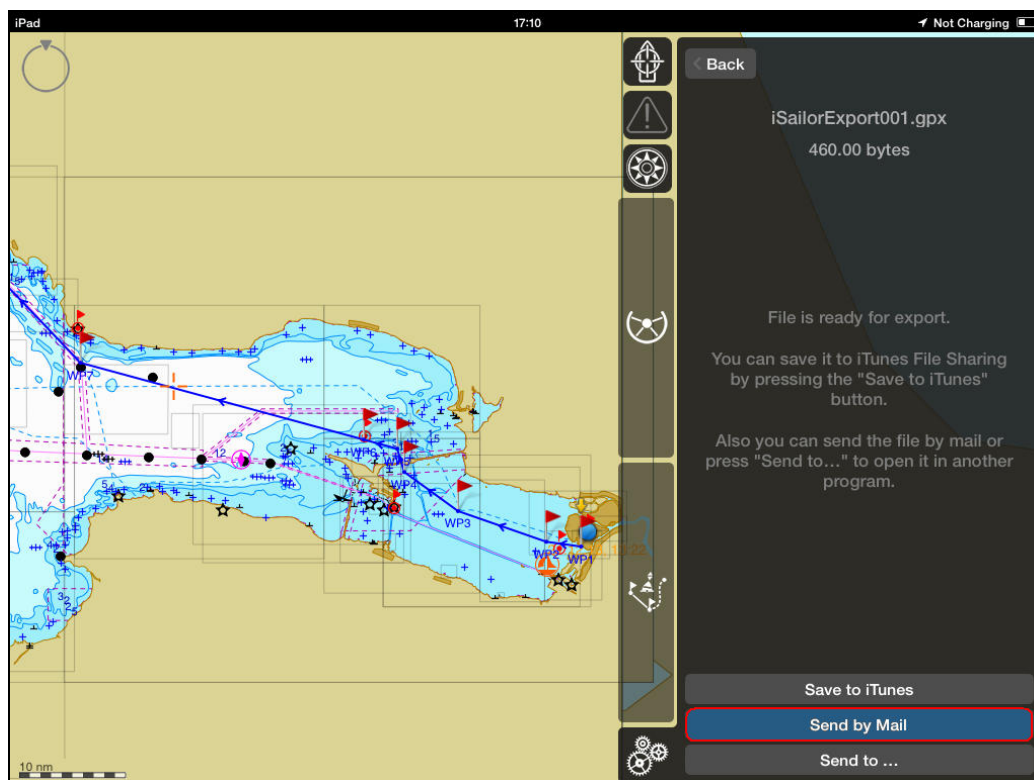




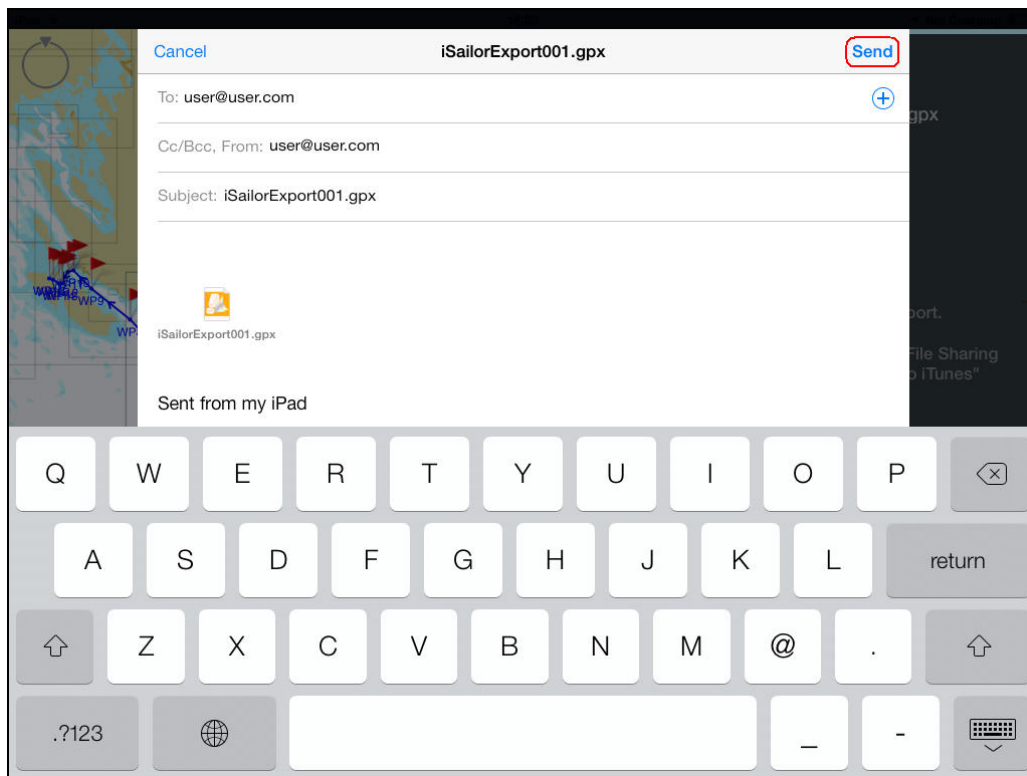
Open “Settings” layout by tapping “Settings” button and tap on the “Export” menu item:



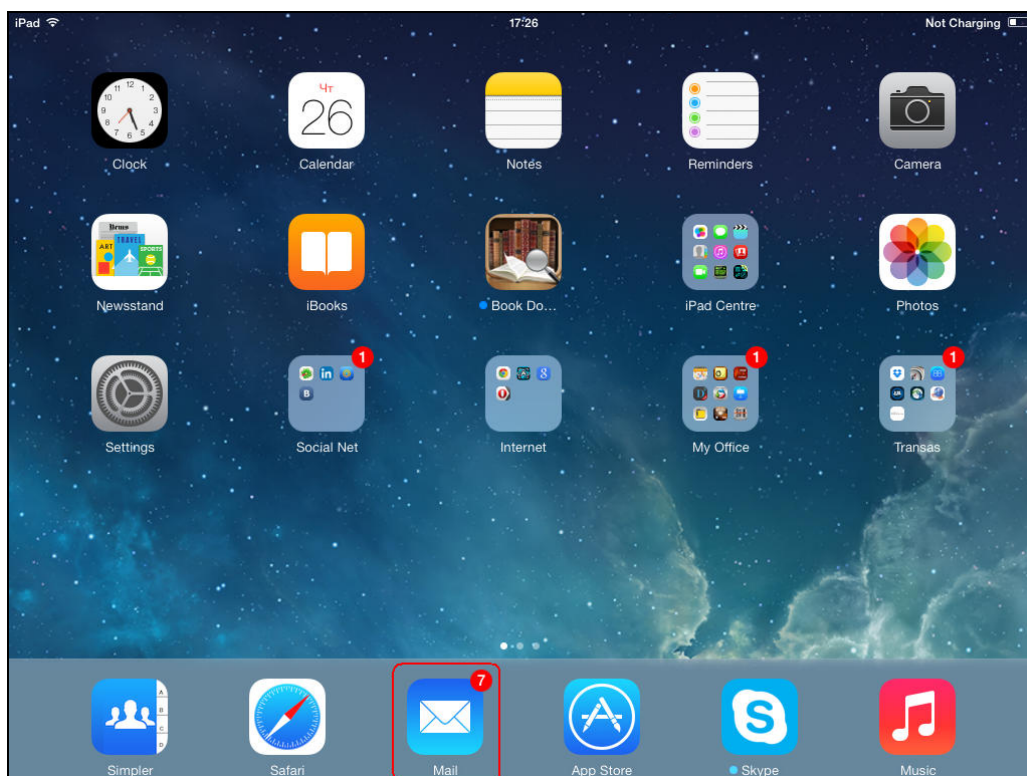
Select the required Route in the list and press “Export to GPX” button to export file into *.GPX format for example (or into KML / KMZ, if necessary).



Press “Send by Mail” button.



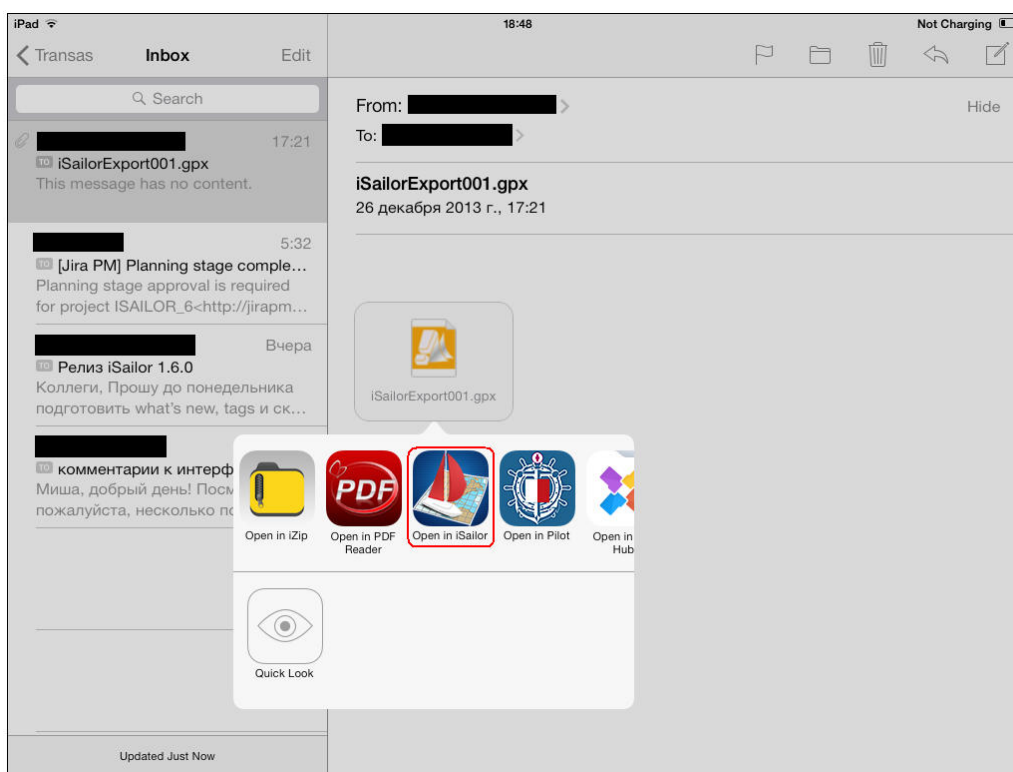
Tap on address field and enter your e-mail address. Press “**Send**” button.



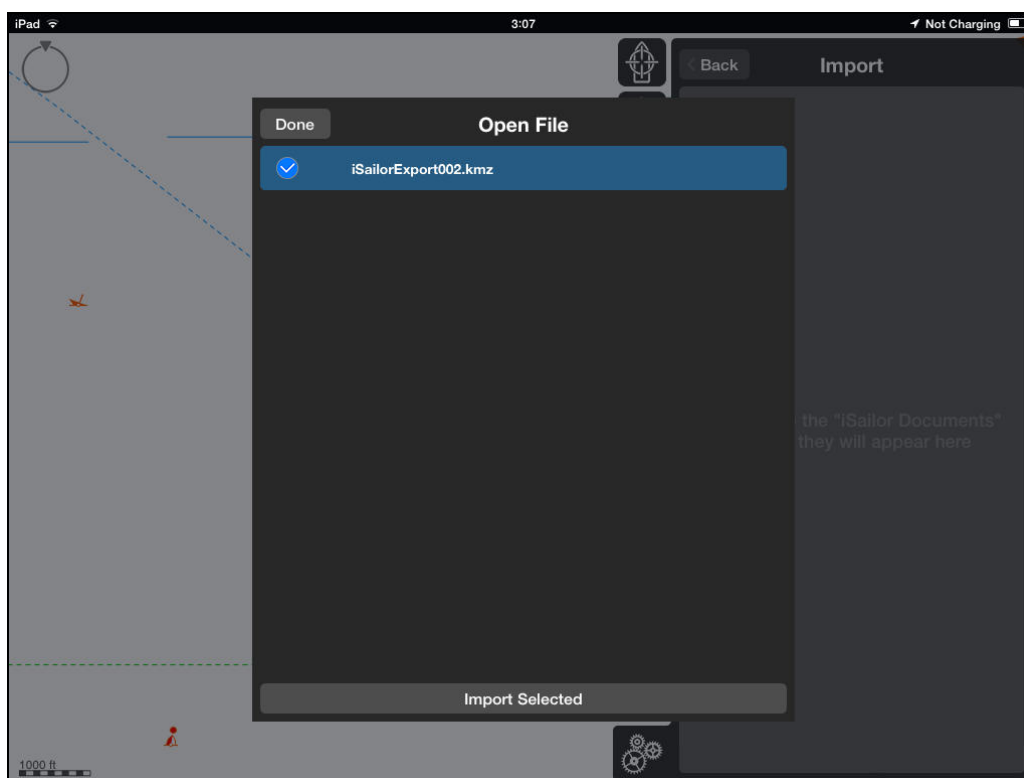
On another device please **Mail** application.



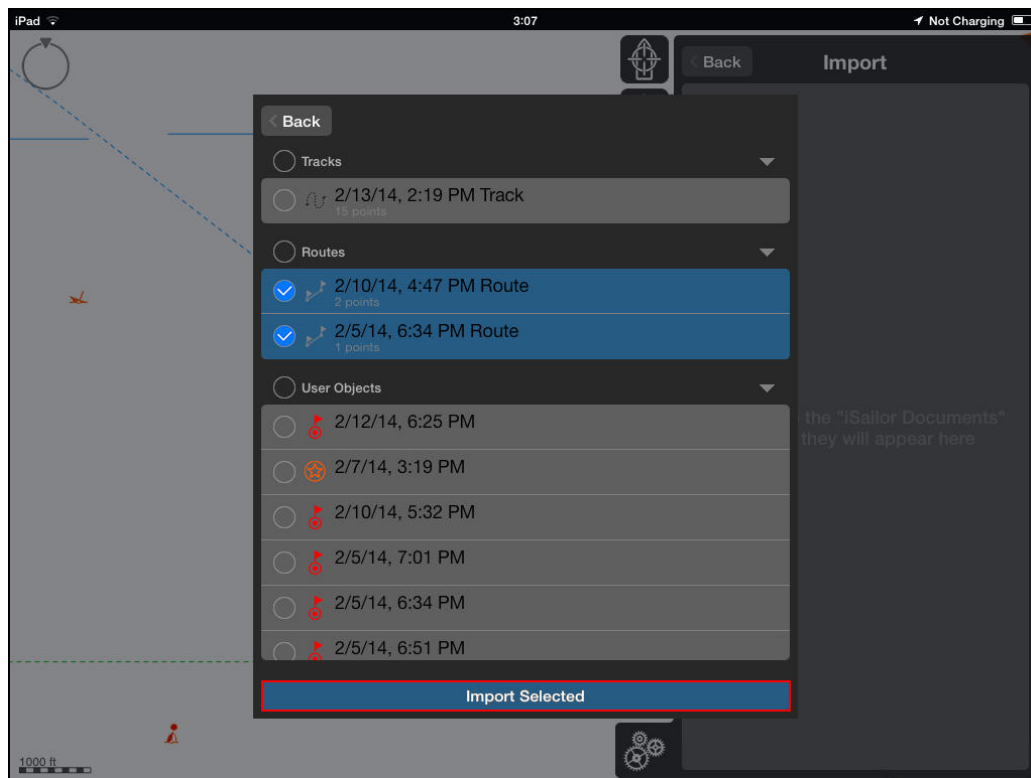
Open new message with an attached file ***.GPX** (or in the ***.KML** or ***.KMZ** format):



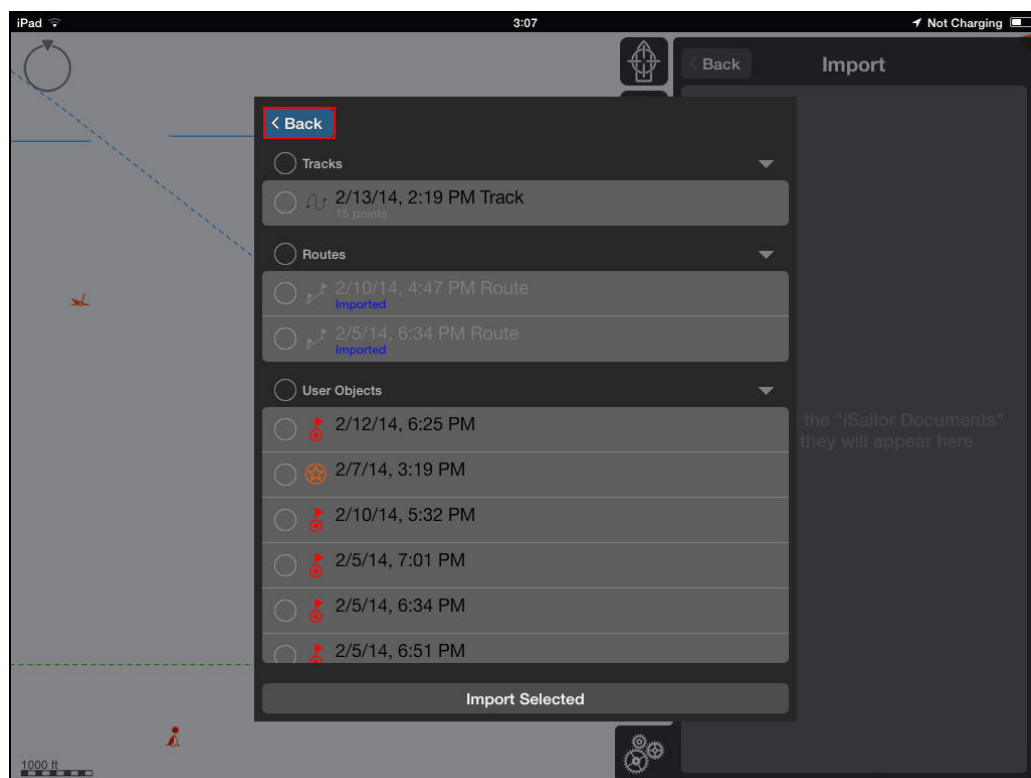
Long tap on the attachment and select **“Open in iSailor”** option.



The **“iSailor”** app will be automatically started. Select file and press **“Import selected”** button on the bottom side of the **“Open File”** window. The **“iSailor”** app will automatically recognize and identify the content of the file.



Select the data and press “**Import selected**” button.



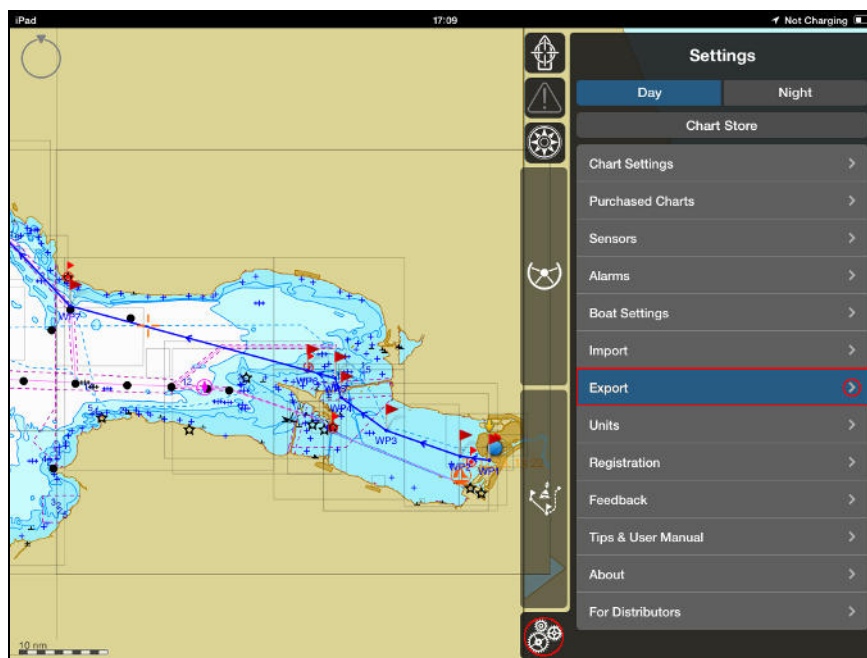
Check that the data is imported and press “**Back**” & “**Done**” buttons.



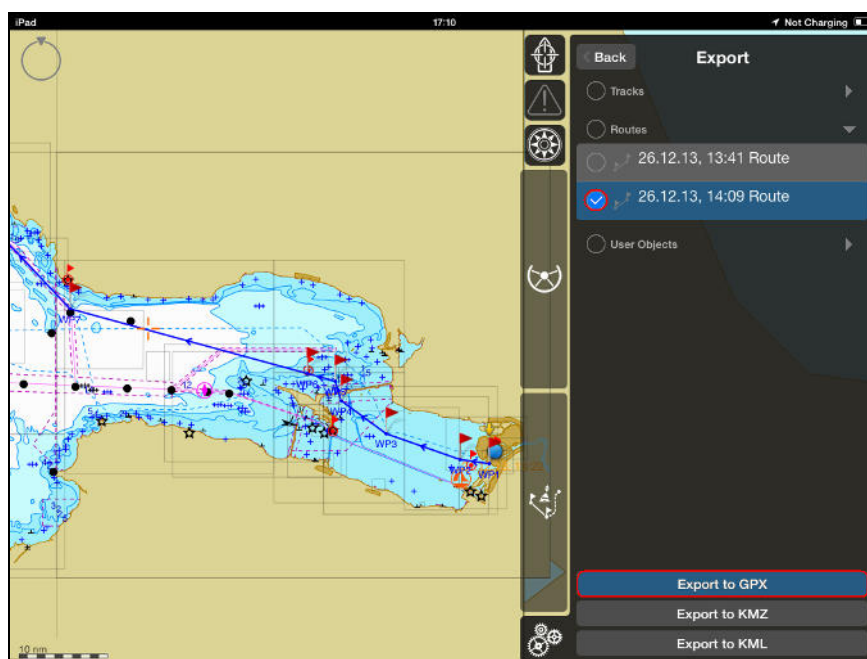
12.4. HOW TO EXPORT DATA VIA “ITUNES” APPLICATION AND MAC OR PC

You can **Import** external data via connected Mac or PC and “iTunes” application. Import format is the same as described above in the Chapter 12.1: *.GPX, *.KML or *.KMZ file.

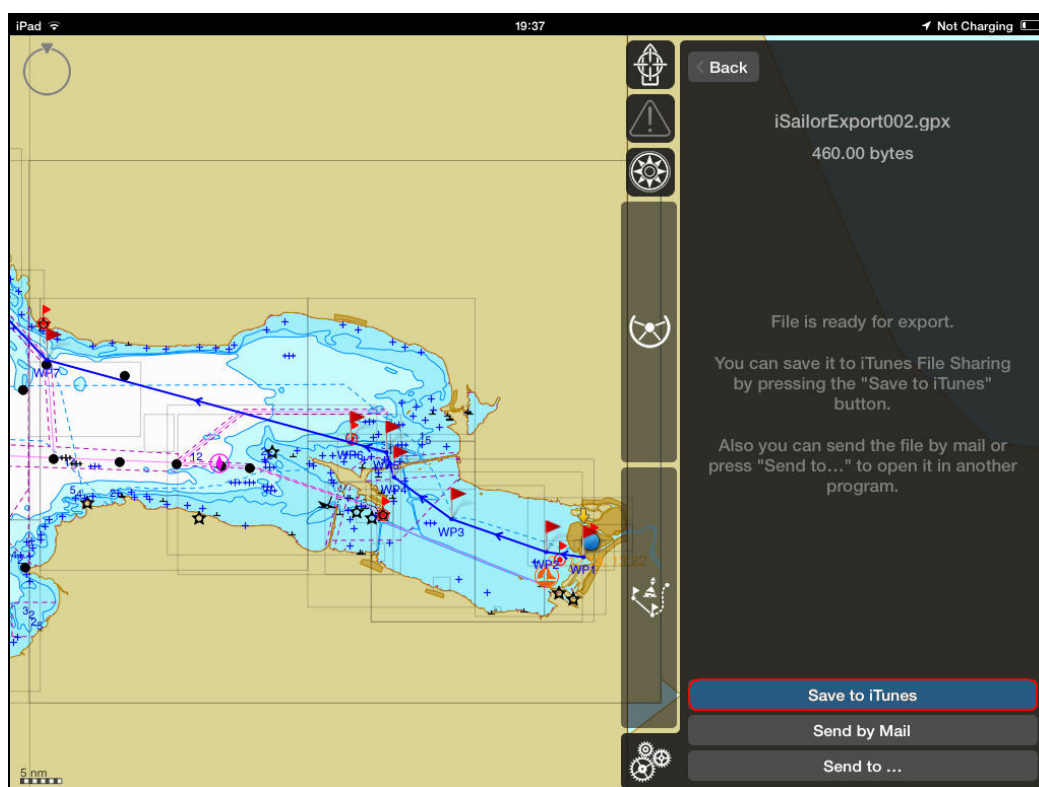
Procedure is a quite similar, as described for the “Import” via “iTunes” application in the **Chapter 12, paragraph 12.2. Import Data by “iTunes” application via Mac or PC** above, exception is that Route, Track or User Object should be created in the “iSailor” app at first, and then exported to “iTunes” application”:



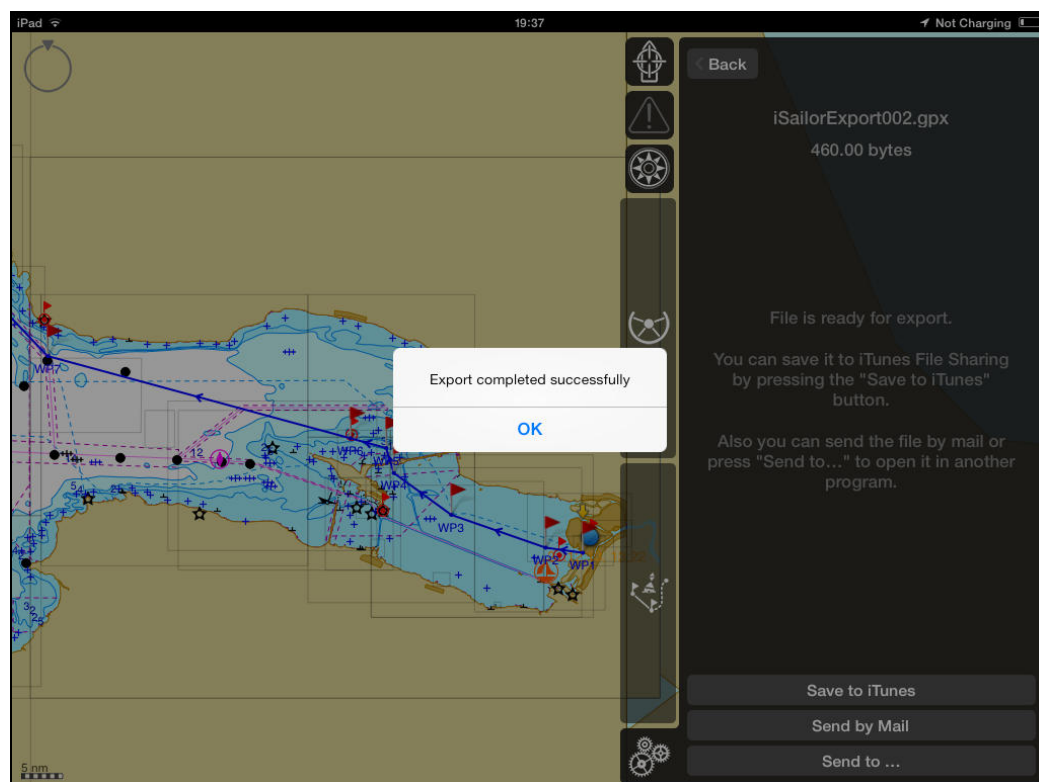
Open “Settings” layout by tapping “Settings” button and tap on the “Export” menu item:



Select the required Route in the list and press “Export to GPX” button to export file into *.GPX format for example (or into KML / KMZ, if necessary).



Tap on “**Save to iTunes**” button.



Press “**OK**” button.

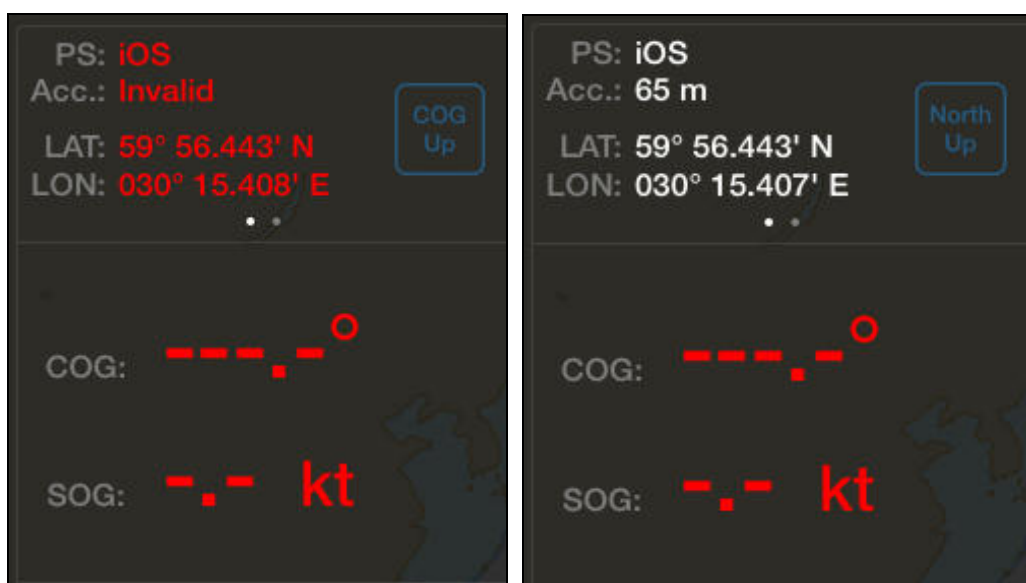


13. ANNEX I - TROUBLESHOOTING

13.1. NO "COURSE" AND "SPEED" DATA IN ISAILOR

Own ship "Position", "Course" and "Speed" window.

Sometimes you can see aforementioned screen on the "Monitoring" layout. It means following: **Apple iOS Location Service** provides to app **invalid data** or **just only position data** (without **COG** and **SOG** or without **SOG** only), which is based on Wi-Fi trilateration or 3G triangulation positioning.

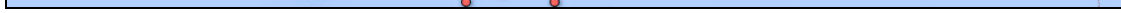


In that case most reasonable answer that positioning by **Internal GPS** (for **iPad Wi-Fi + Cellular** or **iPad mini Wi-Fi + Cellular** models) or by **external GPS** (connected to device via Bluetooth, if available) is not possible due to following possible cases:

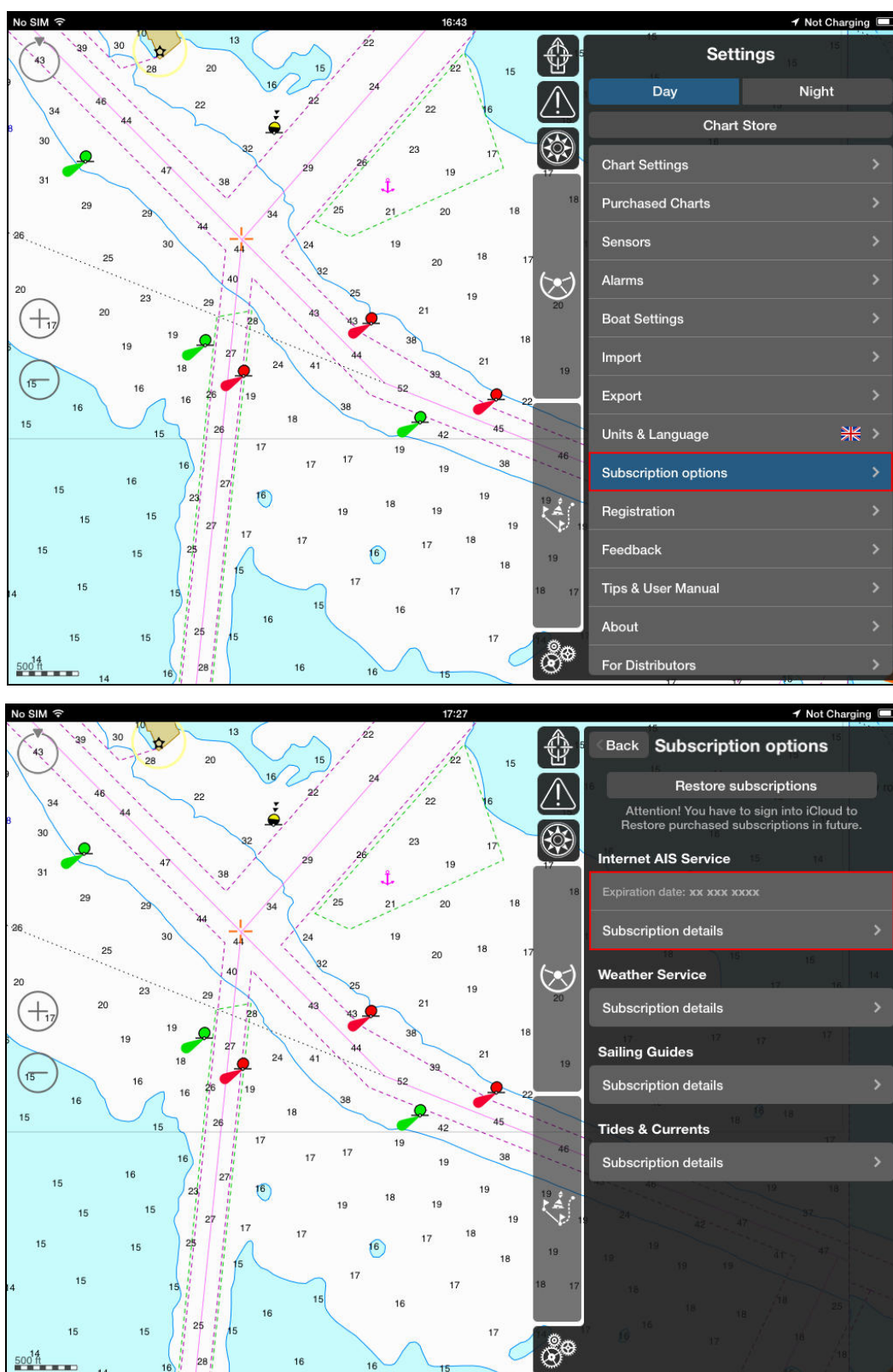
- External **Bluetooth GPS** is turned off or discharged;
- **GPS** satellites are out of visibility (for example, in buildings) or closed by obstructions and cannot be used for positioning by internal or external GPS.
- **Apple iOS Location Service** uses only Wi-Fi or 3G masts for positioning purposes.



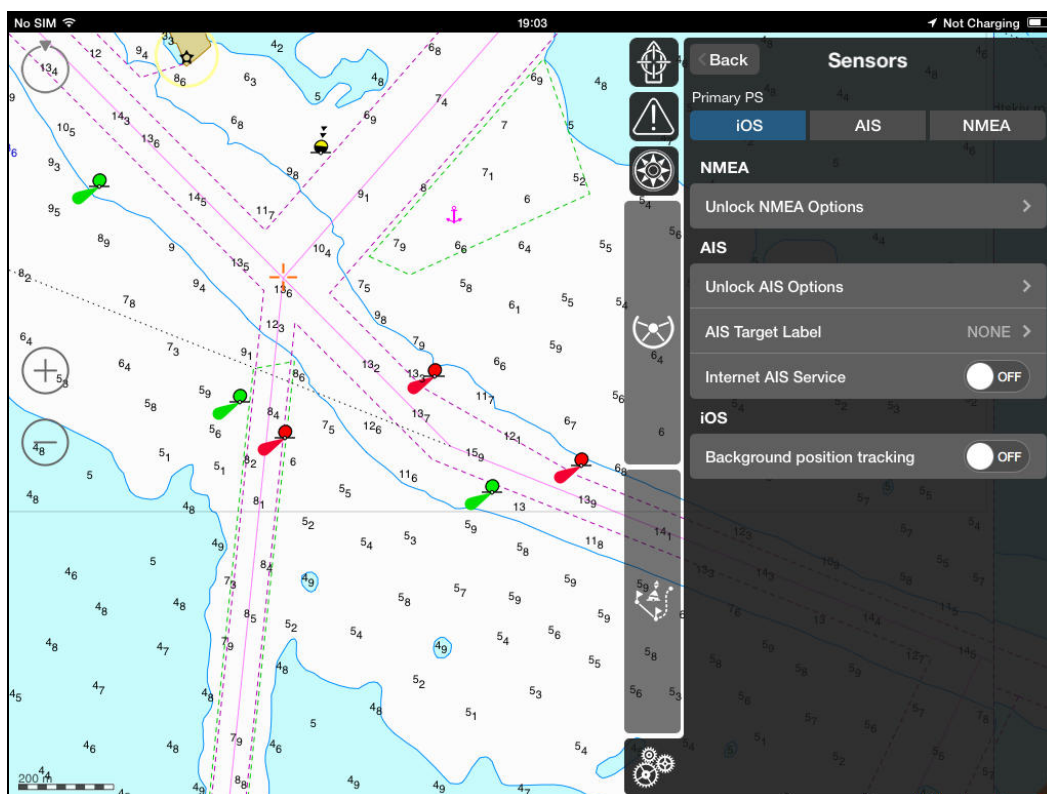
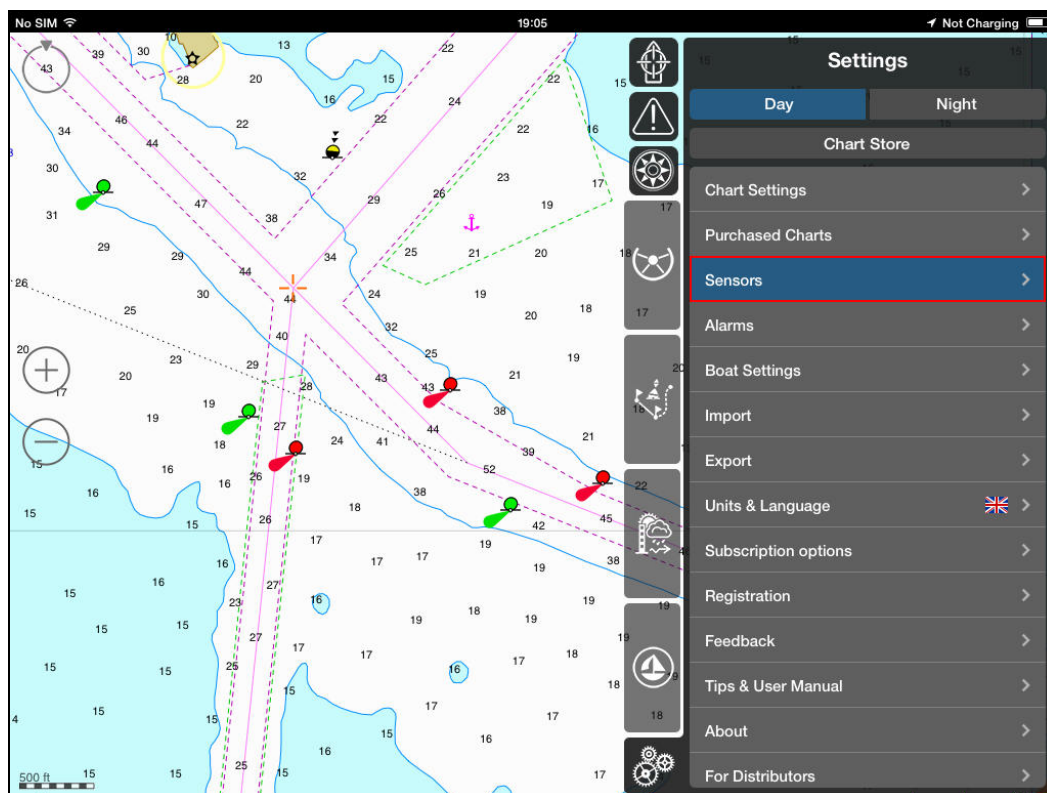
1. 0



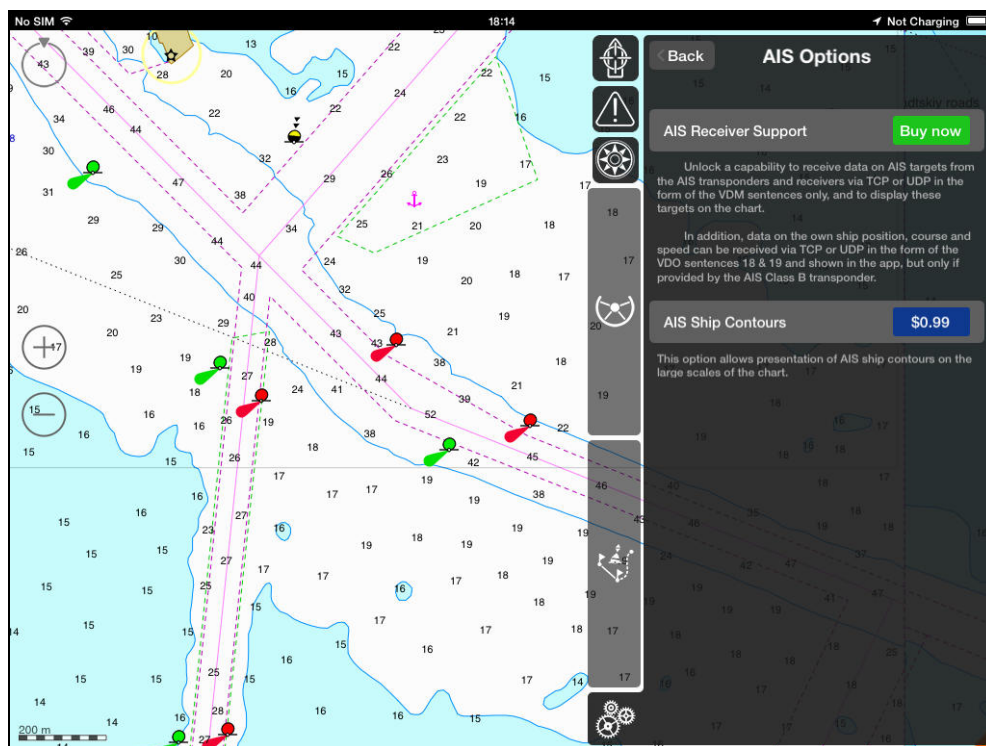
1. *Journal of the American Medical Association*, 2000; 283: 2689-2696.



You will have to open the “**Settings**” – “**Sensors**” menu and activate the following:

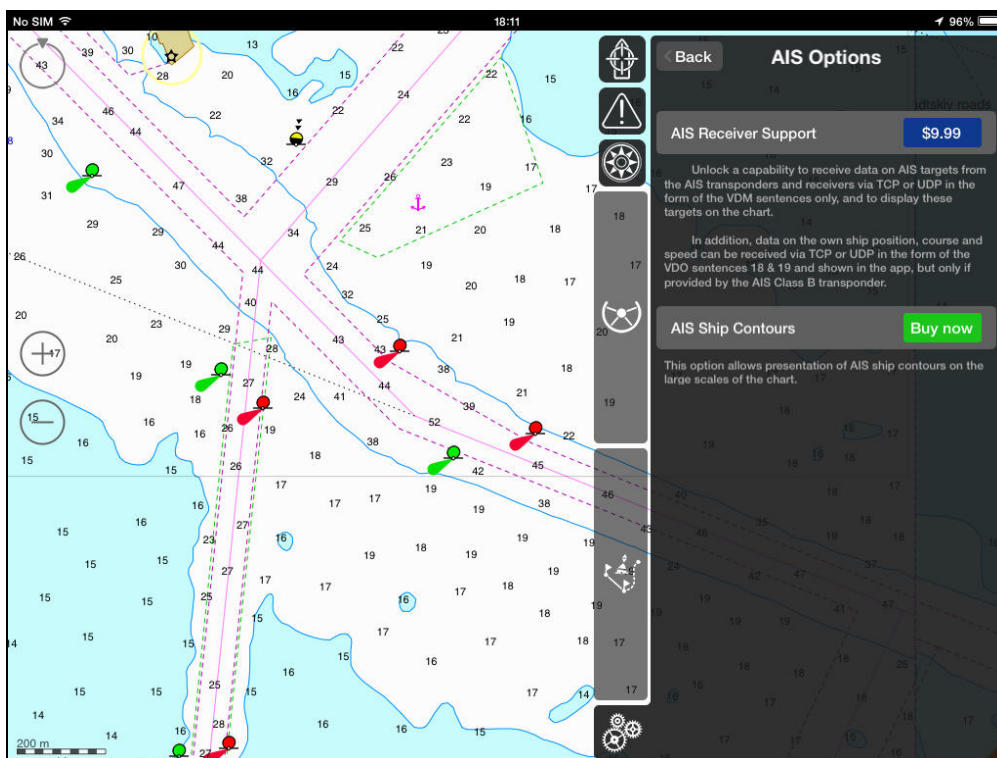


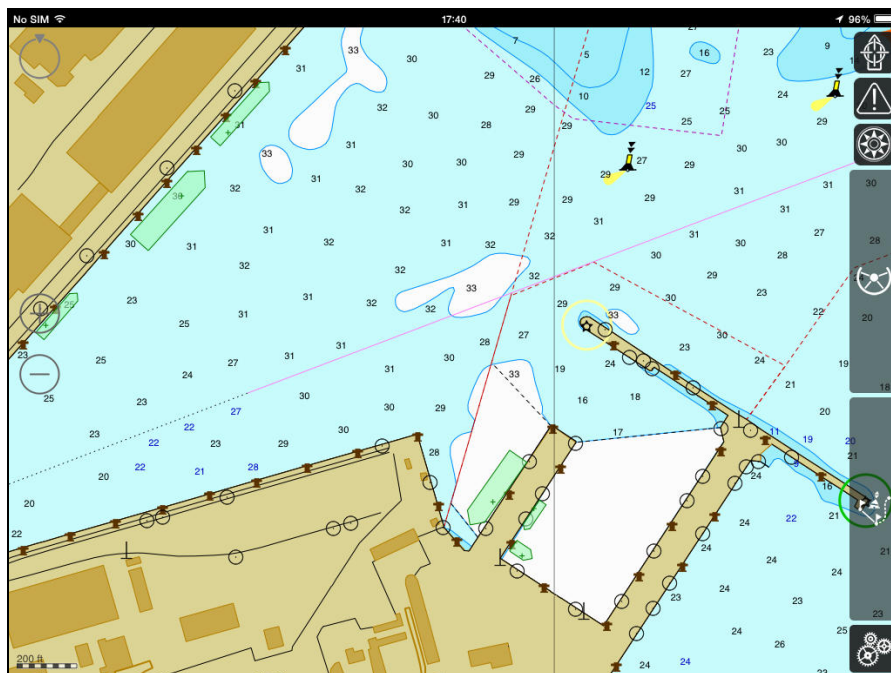
- “Unlock AIS Options” – section with additional AIS options
Option “AIS Receiver Support” for operation with real “AIS class B” or “AIS receiver”.



Note: Detail information about “AIS Receiver Support” is available in **Chapter 14, Section 14.1. “Using AIS in iSailor”** of this manual.

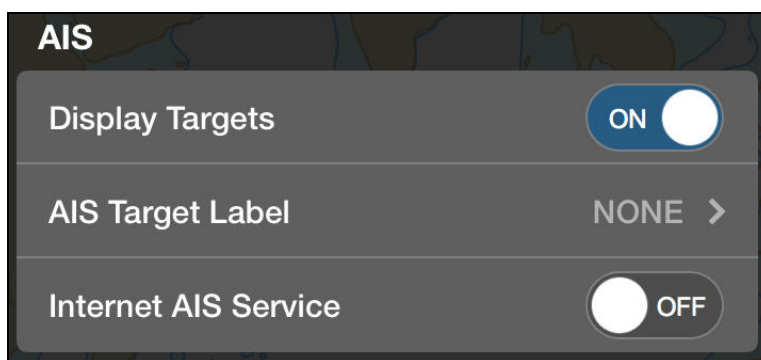
Option “AIS Ship Contour”. For presentation on the Chart area of vessels and AIS targets in the form of contour in accordance with real sizes.





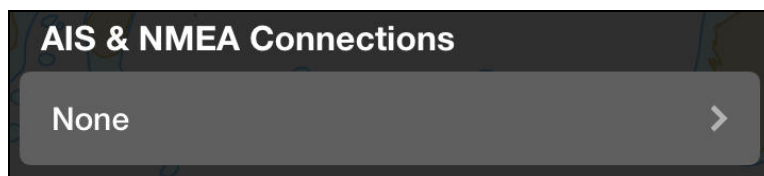
- **“AIS Targets Label”** – setup presentation of the AIS target labels in the Chart area:
- **“Internet AIS Service”** – this button activates the Internet AIS data server connection. Internet connection is required.

In final view the **“AIS”** section is needed for operation with AIS targets:



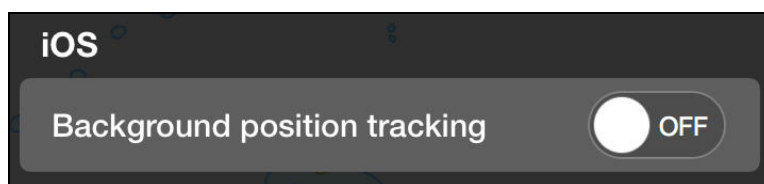
- **Display Targets** – switch **ON** / **OFF** the displaying of AIS targets in the Chart area;
- **AIS Target Label** – setup presentation of the AIS target labels in the Chart area. Available settings: **NONE** (no labels), **NAME** (AIS Ship name will be presented near to the target symbol), **CALL** (AIS Ship Call Sign will be presented near to the target symbol) or **MMSI** number (AIS Ship's MMSI will be presented near to the target symbol).
- **Internet AIS Service** – switch **ON** / **OFF** the displaying of Internet AIS targets.

The **“AIS & NMEA Connections”** section is needed for adjustments of connection settings to external AIS equipment via Wi-Fi transmitter or 3rd Party NMEA sensors.



Note: please see

The “**iOS**” section has only one setting for operation with the internal built-in GPS or external Bluetooth GPS via Apple iOS Location Service:



Background position tracking - switch **ON** or **OFF** the position tracking in the background mode of the **Transas iSailor** app. It's only applicable for the **Primary PS: IOS**.

Please, be noted that operation in this mode may discharge your device battery much faster!

How to Use – Internet AIS Service:

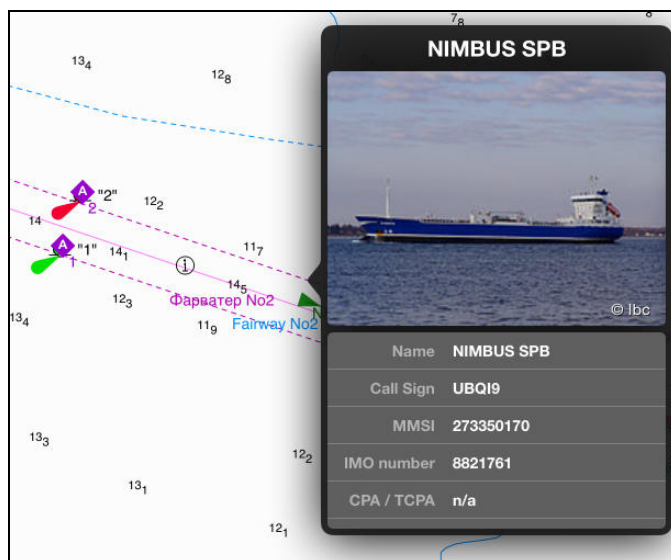
This functionality is absolutely identical to the presentation of the standard AIS targets, received via connected AIS Class A or B transponder. See details in the **Chapter 9.5 “AIS target data”** above. The main difference that **Internet AIS Service** require connection to internet (over Wi-Fi, LTE or 3G) and all targets received via Internet. Some additional tips in relation to this option:

- Make sure that you have adjusted a proper **Date & Time** settings in the iOS “**Settings**”:

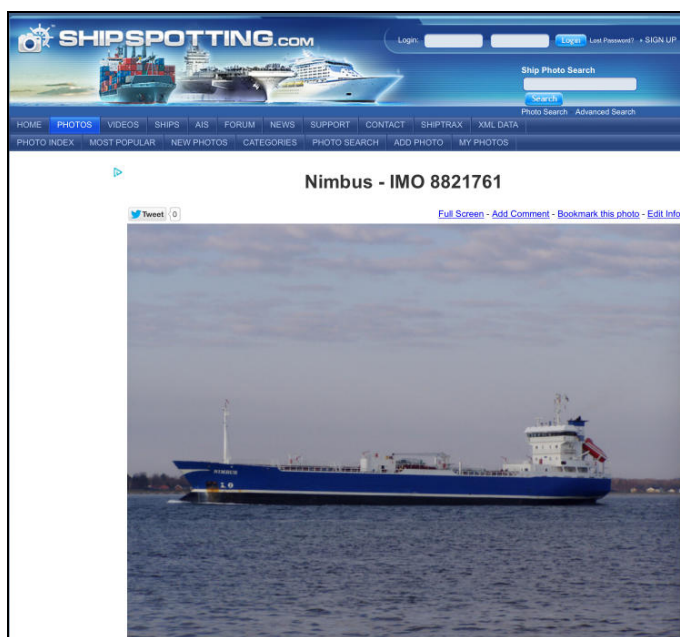


“Set Automatically” switch button should be in position “ON”!

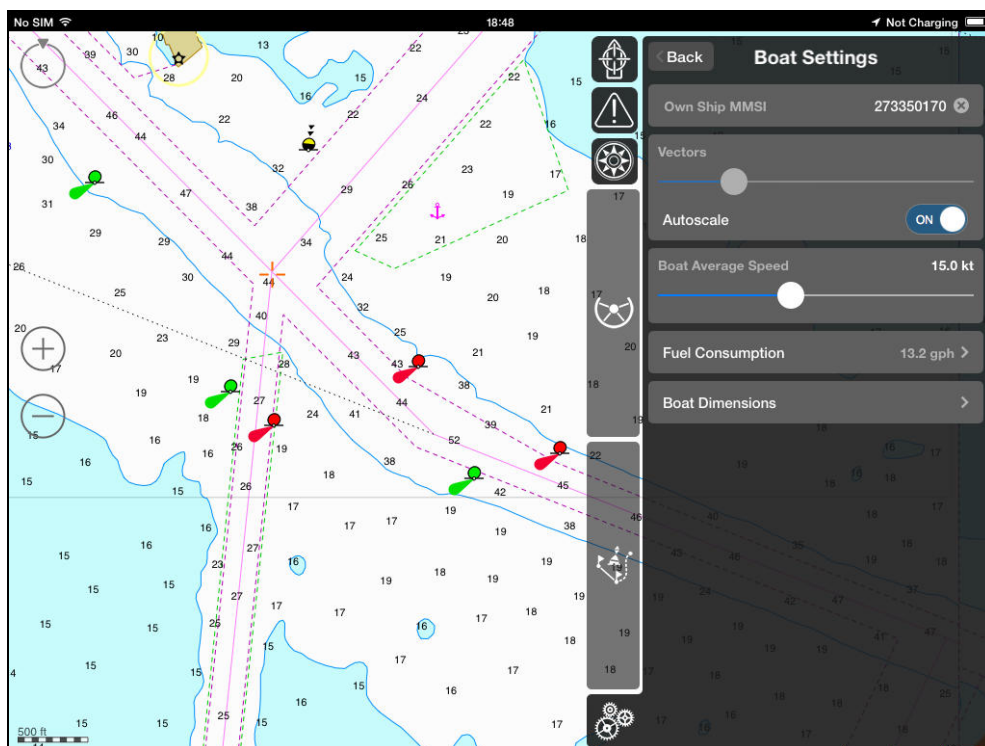
- **AIS Target information window** may have a photo for selected ship (applicable for most of received targets):



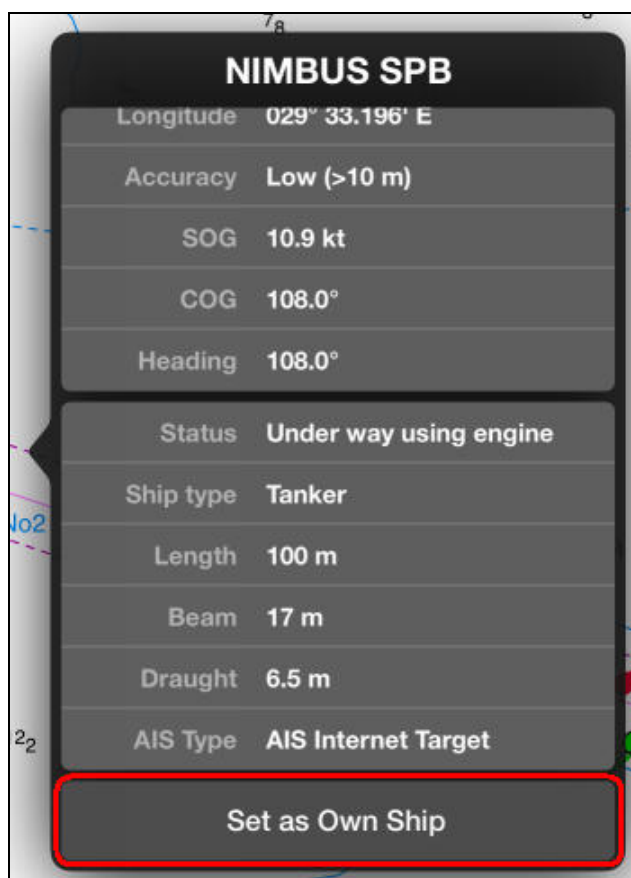
Tap the photo to check information on shipspotting.com, if necessary:



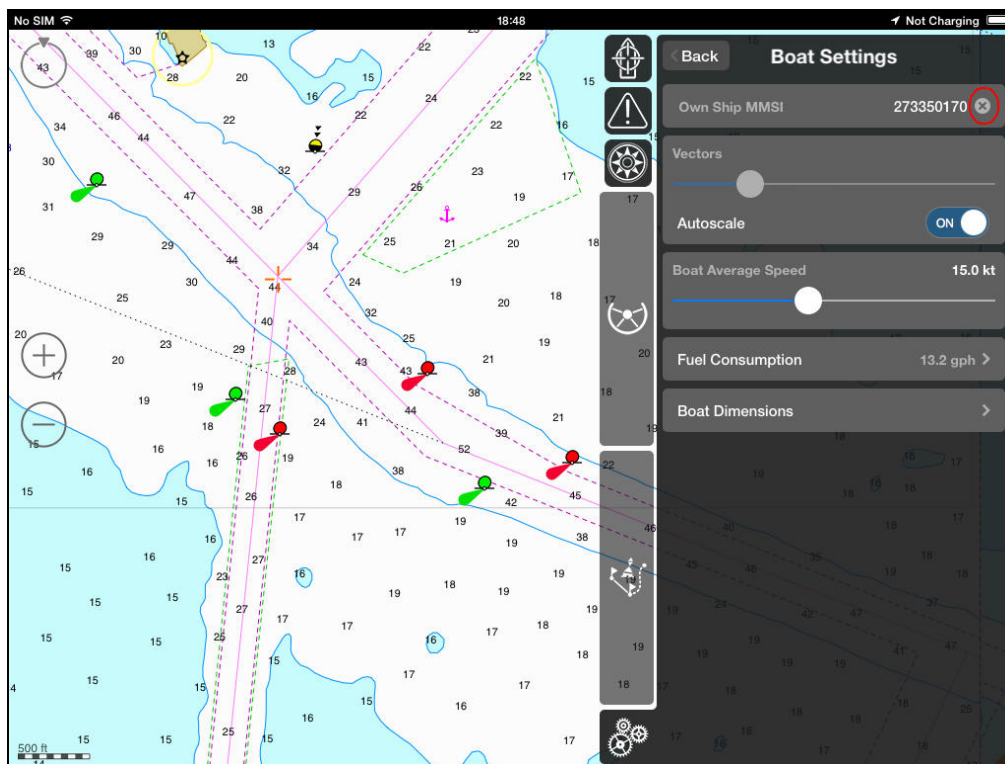
- You may activate a filtering of the **Own Ship AIS** target, which is received in the **Transas iSailor** through the **Internet AIS Service** (just to avoid a cluttering between your actual ship's position and data from the **Internet AIS Service**. It may be done by 2 ways:
 - Specify Own Ship MMS number in the **"Settings"/"Boat Settings"** menu item:



- Or use the **"Set as Own Ship"** button in the bottom part of the selected **AIS Target information window**:



- Filtering can be disabled by the deletion of the **Own Ship MMSI** number using the "cross" symbol:

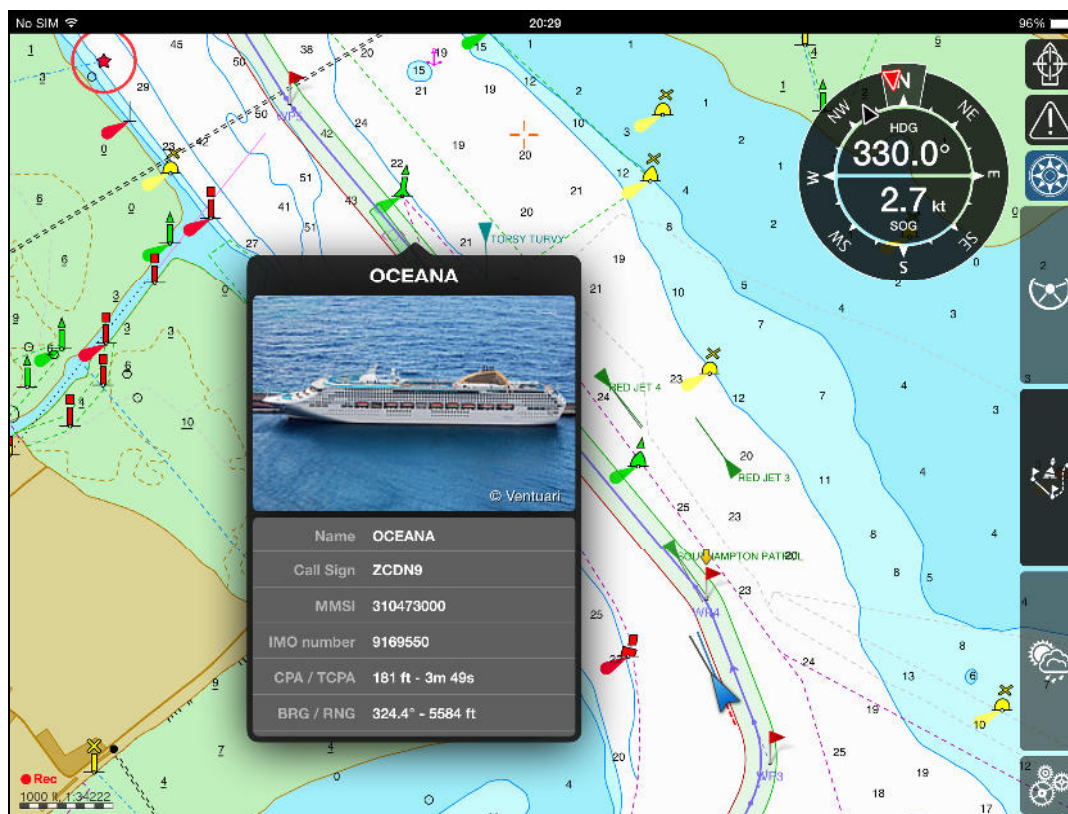


- AIS data update interval – data request to server:
 - Once per **30 seconds** for the centre of the selected chart area (when chart area is static);
 - By the any **chart re-draw command** (zoom in, zoom out, pinch to zoom, drag chart area).

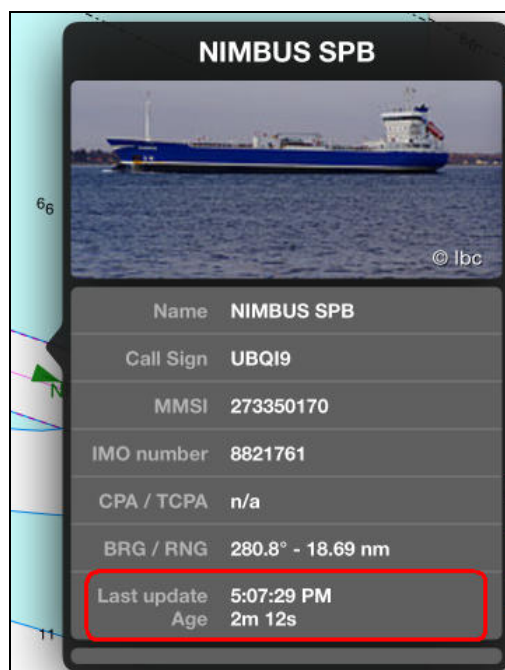
You will see the “data request” icon during all aforementioned requests:



- Received real time AIS data will be shown within a 50-60 nm from the centre of the active chart screen area:



- **Last Update & Age fields.**



- **Last update** field shows last observation time of the selected target from the **Internet AIS server**;
- **Age** field shows the difference between **Last update** time and **actual** (iPad's) time.

NOTE: Transas iSailor is only processing up-to-dated AIS targets from the Pocket Mariner server and will not display AIS targets with **Age > 30 minutes**! Please, be noted about it.

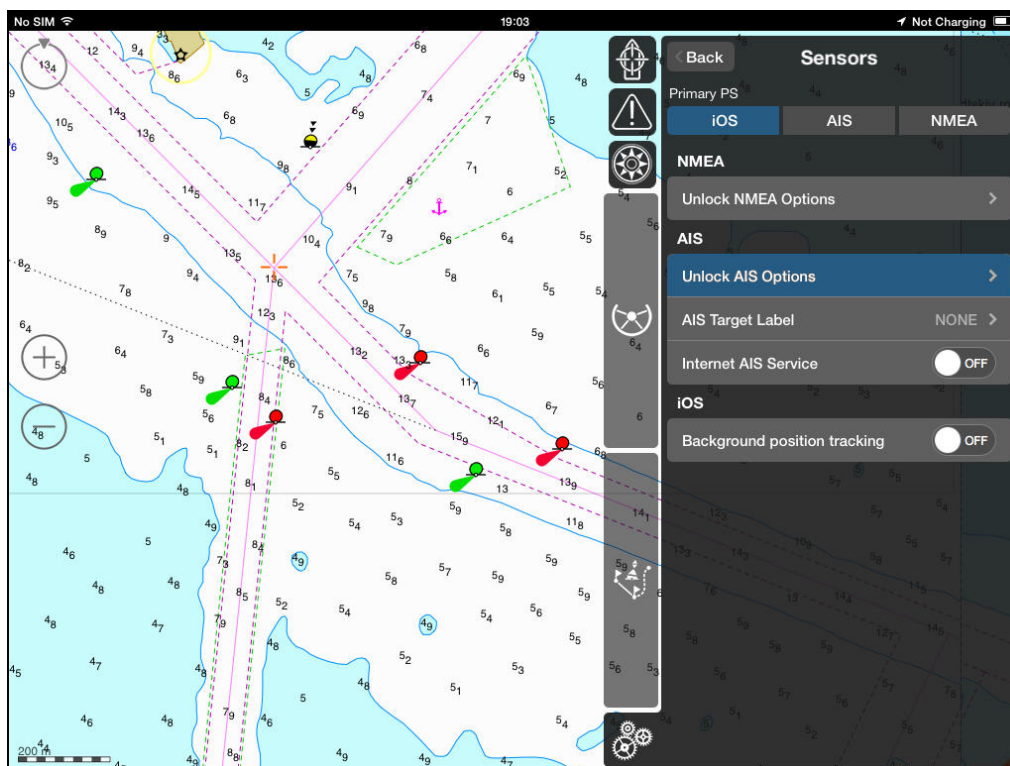


- **Deletion of the Internet AIS targets:**

Drop timeouts for Internet AIS target (if data was not updated in the defined time period):

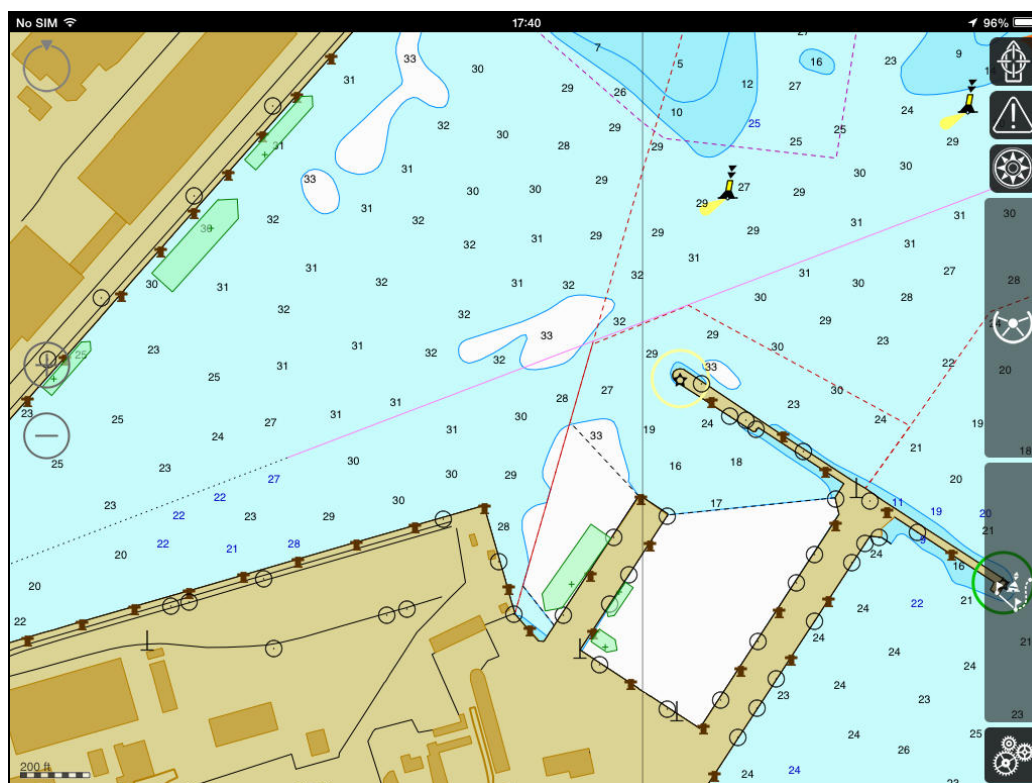
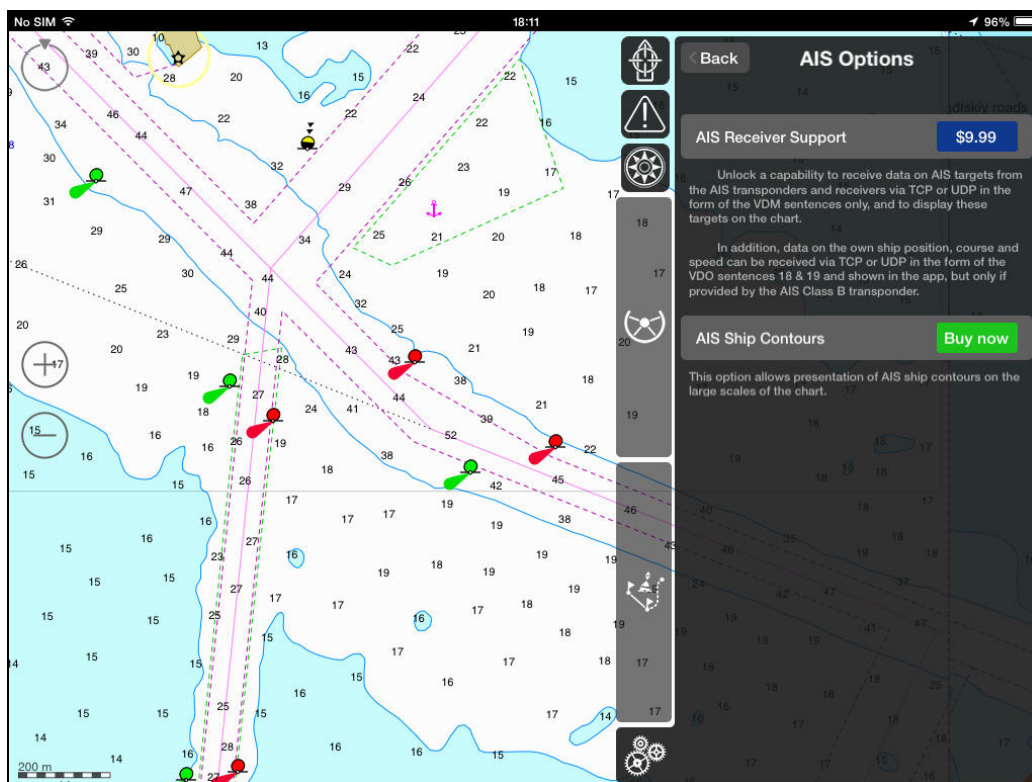
AIS target type	VDM message	Lost timeout from latest data	Drop timeout from latest data
AIS Class A, AIS Class B	AIS internet target	Not Applicable	3 minutes or parameter Age > 30 min
Base Station	AIS internet target	Not Applicable	30 min
AtoN (Aids to Navigation)	AIS internet target	Not Applicable	30 min

After you have purchased the “**Internet AIS Service**” option subscription, you will have to open the “**Settings**” – “**Sensors**” menu and activate the following:



In section “**AIS**” press “**Unlock AIS Options**” button.

To view the vessel contours and AIS target dimensions you will have to buy the additional “**AIS Ship Contours**” option in the “**Sensors**” – “**AIS Options**” menu.

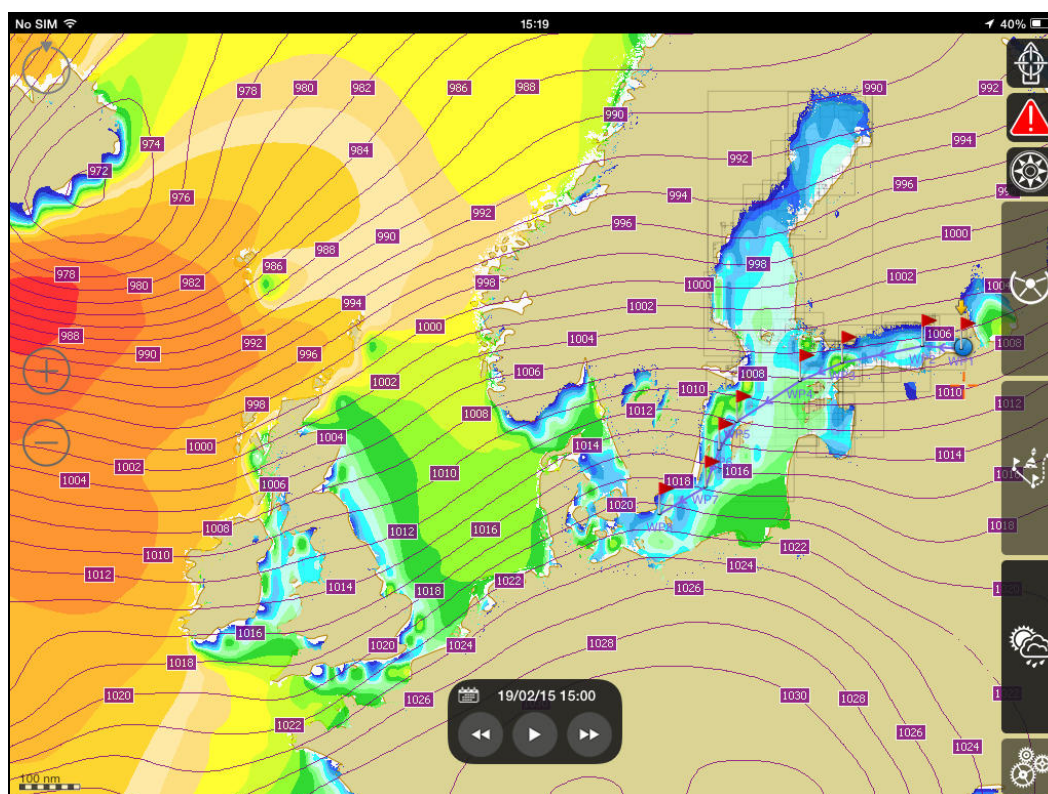




13.3. ADDITIONAL INFORMATION ABOUT THE “WEATHER SERVICE” OPTION

After you have purchased the “**Weather Service**” option subscription, you will see the additional “**Environmental Data**” tab appear in the main iSailor information panel.

Online “**Weather Service**”: global real time Weather Forecast service from **Theyr.com**. This option enables following weather forecast data: **Wind Speed & Direction, Atmospheric Pressure, Wave Height, Precipitations** (and some combined: **Wind & Wave, Wave & Pressure, Wind & Pressure**):



“Environmental Data” panel. “Weather Forecast” data. Fullscreen mode.

- **Weather Data** by regions, resolution and duration of the forecast:

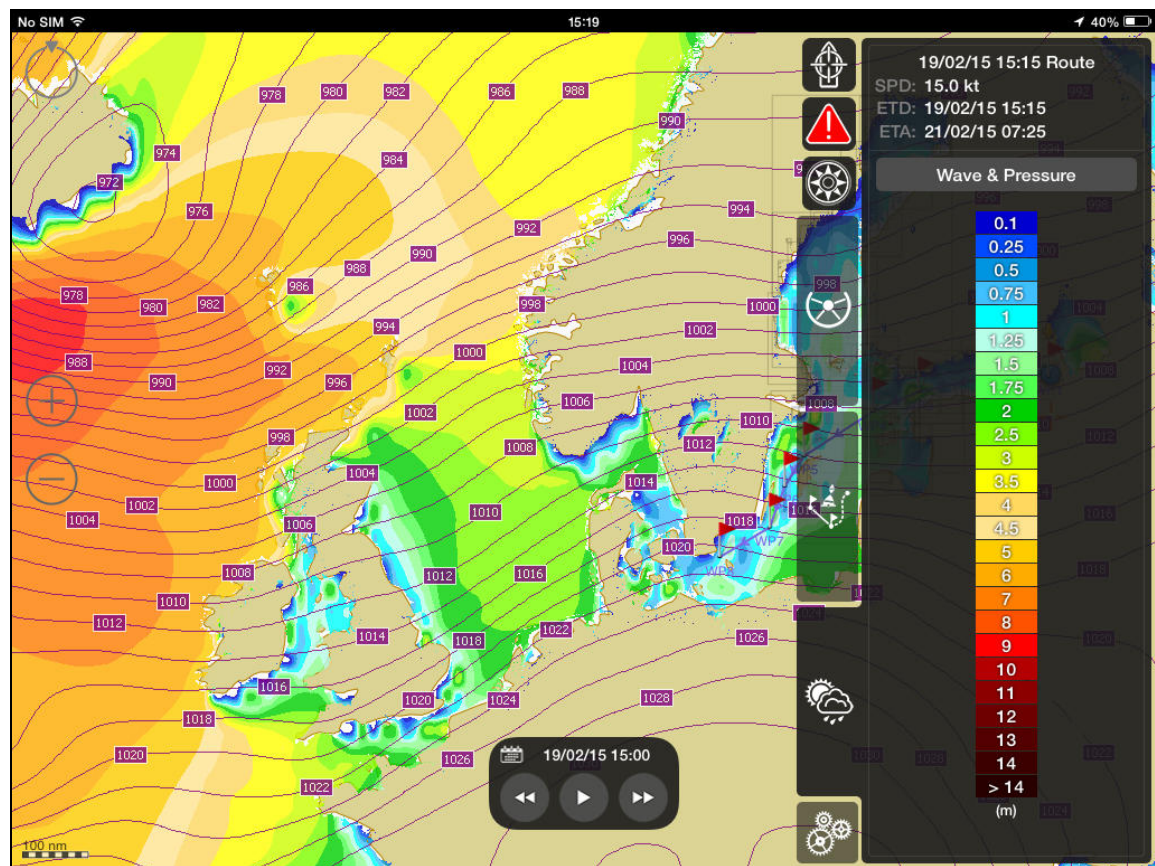
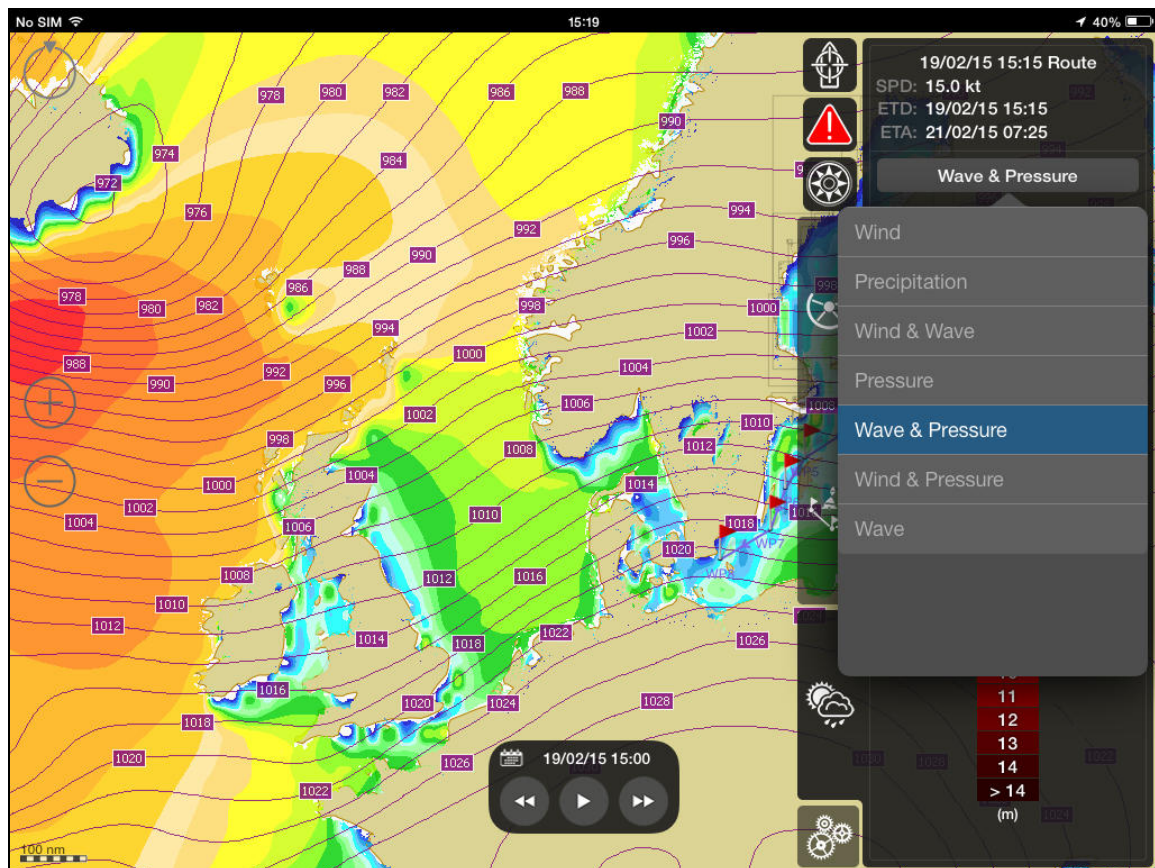
Name of the Region	Available Parameters	Resolution	Forecast Duration	Step	Refresh cycle
Global Forecast	Wind, Pressure, Precipitation, Wave	0.50 deg	144 hrs / 6 days	3 / 6 hrs	12 hrs
Europe North Atlantic	Wind, Pressure, Precipitation, Wave	0.10 deg	96 hrs / 4 days	1 / 3 / 6 hrs	12 hrs



English Channel	Wind, Pressure, Precipitation, Wave	0.010 deg	48 hrs / 2 days	1 / 3 / 6 hrs	12 hrs
East / Centre USA NMM	Wind, Pressure, Precipitation	0.045 deg	48 hrs / 2 days	1 / 3 / 6 hrs	24 hrs
West/Centre USA NMM	Wind, Pressure, Precipitation	0.045 deg	48 hrs / 2 days	1 / 3 / 6 hrs	24 hrs
Alaska NMM	Wind, Pressure, Precipitation	0.045 deg	48 hrs / 2 days	1 / 3 / 6 hrs	24 hrs
South America	Wind, Pressure, Precipitation, Wave	0.080 deg	60 hrs / 2.5 days	1 / 3 / 6 hrs	12 hrs
South Africa	Wind, Pressure, Precipitation, Wave	0.080 deg	60 hrs / 2.5 days	1 / 3 / 6 hrs	12 hrs
SE Australia / New Zealand	Wind, Pressure, Precipitation, Wave	0.080 deg	48 hrs / 2 days	1 / 3 / 6 hrs	12 hrs
East Australia	Wind, Pressure, Precipitation, Wave	0.080 deg	60 hrs / 2.5 days	1 / 3 / 6 hrs	12 hrs
West Australia	Wind, Pressure, Precipitation, Wave	0.080 deg	60 hrs / 2.5 days	1 / 3 / 6 hrs	12 hrs
West Europe	Wind, Pressure, Precipitation, Wave	0.040 deg	48 hrs / 2 days	1 / 3 / 6 hrs	12 hrs

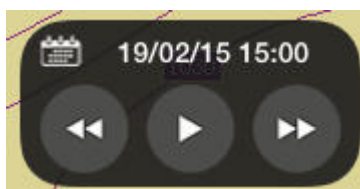
How to Use:

- Tap the “**Environmental Data**” panel. Selected route is shown on top with the Average Speed, ETD and ETA (for information purposes, see details in the **Chapter 11.1.3 “Schedule Calculation”**).
- Tap the dropdown “**Parameters**” button and select required weather parameter, for example “**Wave & Pressure**”. Legend is available for the selected parameter and shown below the dropdown “Parameters” button:





- Weather Forecast for the selected parameter and actual Date & Time will be show on the chart area. Internet Connection is required (Wi-Fi or 4G/LTE is recommended!).
- Be noted that maximal scale is limited (Zoom In) during operation with a weather forecasts for convenience purposes.
- Main Information panel can be “hidden” for better view. Tap the page control to hide or open the “**Environmental Data**” panel (or any other).



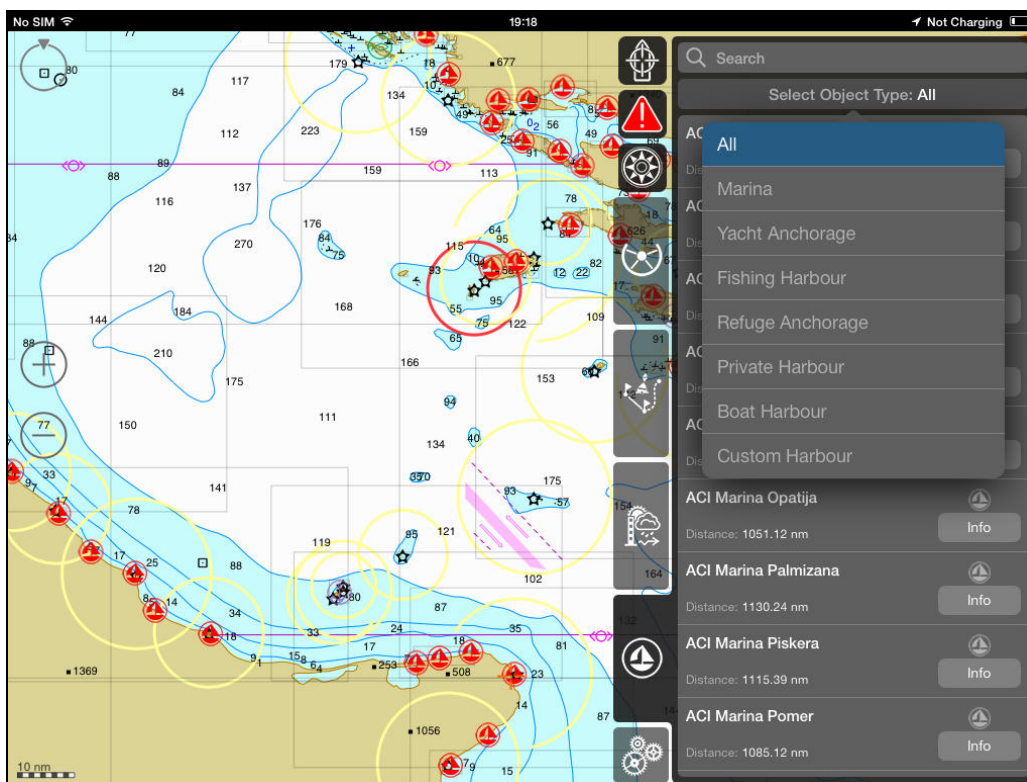
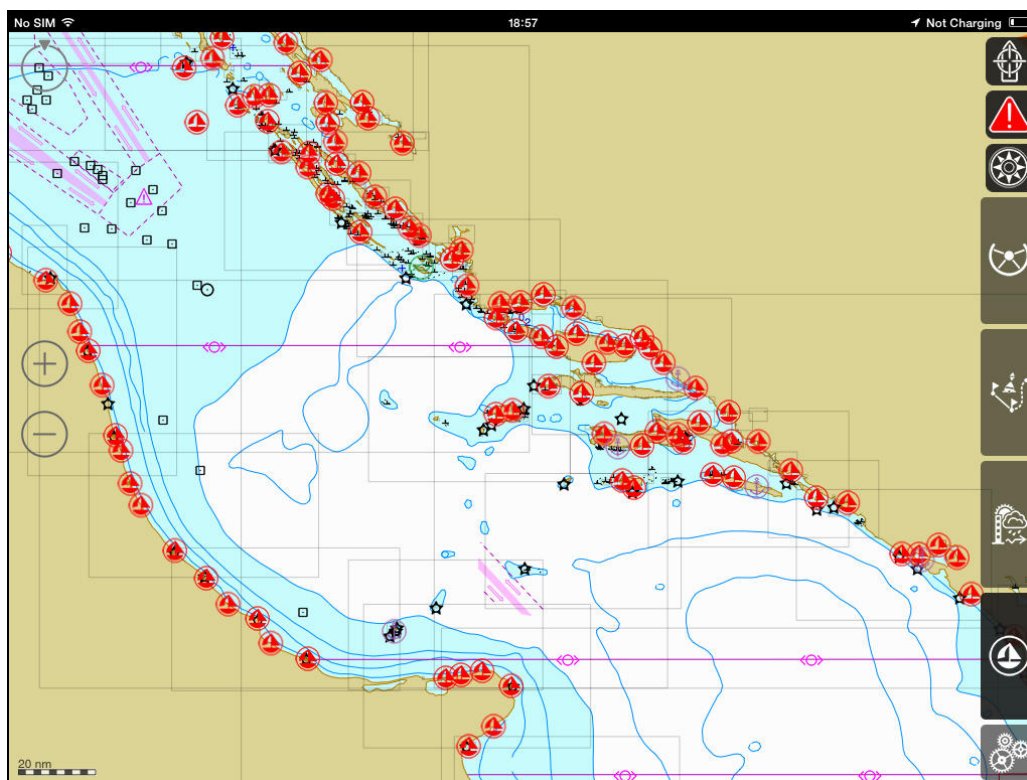
- Use the “**Player**” control to see the weather forecast ahead (take into consideration that duration of weather forecast is different for different areas and parameters. See details in the table above.
- Use the “**Calendar**” icon to specify required date ahead.

NOTE: Weather Forecast for different parameters can be cashed in the memory (saved in the application) during playback mode **for future usage in the offline mode!** You should select required area at first, select required weather Parameters (one by one) and use “**Play Ahead**” for playback and cashing purposes! All available weather forecast tiles will be cashed in the memory for corresponding weather parameters and selected chart scale.

13.4. **ADDITIONAL INFORMATION ABOUT THE “SAILING GUIDES” OPTION**

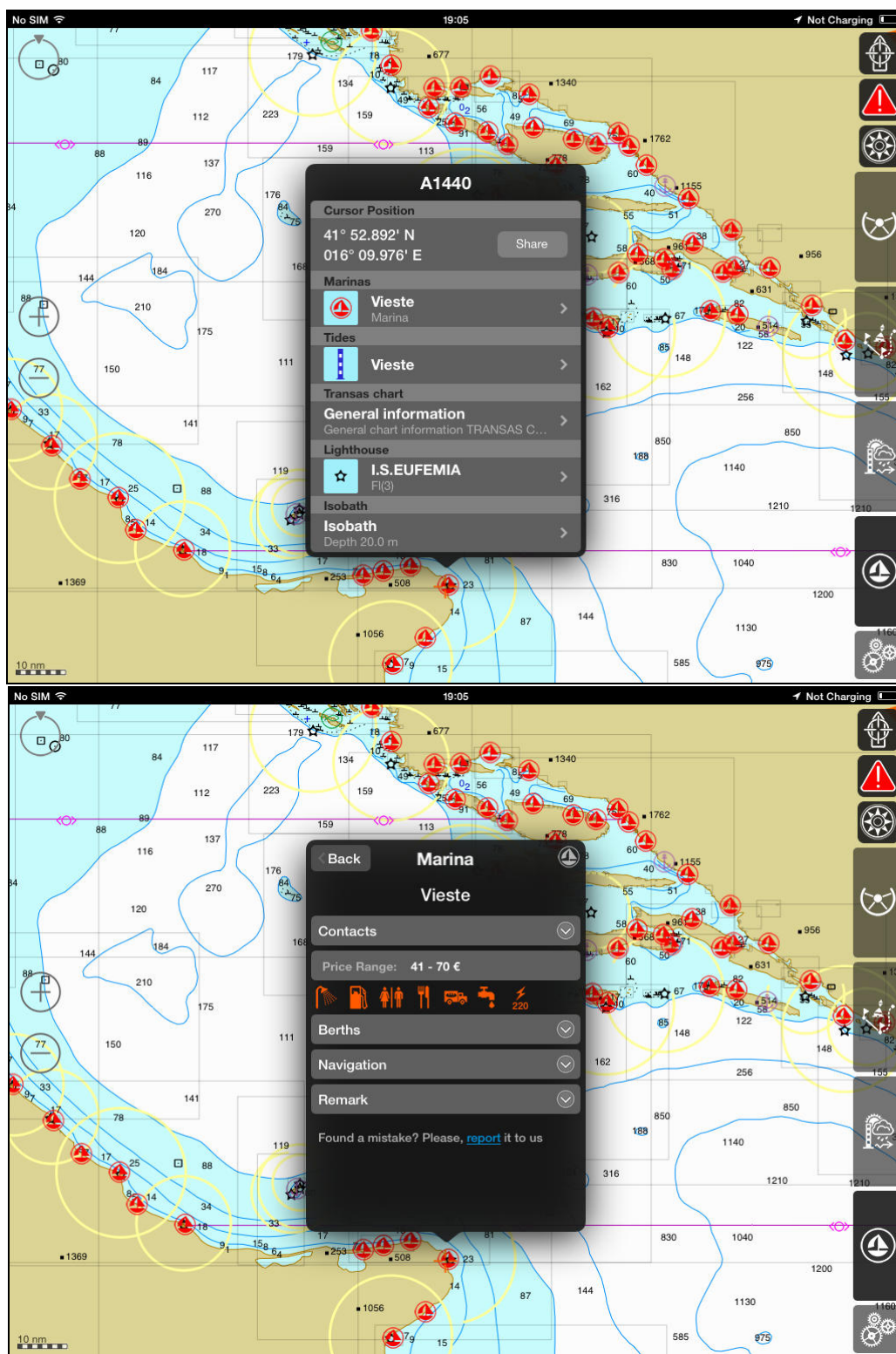
After you have purchased the “**Sailing Guide**” option subscription, you will see the additional “**Marina**” tab appear in the main **iSailor** information panel.

“**Sailing Guides**” is a database of objects for use on the device. Available object types: **Marina, Yacht Anchorage, Fishing Harbour, Refuge Anchorage, Private Harbour, Boat Harbour, Custom Harbor.**



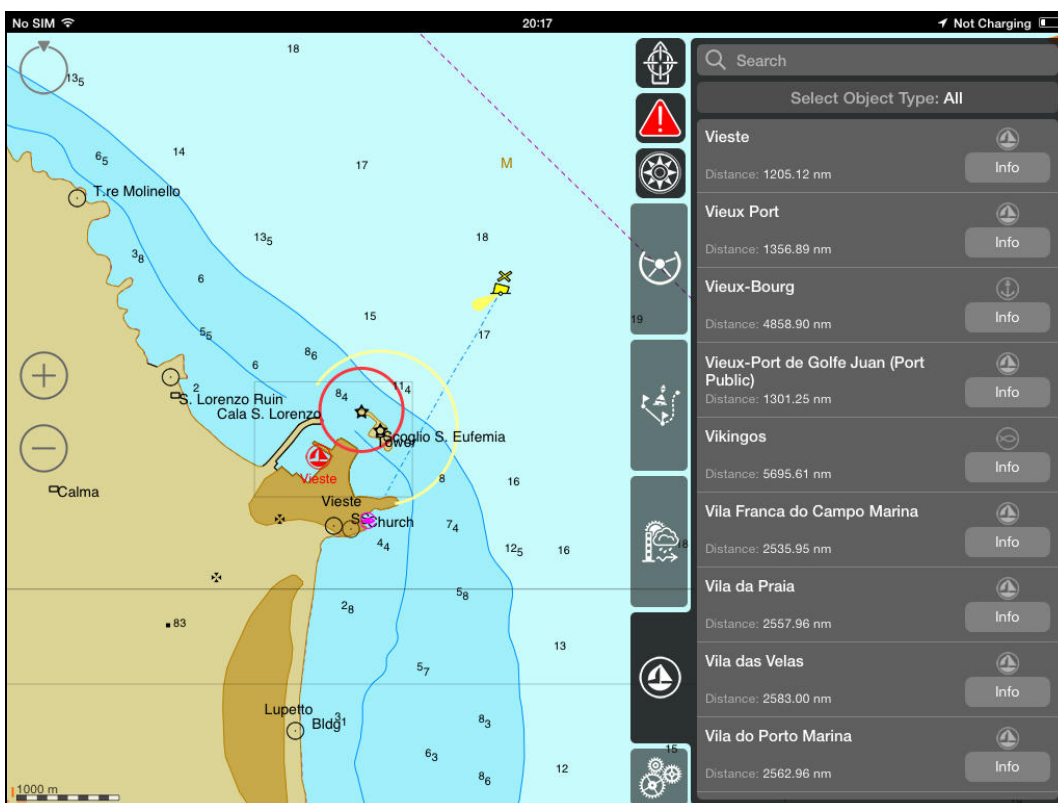
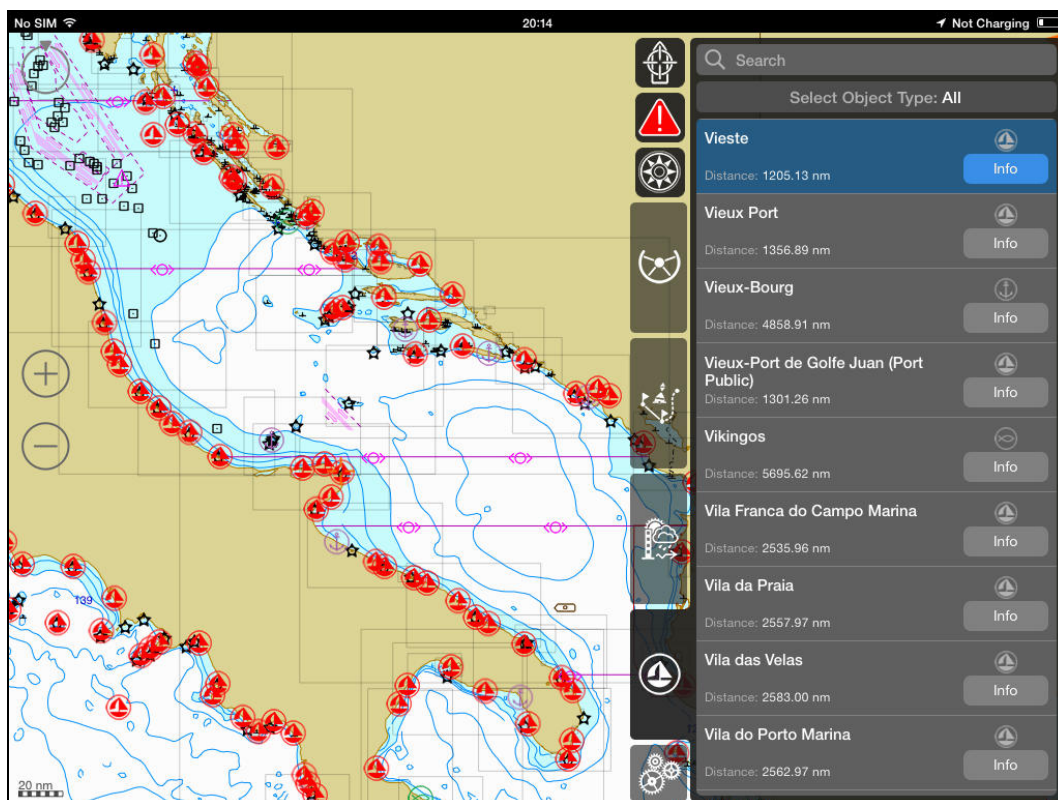
How to Use – Sailing Guide:

- Check Special Symbols on the chart area.
- Activate free cursor and take **Info** for the any Special Symbol on chart:

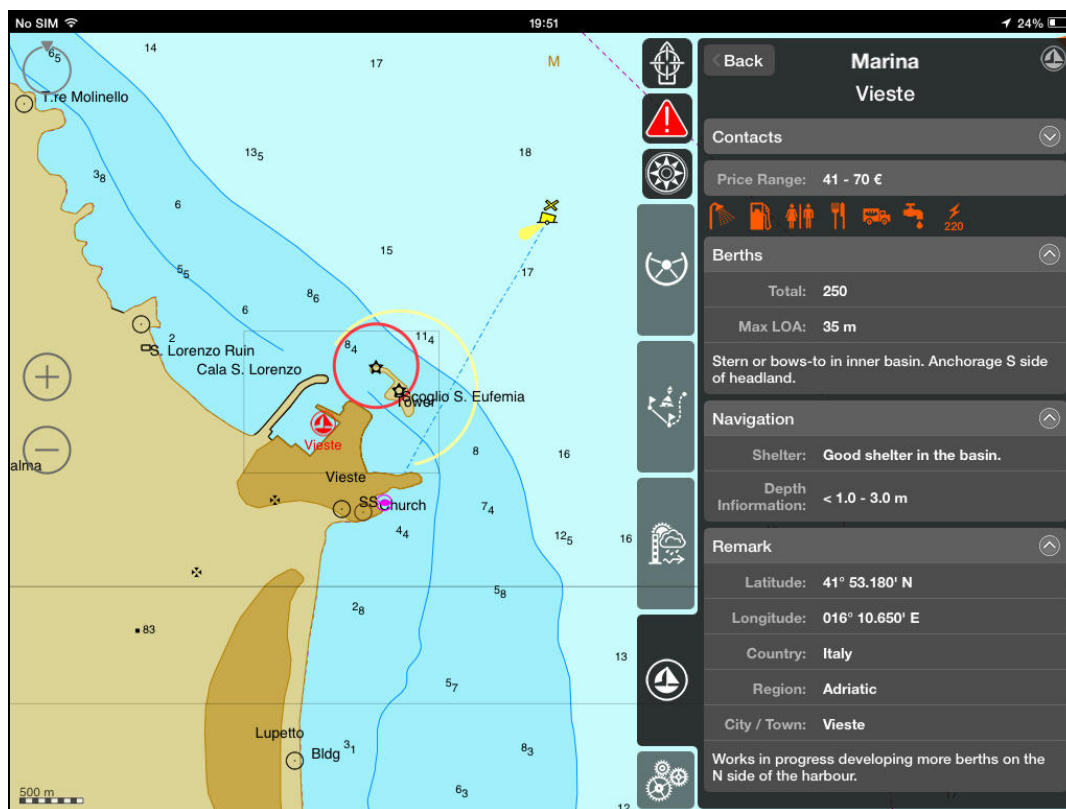


- For display of object on the chart area click on the object name in the list:

NOTE: The list contains the “Distance” from the Own Ship position to the subject.



- For display of detail information about the object press the “Info” button in the list:



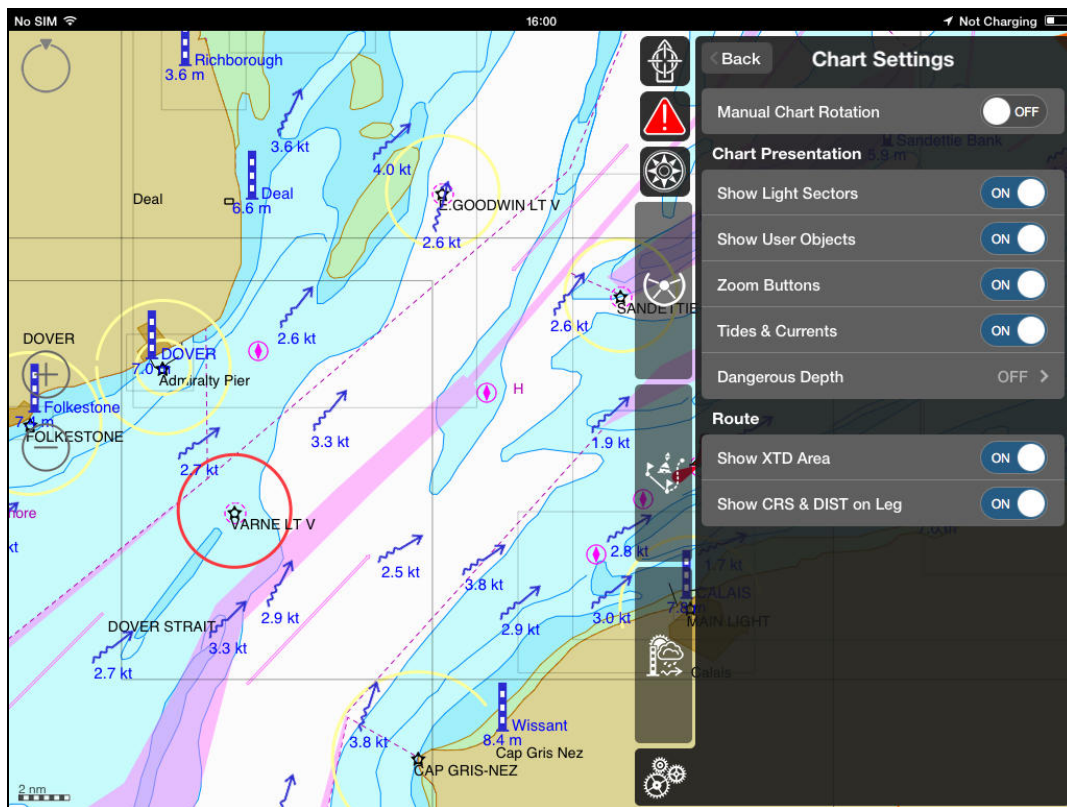
13.5. ADDITIONAL INFORMATION ABOUT THE “TIDES & CURRENTS” OPTION

After you have purchased the “**Tides & Currents**” option subscription, you will see the additional “**Environmental Data**” tab appear in the main iSailor information panel.

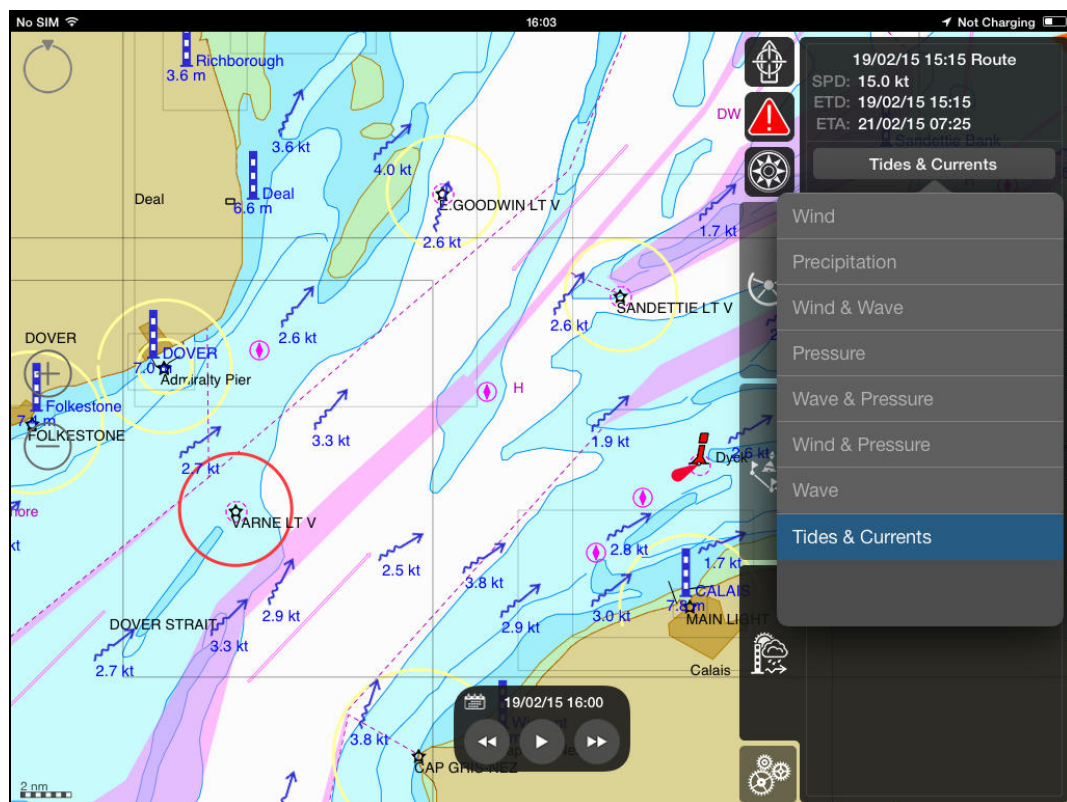
Tides & Tidal Currents database. The tides calculation is performed on the base of four Main harmonics as well as shallow water corrections. The calculation process is based on Simplified Harmonic Method of Tidal Predictions that can be found in different publications, for example Admiralty Tide Tables.

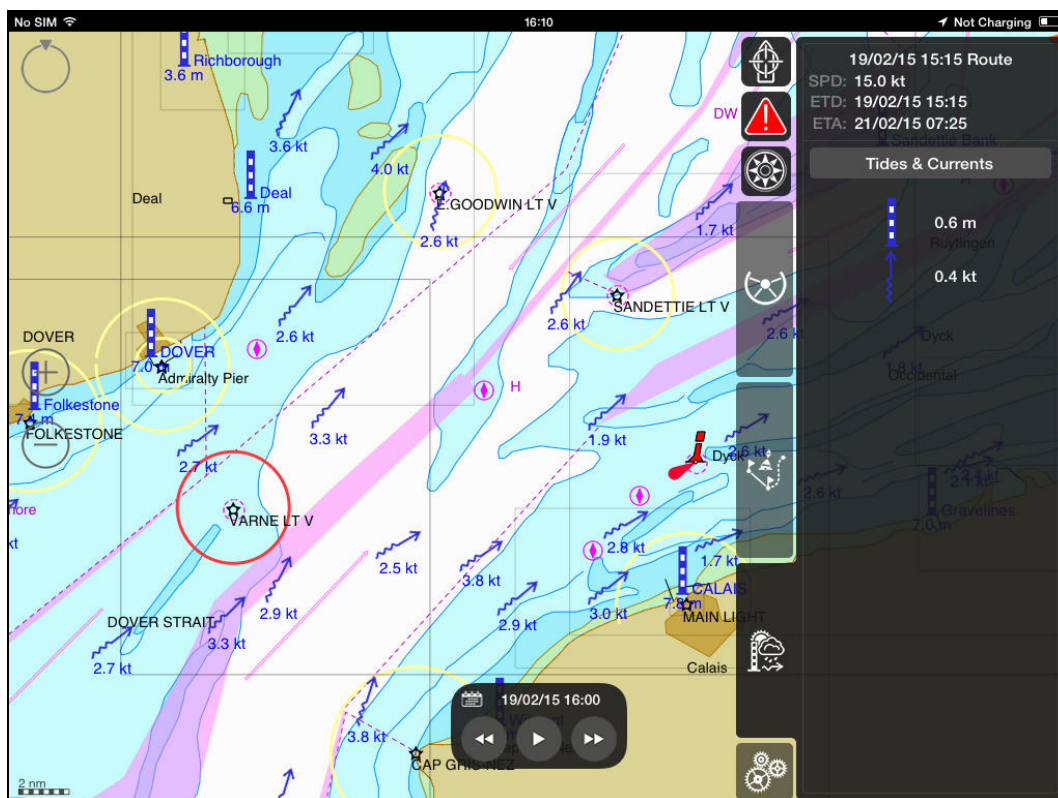
NOTE: Results of the used method may have minor difference with published Admiralty Tide Tables or other prediction software.

- Make sure that “**Tide & Currents**” switch is ON in the “**Chart Settings**” menu item:



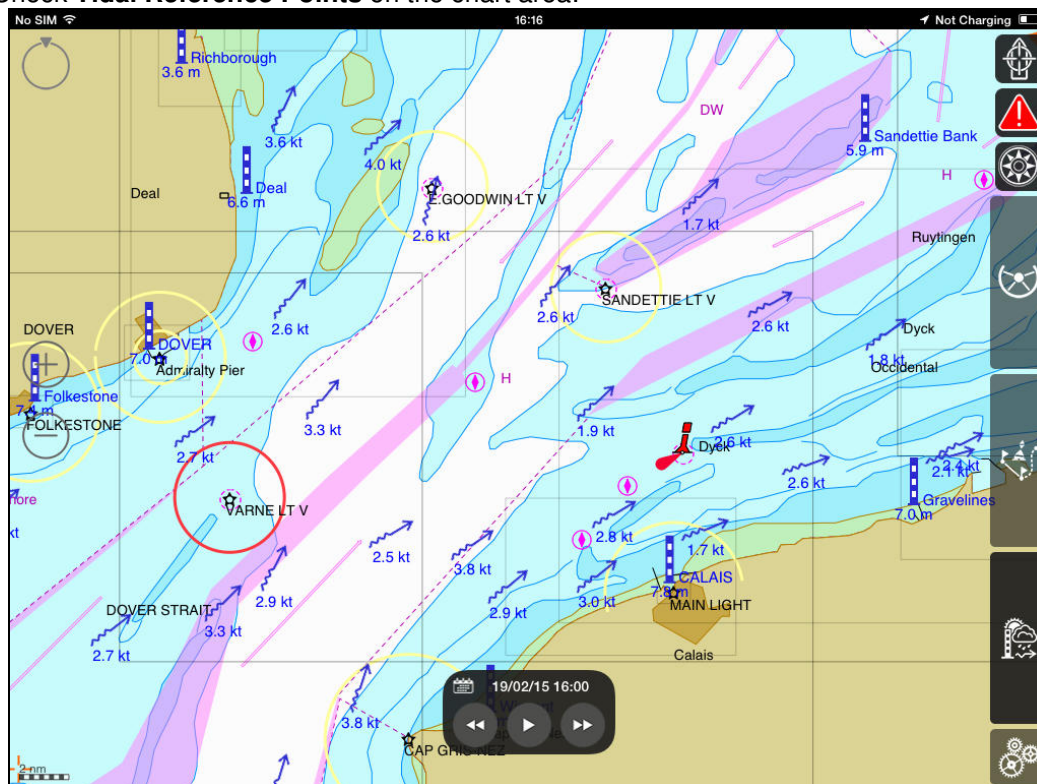
- Tap the dropdown “**Parameters**” button and select required “**Tides & Currents**” parameter. Legend is available for the selected parameter and shown below the dropdown “Parameters” button:





How to Use - Tides:

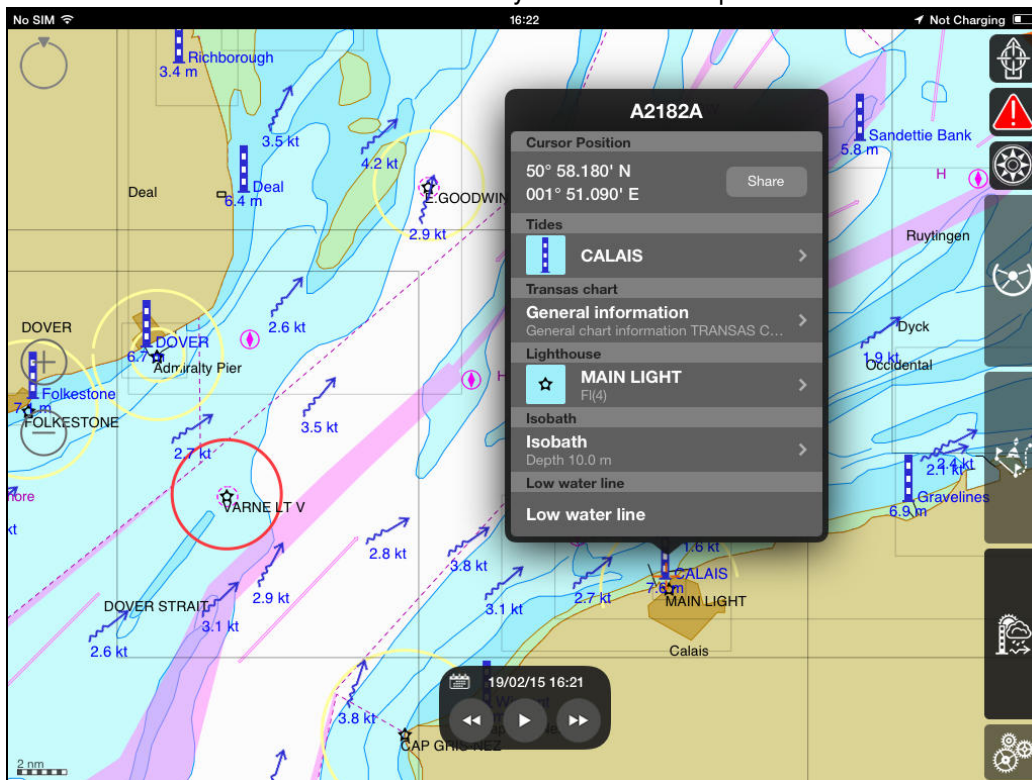
- Check **Tidal Reference Points** on the chart area:



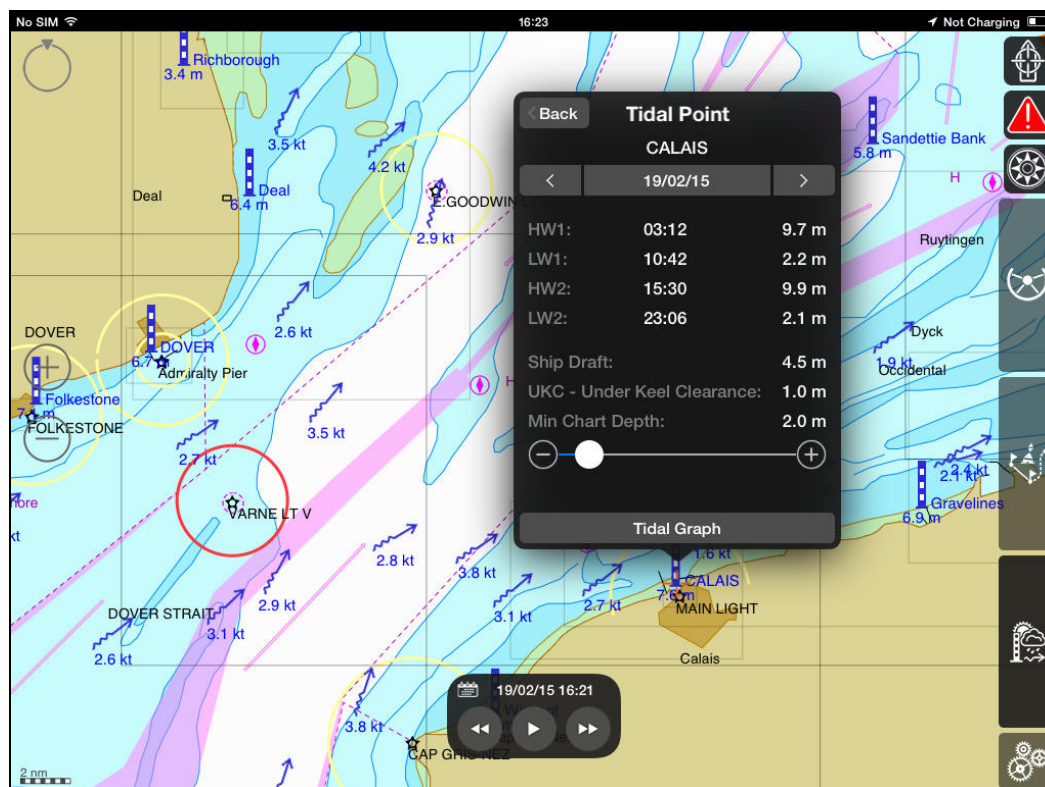
Tidal Points shown with tide levels and names of these points (on the large scale only).



- Activate free cursor and take **Info** for the any Tidal reference point:



- On the first page you will see the textual data:

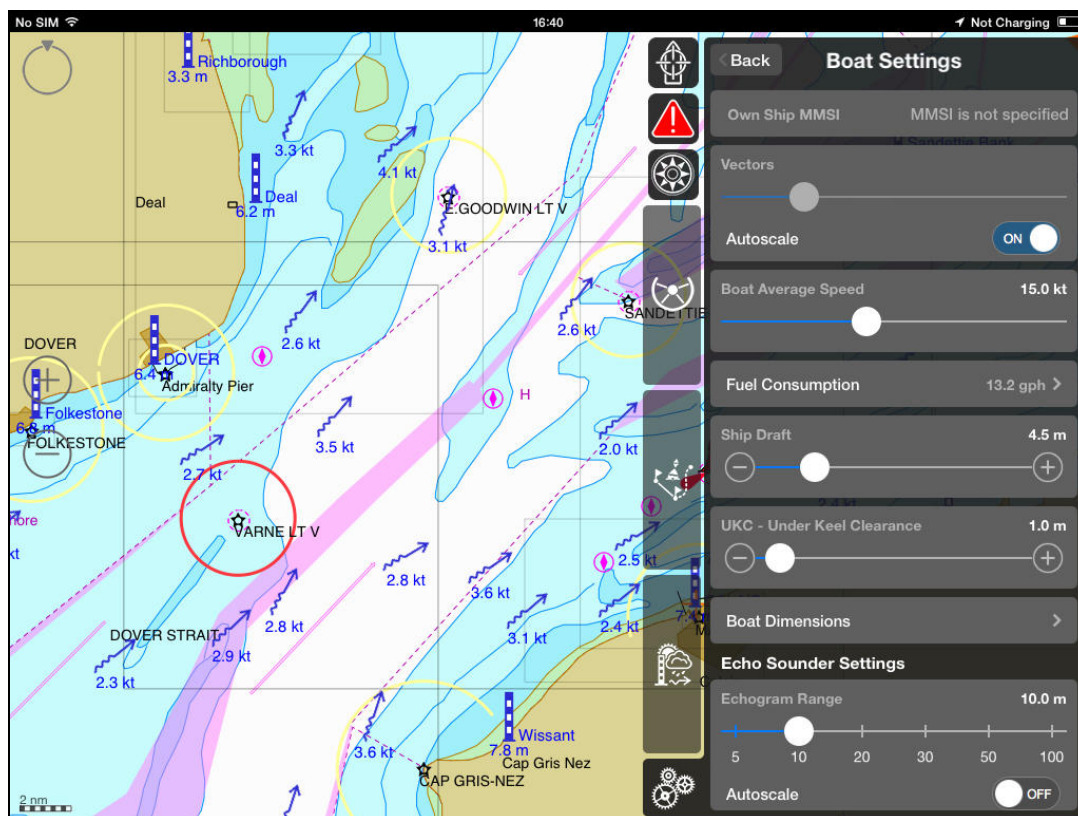


- **Tidal Point Name**
- **Date Selection Control** (including Day Back and Day Ahead buttons)
- **LW1, LW2 (if available)** – Low Water level and time



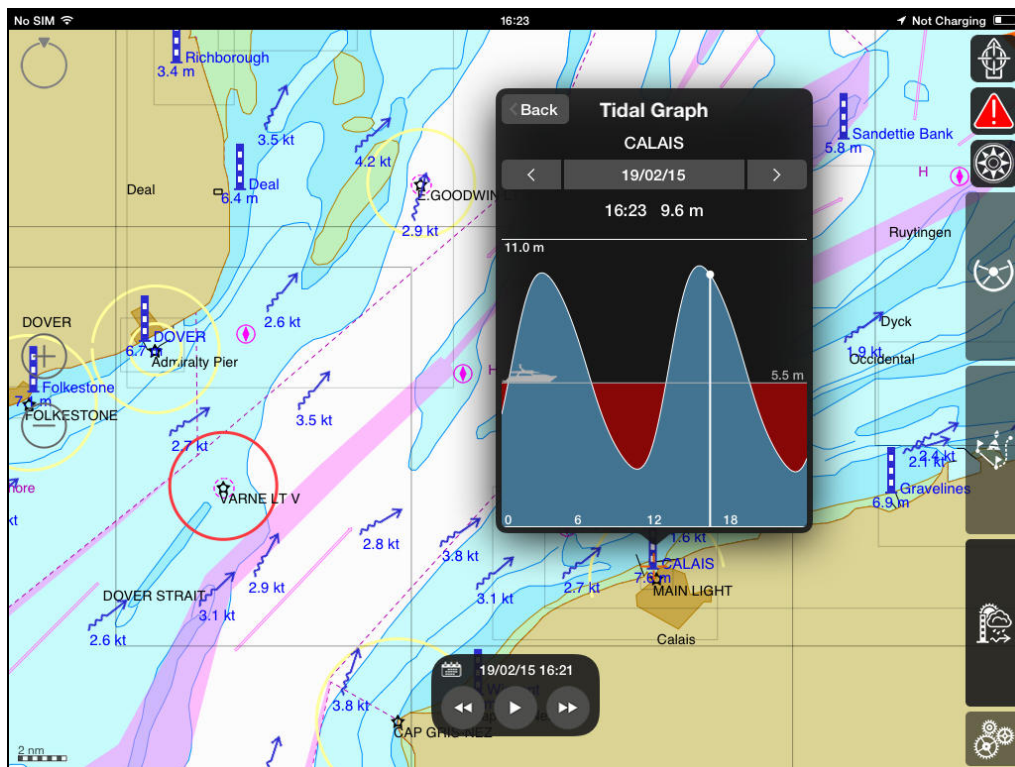
- **HW1, HW2 (if available)** – High water level and time
- **Ship Draft** – user specified own ship draft
- **UKC (Under Keel Clearance)** - user specified UKC value
- **Min Chart Depth** – user specified minimal chart depth in this area
- **Tidal Graph** button – switching to the graphical mode.

NOTE: Make sure that you have entered correct values for the **Ship Draft** and **UKC** in the “**Settings**” / “**Boat Settings**” menu item:



HW and **LW** uses following formulas:

- **Ship Draft:** 0m, **UKC:** 0m, **Min Chart Depth:** 0m – original tidal heights are presented.
- **Otherwise:** **Depth of Water, m** = **HW(LW), m** + **[Min Chart Depth, m]**
- **Time is always referenced to the Local iPad time!** Set up GMT/UTC time in the Apple iOS “**Settings**” menu, if necessary.
- Tap the “**Tidal Graph**” button to check the tide in the graphical mode:



- Tap the vertical line and drag it “left – right” to check the Tidal level for the specified time. Bottom side shows time marks for the selected data (0hrs – 6hrs – 12hrs – 18hrs – 23:59)
- Horizontal Mark with the Ship symbol means the Ownship **Max Draft level**, which includes: **Draft** and **UKC** parameters:

$$\text{Max Draft level, m} = \text{Ship Draft, m} + \text{UKC, m}$$

- “Blue” area in the graphic means a safe area, “Red” is dangerous according to the specified **Ship Draft** and **UKC** values:

“Red Dangerous” zone:

Depth of Water, m – **Max Draft level, m** ≤ 0 m

“Blue Safety” zone:

Depth of Water, m – **Max Draft level, m** > 0 m



13.6. CALCULATED “WIND SENSOR” DATA

Wind re-calculations from relative to true and the other way round can be made according to the algorithm shown below:

Input NMEA Sentences	NMEA <MWD>	NMEA <VWR>	NMEA <MWV>	NMEA <MWV>
	True Wind only	Relative Wind Only	Relative Wind	Theoretical Wind
	Direction 000.0 – 359.9 deg	Direction 000.0 – 180.0 deg Starboard or Port side	Direction 000.0 – 359.9 deg	
Available Sensors	from True North	from Ship's bow		
Wind Sensor only	Relative Wind – NO	Relative Wind – YES	Relative Wind – YES	Relative Wind – NO
	True Wind – YES	True Wind – NO	True Wind – NO	True Wind – NO
Wind Sensor, GPS	Relative Wind – NO, if SOG < 3 kn, otherwise – YES (calculated)	Relative Wind – YES	Relative Wind – YES	Relative Wind – NO, if SOG<3kn, otherwise – YES (calculated)
	True Wind – YES	True Wind – NO, if SOG < 3 kn, otherwise – YES (calculated)	True Wind – NO, if SOG < 3 kn, otherwise – YES (calculated)	True Wind – NO, if SOG < 3 kn, otherwise – YES (calculated)
Wind Sensor, Heading Sensor	Relative Wind – NO	Relative Wind – YES	Relative Wind – YES	Relative Wind – NO
	True Wind – YES	True Wind – NO	True Wind – NO	True Wind – YES
Wind Sensor, GPS, Heading Sensor	Relative Wind – YES (calculated)	Relative Wind – YES	Relative Wind – YES	Relative Wind – YES (calculated)
	True Wind – YES	True Wind – YES (calculated)	True Wind – YES (calculated)	True Wind – YES



14. AIS CLASS B TRANSPONDER OR RECEIVER

14.1. USING AIS IN ISAILOR

The "iSailor" app supports the real-time display of AIS targets (Class A and Class B) on the Transas charts from the own ship AIS transponder (or receiver). To enable AIS option, it is necessary to make an In-App Purchase from the Apple Store, but once it is done, you will be able to receive AIS targets data from any Wi-Fi enabled AIS transponder or receiver. The data connection can be via TCP (single device) or UDP (multiple devices), and it passes the standard **VDM 1, 2, 3, 5, 18, 19, 24a** and **24b** sentences, so that all Class A and Class B AIS targets are displayed on the chart.

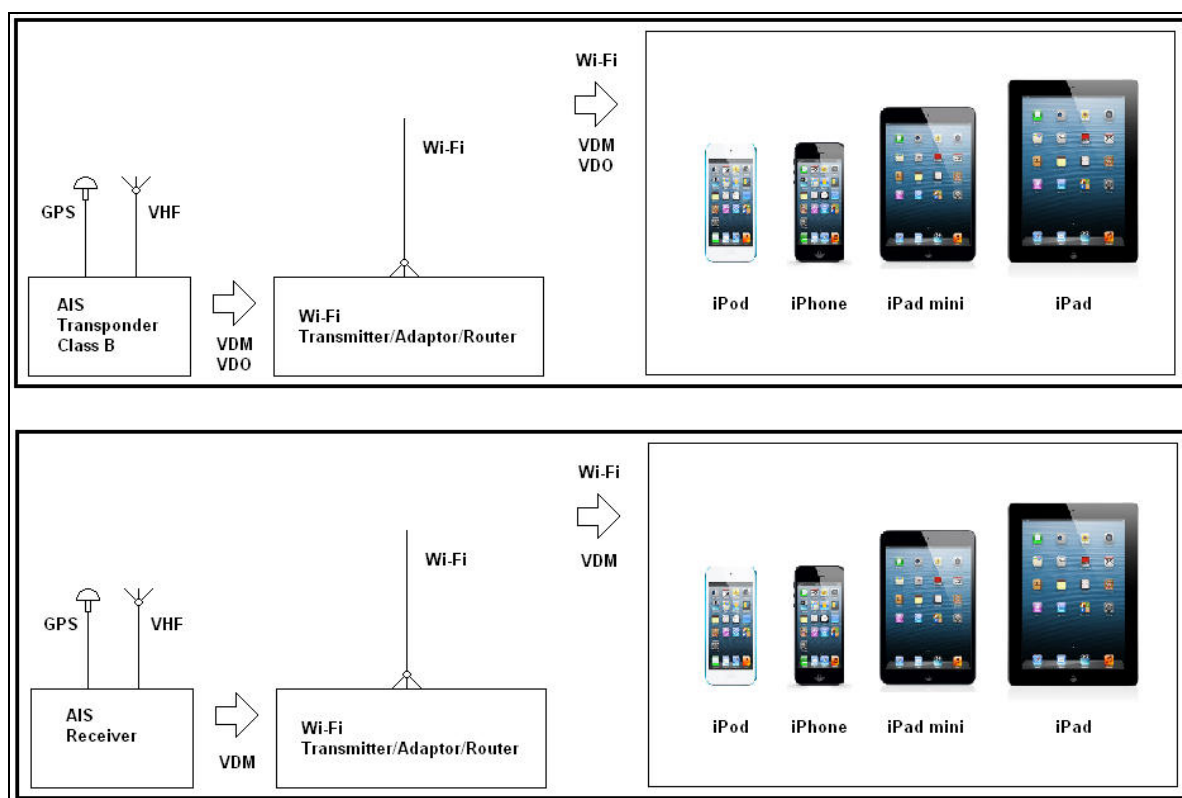
In addition, AIS-GPS data on your own boat position, course and speed can be received over the same Wi-Fi connection from AIS, providing backup positioning data (additionally to the data from the iPad/iPhone's internal GPS). This also has the benefit of allowing non-3G iPads that do not have an internal GPS to be used for navigation, or even a low cost iPod Touch.

Note: Currently **VDO** sentences **18, 19** (from AIS Class B transponders or receivers) can be used for the own boat positioning by AIS data, but in the future other standard NMEA GPS messages (like **RMC, GLL, VTG, GGA**) will be also supported via Wi-Fi connection and external GPS receiver!

To get AIS data in the "iSailor" you just need two things:

1. AIS transmitter or receiver;
2. Wi-Fi transmitter.

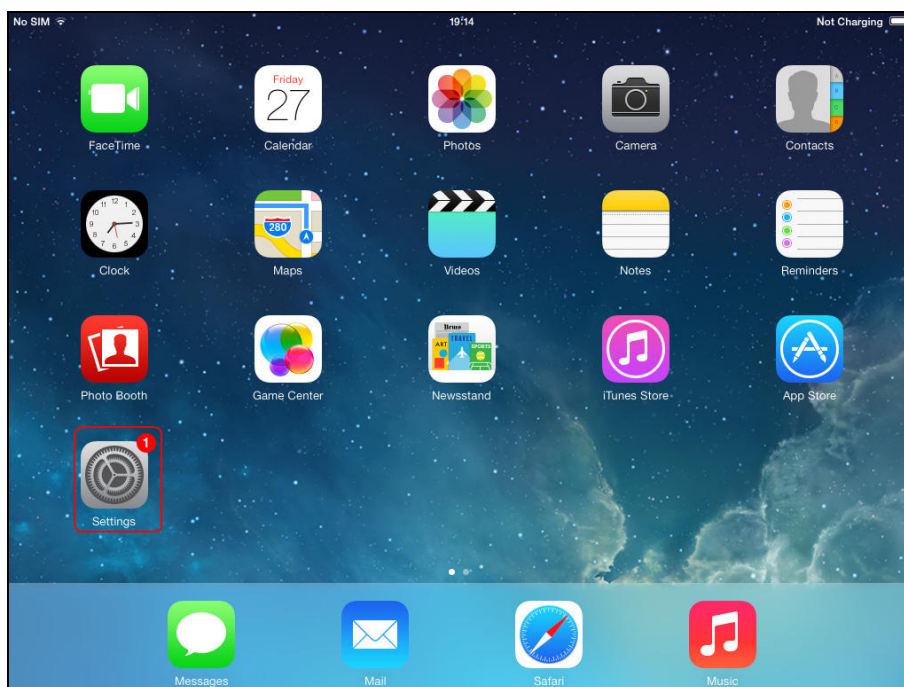
In some cases both elements can be available in one device.



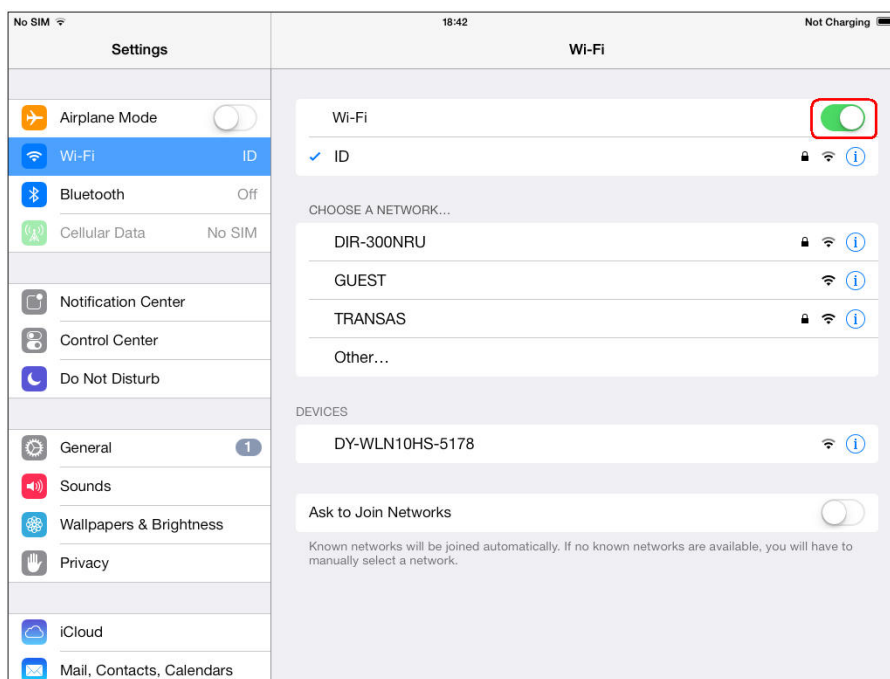


In what follows you can find the following information:

- How to connect Apple device to Wi-Fi transmitter;
- How to connect or disconnect “iSailor” to/from Wi-Fi transmitter;
- How to look up information on AIS objects (targets);
- How to look up Own Ship Data from AIS;
- Default settings for Digital Yacht or similar devices.



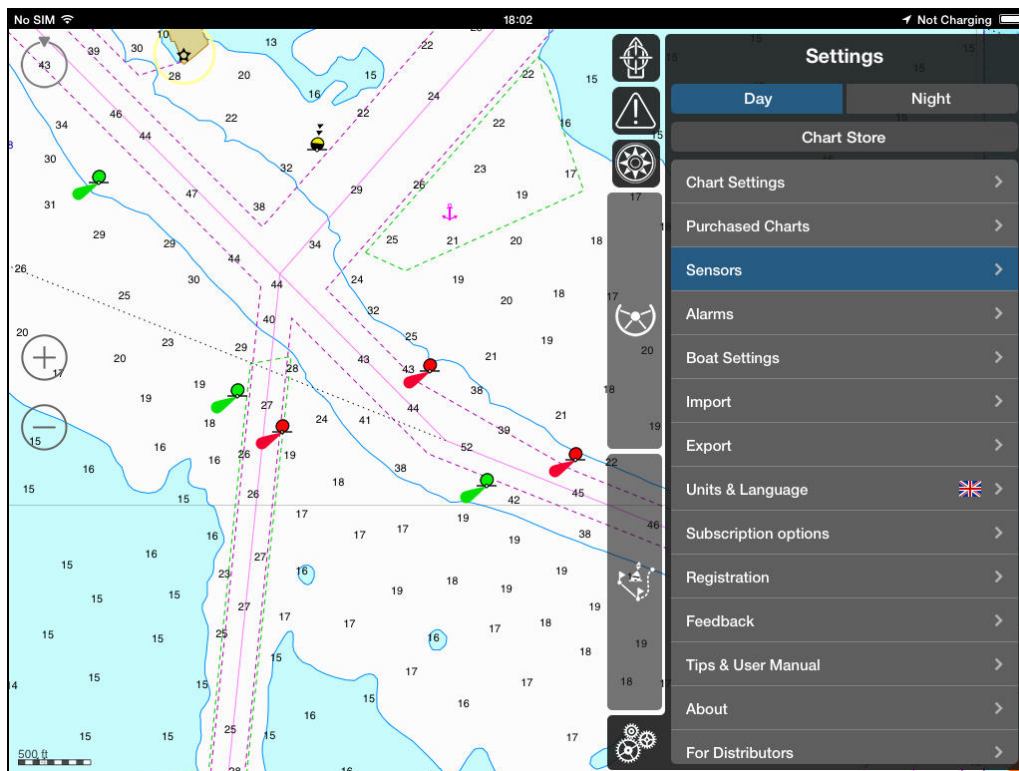
Switch ON device and run iOS “**Settings**” menu.



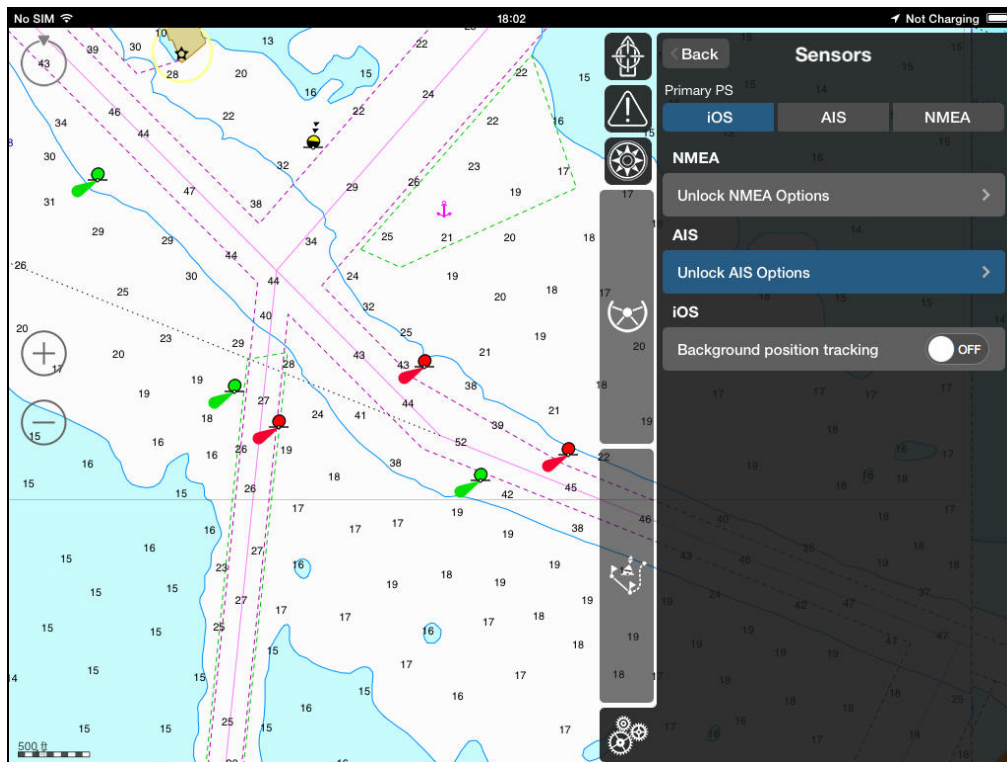


Select a Wi-Fi group and switch the Wi-Fi option **“ON”**. Connect the AIS equipment to the Wi-Fi transmitter and apply power to both devices. Select a corresponding Wi-Fi AIS transmitter from the list (**DY-WLN10HS-5178** on the example above produced by Digital Yacht).

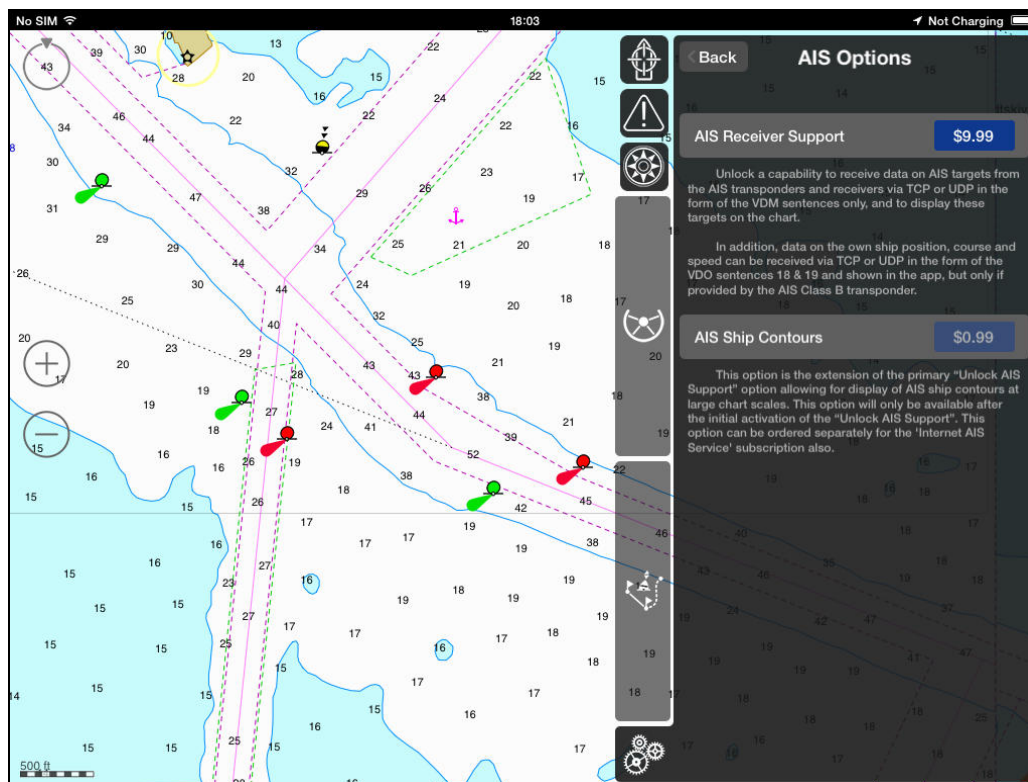
Run the **“iSailor”** app.



Press **“Settings”** button and tap the **“Sensors”** menu item.

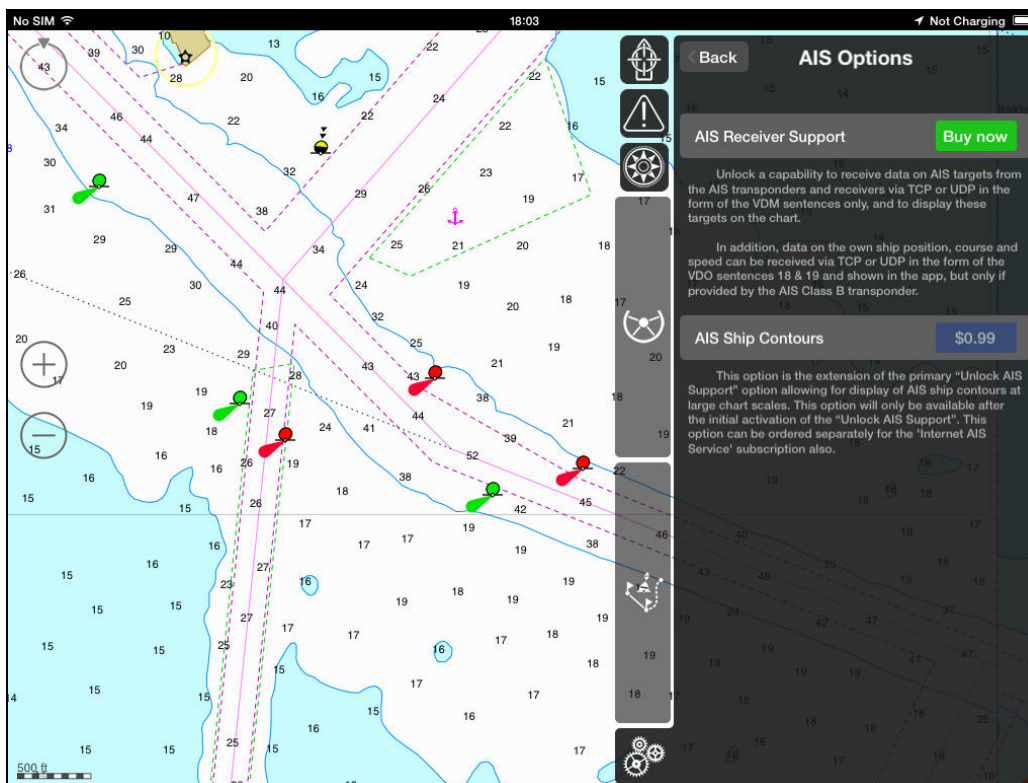


Tap the **“Unlock AIS Options”** menu in **“AIS”** section.

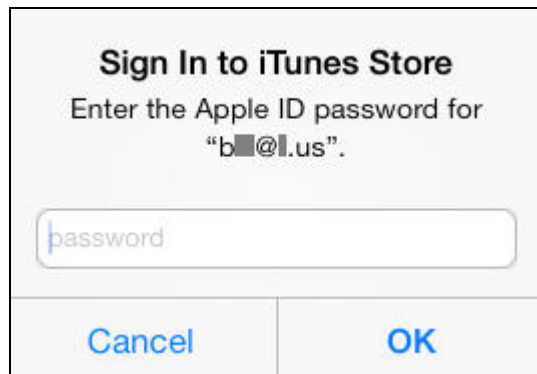


Tap the **"Price"** button.

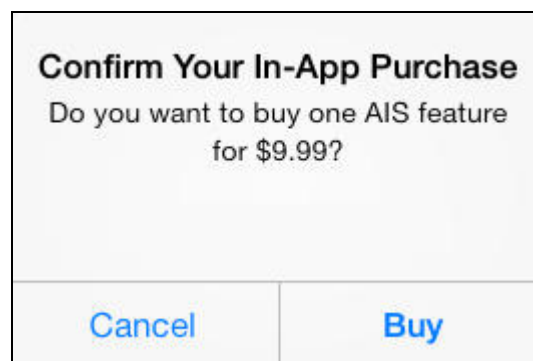
Note: You can purchase **"AIS Ship Contours"** option only after the purchase of **"AIS Receiver Support"** option or **"Internet AIS Service"** subscription.



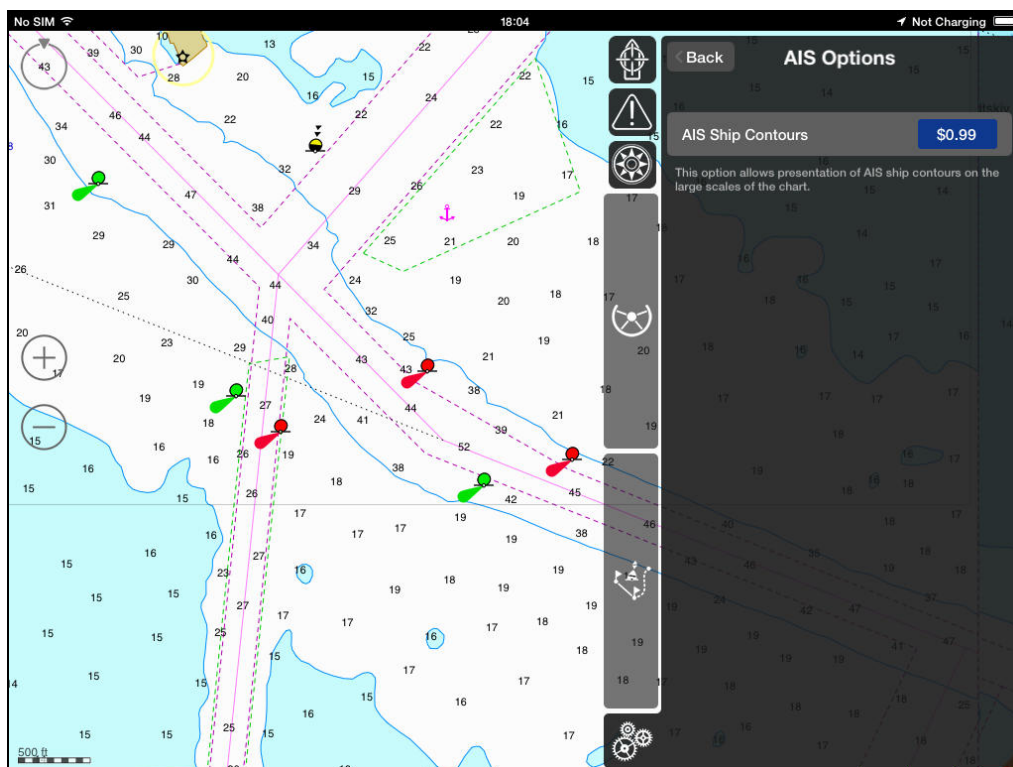
To confirm your choice, press the **"Buy now"** button.



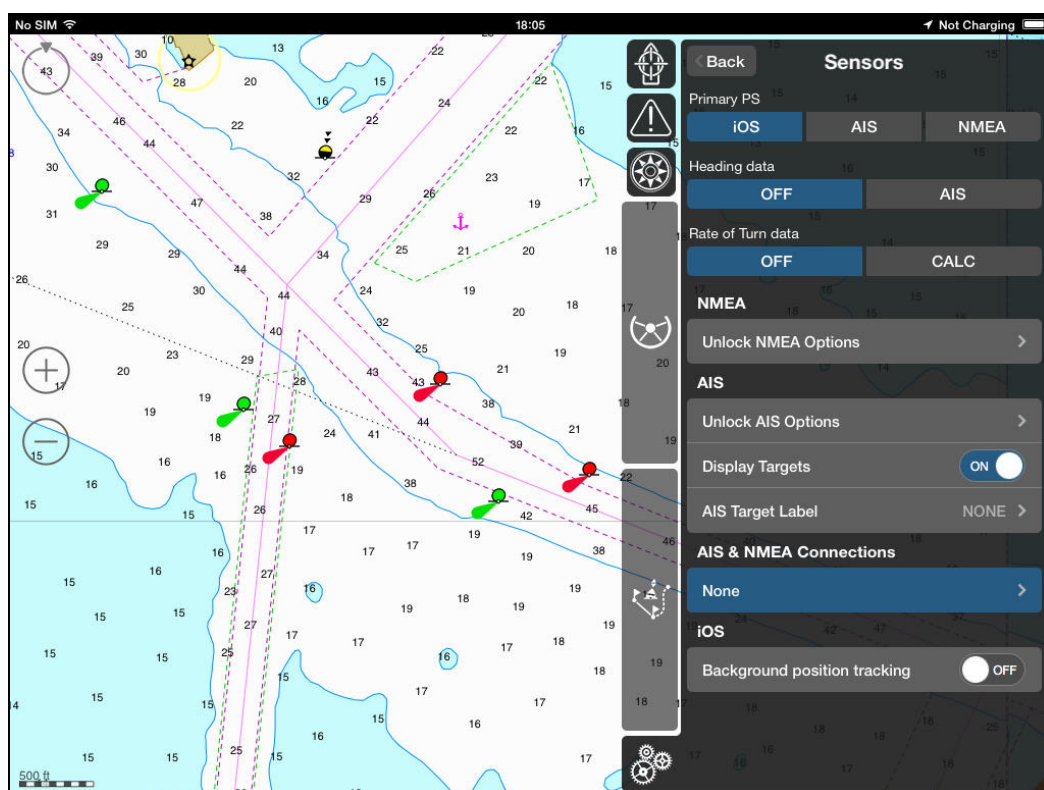
Check the Apple ID, enter your correct password and press the “OK” button.



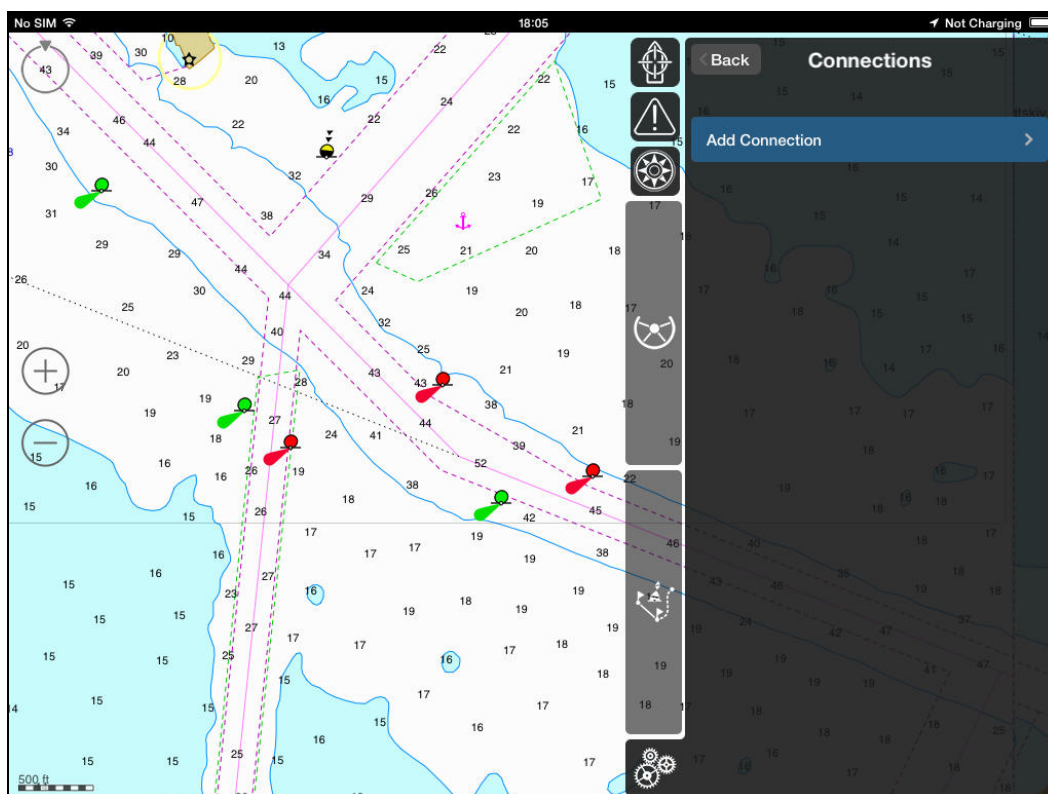
Confirm your purchase and press the “Buy” button.
Wait until “AIS” option is registered on Apple Store.



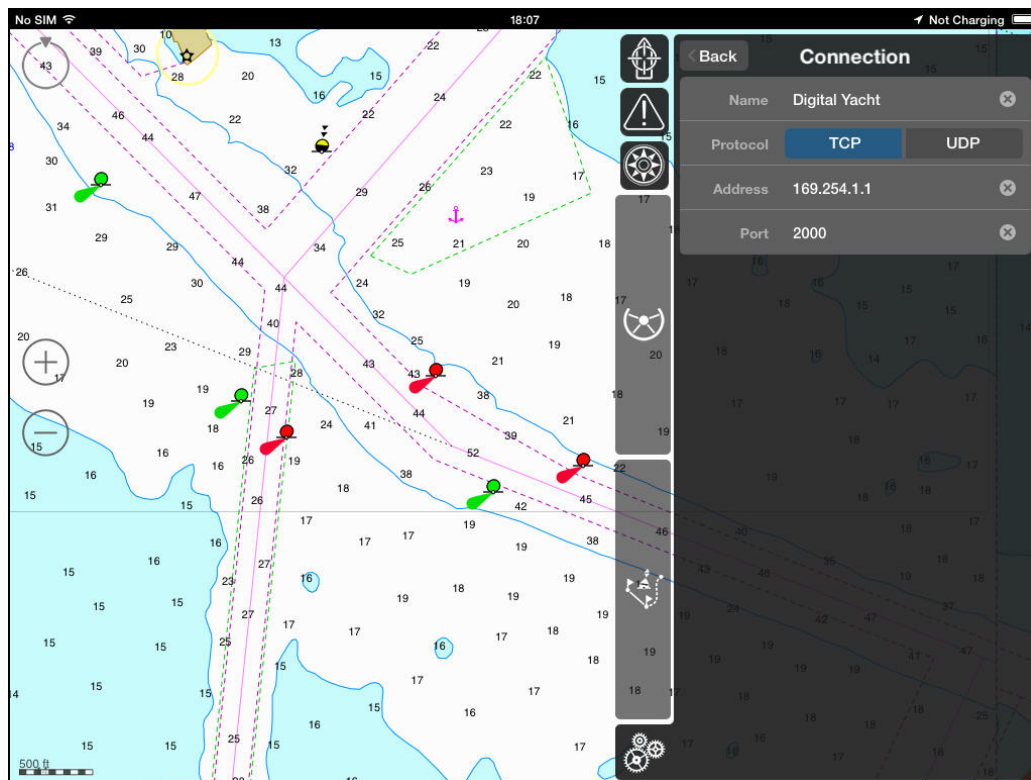
Information about “AIS Ship Contours” option is available in **Chapter 13, Section 13.2. “Additional information about the “Internet AIS Service” subscription option”** of this manual.



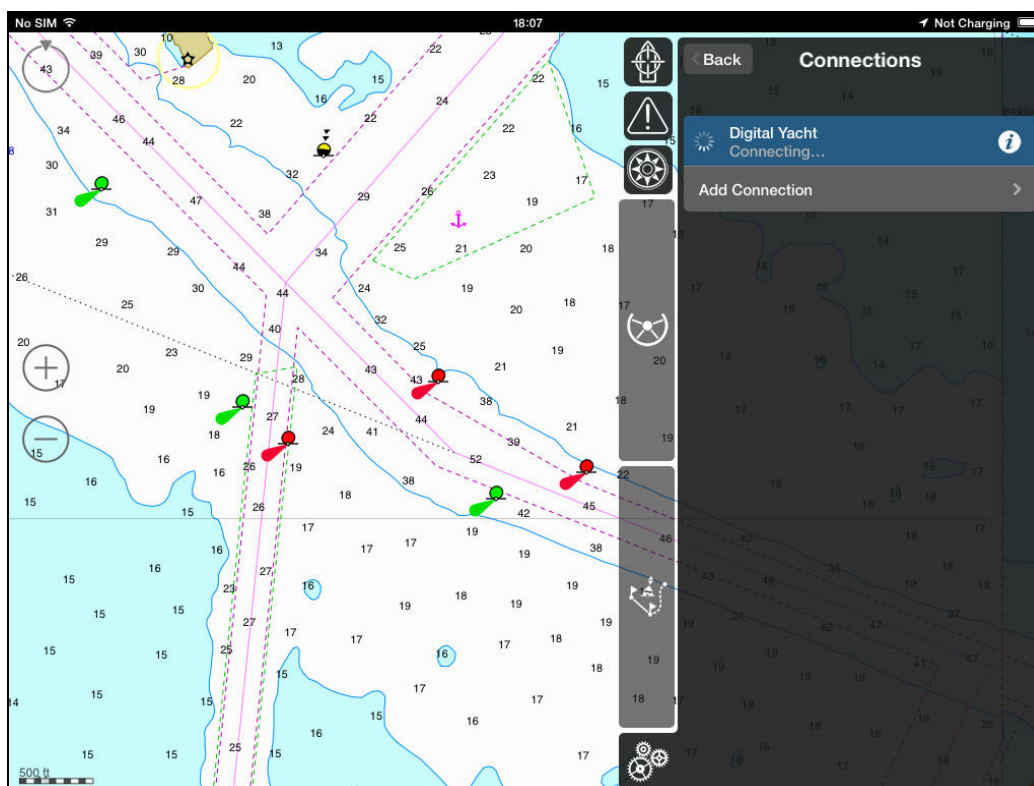
Press the arrow on the button **“None”** in section **“AIS & NMEA Connections”**.



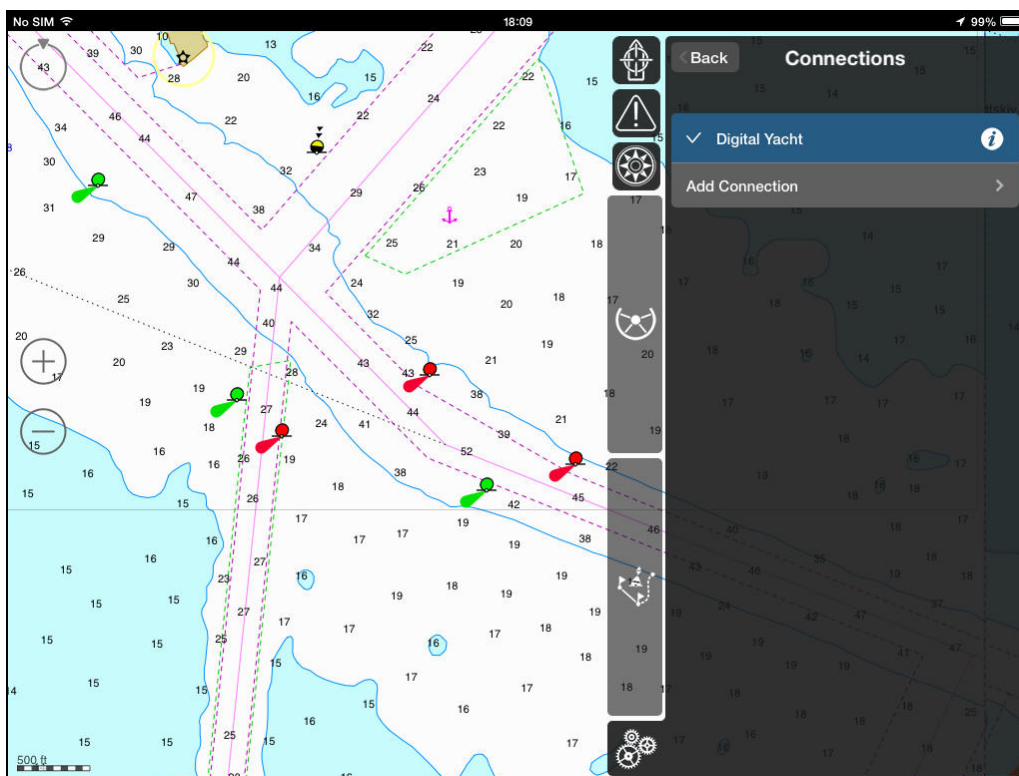
Press the arrow on the button **“Add Connection”**.



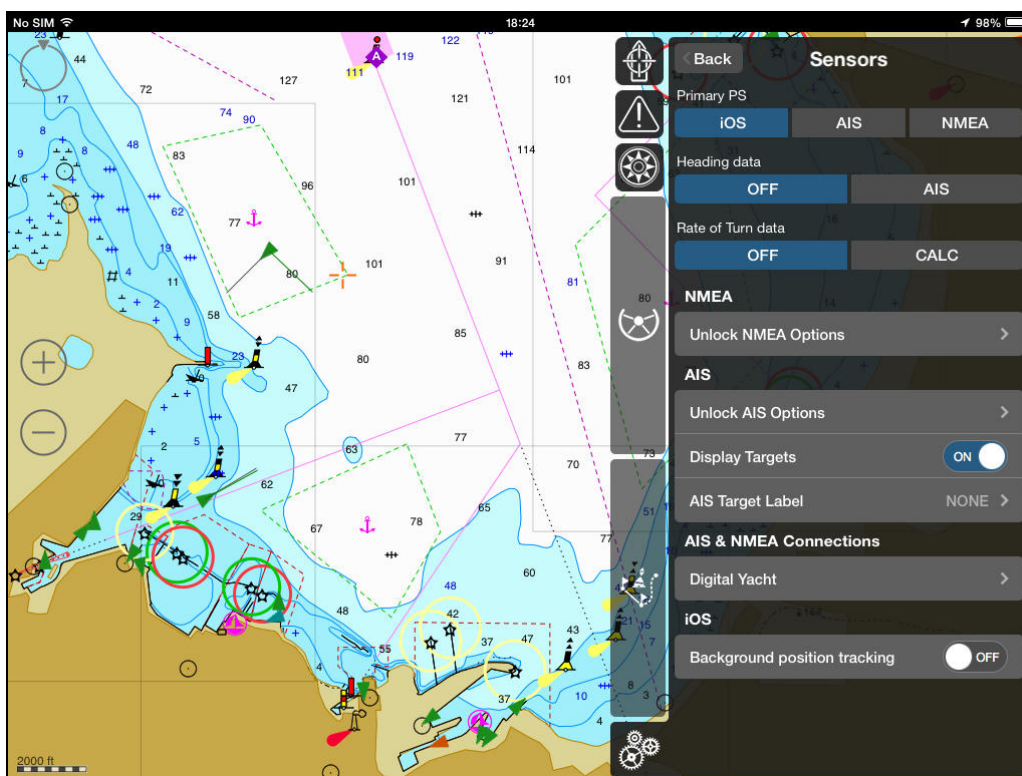
Select the protocol type (**TCP/IP** or **UDP**), TCP/IP Address and Port. Enter the **"Name"** of the AIS Data Source (any). Check entered data and press the **"Back"** button.



Wait for the connection to be made.

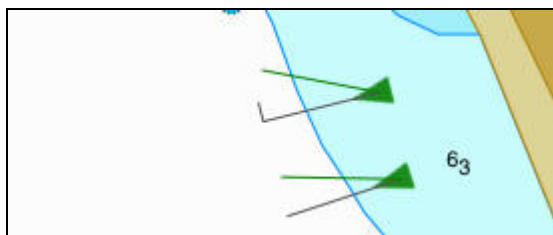


As soon as a tick appears the data link is ready.



Check that the AIS targets are now available on the chart. Colour of displayed AIS targets is depending on ship's type:

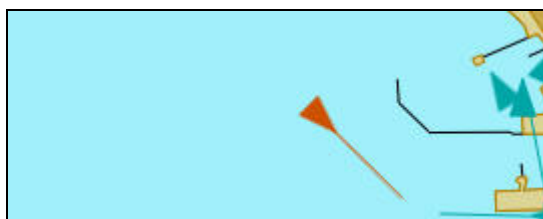
Note: Make sure that “Display Targets” control is switched **ON** in “AIS” section of the “Settings” \ “Sensors” menu item.



“AIS Class A” – standard targets on small chart scales



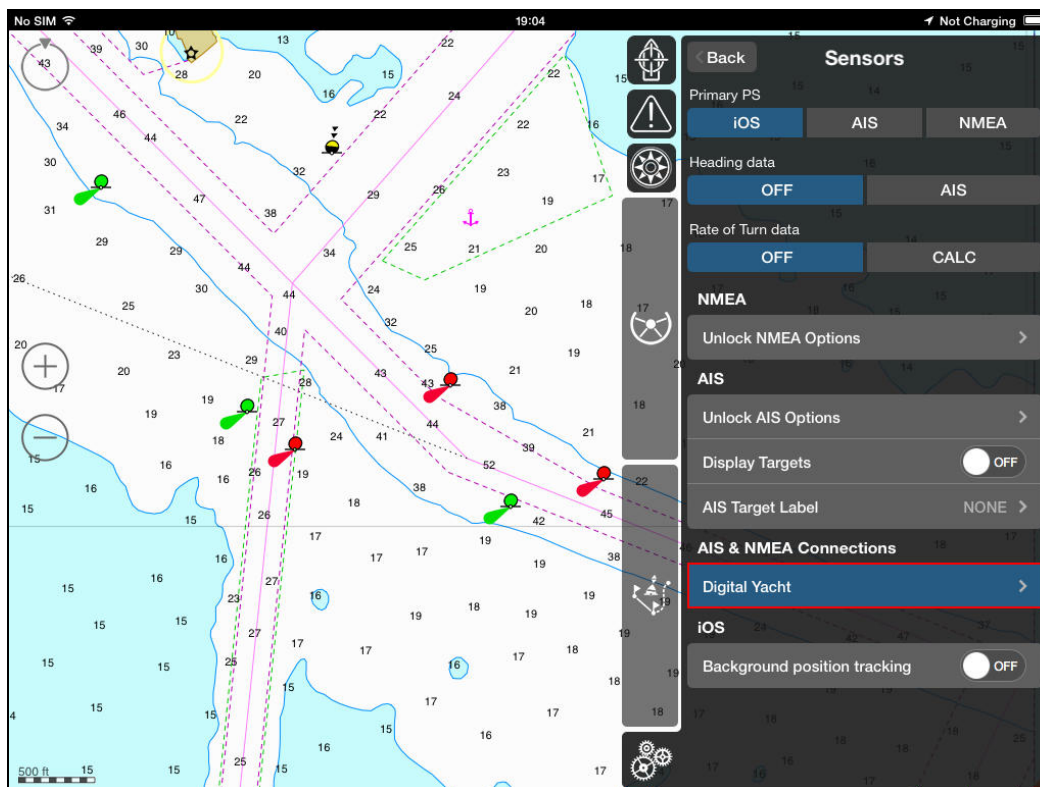
AIS Class A – Special colour for: “Pleasure” or “Sailing” yacht and AIS Class B targets

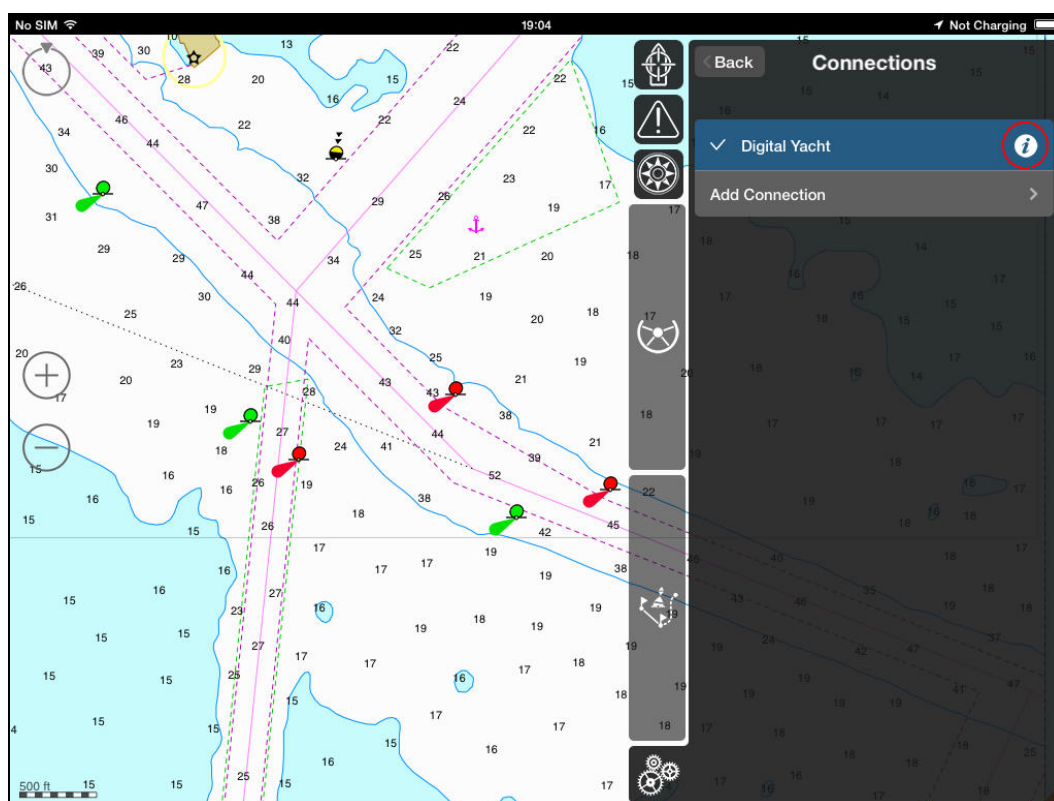


AIS Class A – Special colour for: “Pilot Boat”, “Tug” or “Port tender”

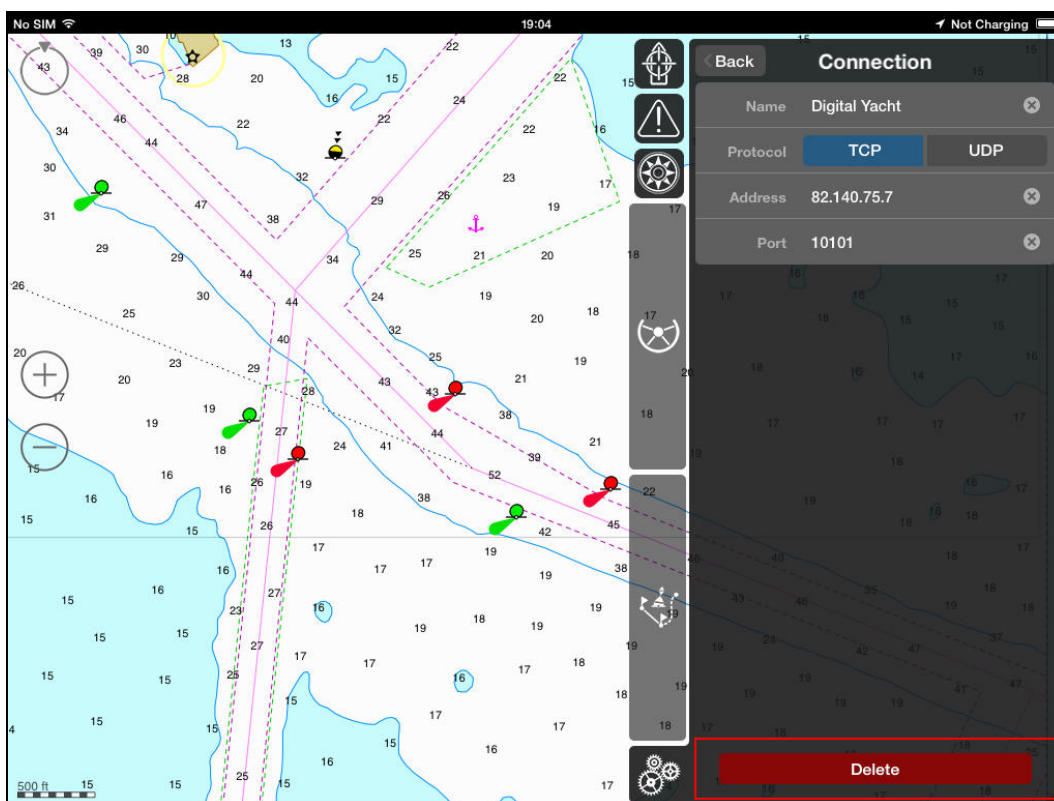
For obtaining information about AIS targets, see **Chapter 9, paragraph 9.5. AIS target data.**

To delete a source go to the “**AIS & NMEA Connections**” section and select the source to be deleted, if necessary:





Select adjusted source, tap “Info” icon.



Press the “Delete” button on bottom of the “Connection” page.



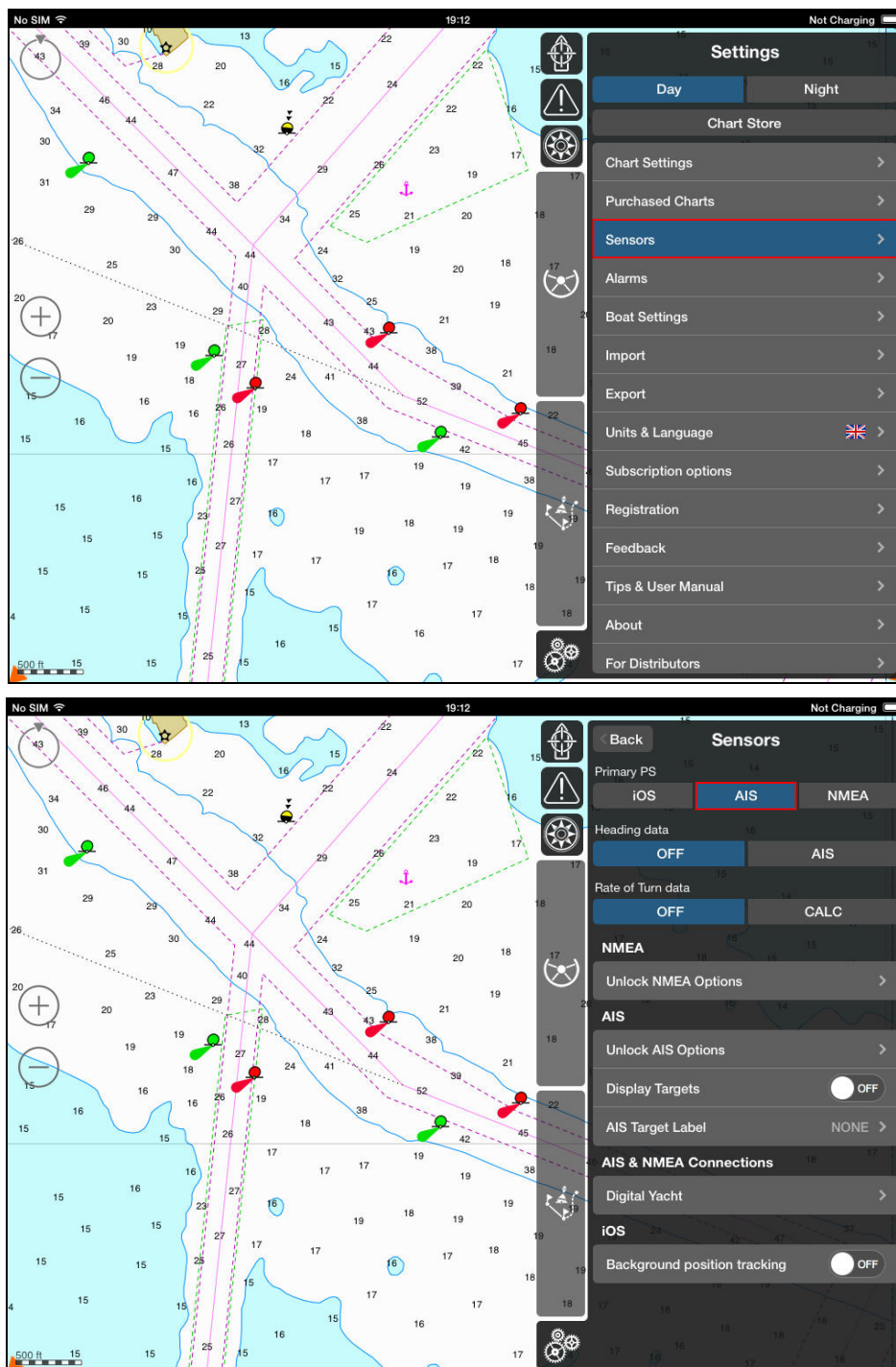
14.2. OWN SHIP DATA FROM AIS CLASS B TRANSPONDER

If you have an AIS class B transponder, you can use its GPS to provide the boat position, speed and course over the ground into “iSailor” app.

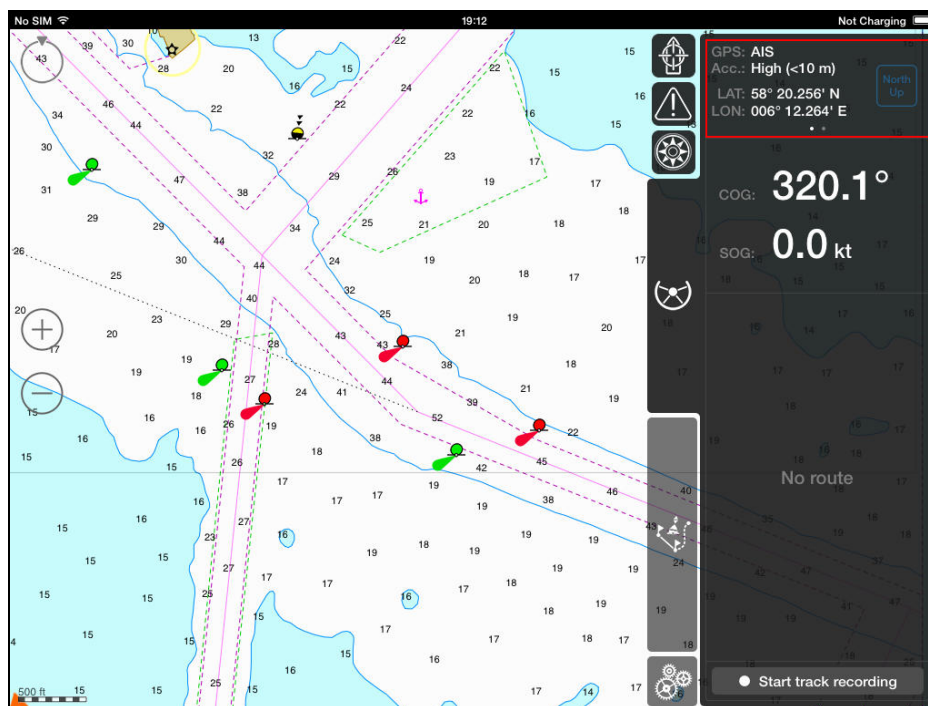
ATTENTION!

Please note that the boat position data can only be received via the TCP or UDP from the **AIS Class B** VDO sentences (VDO: 18, 19, 24a/24b).

Go to section of the “Settings” \ “Sensors” menu item:



Select the “AIS” button in the “Primary PS” section of the “Sensors” menu item.



You will then see the data from AIS on top of the “**Monitoring**” page.