



The Aqua Map™ How-To serie

The Route Planning



Image 1: sextant and compass

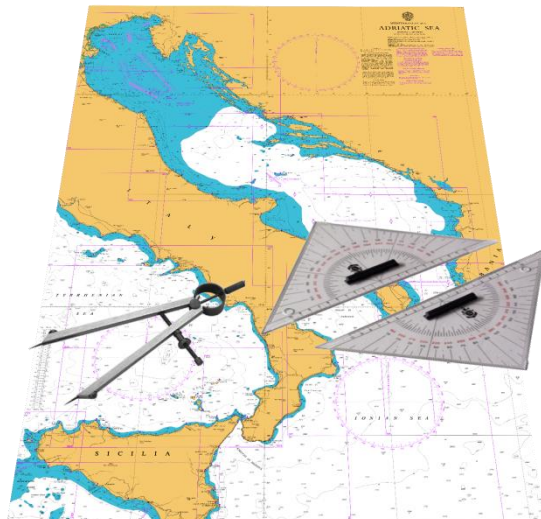


Image 2: paper chart planning

A bit of history

“A **sextant** is a doubly reflecting navigation instrument used to measure the angle between any two visible objects. The principle of the instrument was first implemented around 1730 by John Hadley (1682–1744) and Thomas Godfrey (1704–1749) but it was also found later in the unpublished writings of Isaac Newton (1643–1727)....” from wikipedia.org.

“A **compass** is an instrument used for navigation and orientation that shows direction relative to the geographic *cardinal directions*, or “points”. Usually, a diagram called a compass rose, which shows the directions north, south, east, and west as abbreviated initials marked on the compass. When the compass is used, the rose can be aligned with the corresponding geographic directions, so, for example, the “N” mark on the rose really points to the north.....” from wikipedia.org.

“A **nautical chart** is a graphic representation of a maritime area and adjacent coastal regions. Depending on the scale of the chart, it may show depths of water and heights of land (topographic map), natural features of the seabed, details of the coastline, navigational hazards, locations of natural and human-made aids to navigation, information on tides and currents, local details of the Earth's magnetic field, and human-made structures such as harbors, buildings and bridges. Nautical charts are essential tools for marine navigation; many countries require vessels, especially commercial ships, to carry them....” from wikipedia.org.

The last 30 years technology completely changed

the past 300 years Nautical planning methods. No more sextant, compass, paper charts, etc.. just a PC with internet or a smartphone and... a finger.

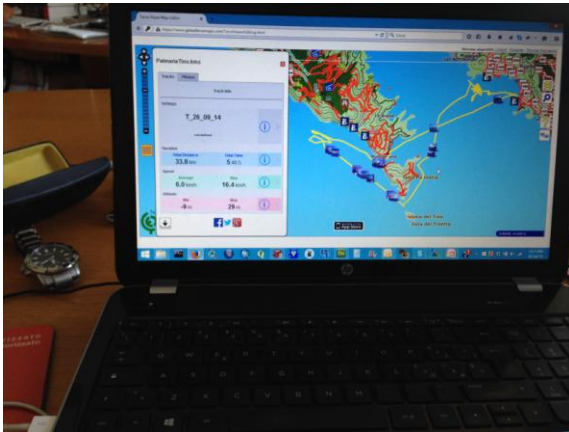


Image 3: PC map viewer

Not only, today you access in a click the weather forecasts, tides and currents predictions, ratings & reviews about the Marina you would stop for a night, fuel prices, information about Anchorages and Hazards in the area of your interest, attractions, services, restaurants with pier, etc, etc.

Today at home with a PC with internet connection you can perfectly plan your next Navigation route with a very high level of accuracy and safety.

Yes, we knew :-P

Our idea

Right, this are not a big news, it is at least 10 years, if not more, that this is possible.

The idea is to create the right environment to access all the necessary information and with easy tools to create our Route.

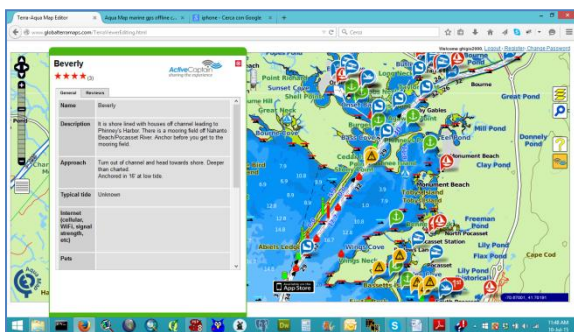


Image 4: Aqua Map web Nautical Charts with ActiveCaptain data.

Our Aqua Map Nautical Chart, ActiveCaptain data, a sharing system to upload and modify existing routes from the communities and friends, and a set of tools for the Route customization are our starting point...then we will add more in the future.

How-To

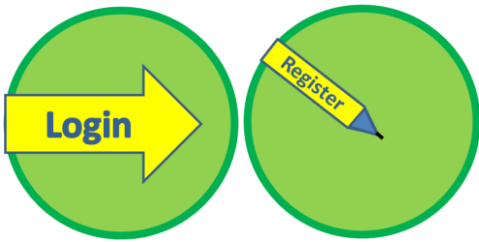


Image 5: Register and Login your GEC Account

Login to your GEC Account to enter your User Area.

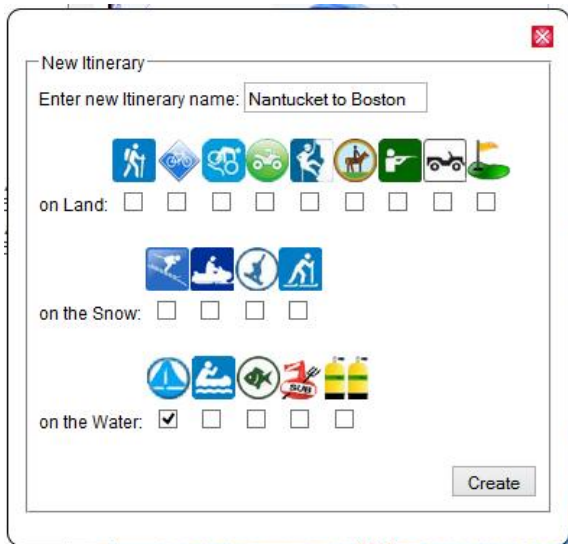



Image 6: new Itinerary name and type

Click this button  to create a New Itinerary, enter a name (no duplication are allowed) and select one or more activity type. We suggest you to use a mnemonic name to clearly describe your trip (e.g. Nantucket to Boston). Remember it will not be possible to rename it.

An Itinerary is a composition of Routes, Markers, Tracks and Photos. Yes, many daily Routes can compose your 5 days Itinerary.

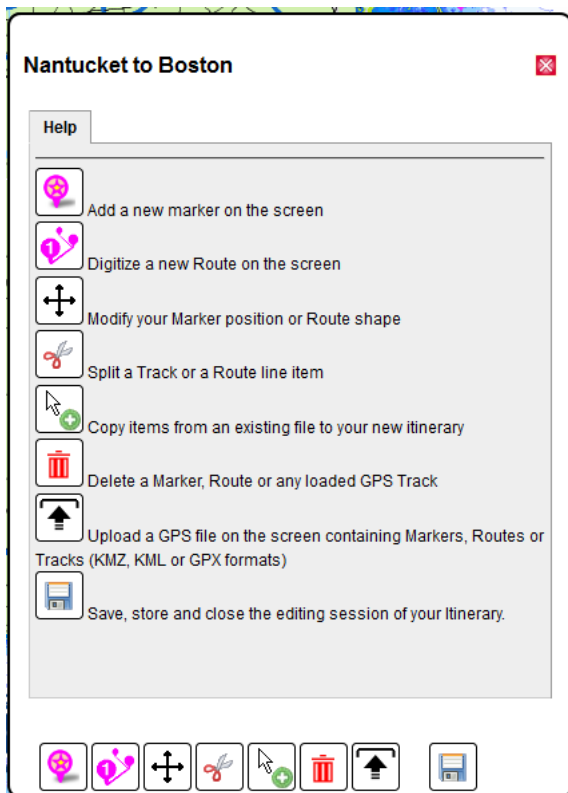


Image 7: Itinerary builder toolbox

A toolbox with a summary help for each available functionality will be opened.

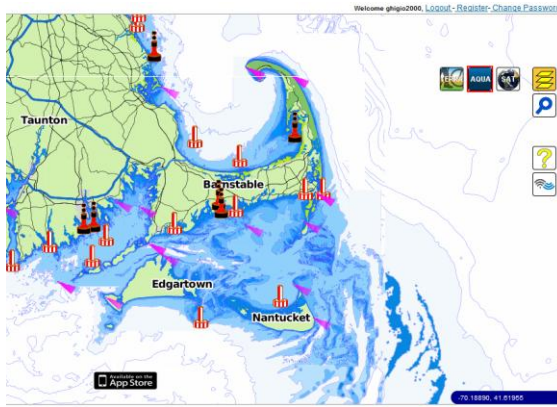


Image 8: Aqua Map Nautical chart view

Pan and zoom on the map to find your area of interest.

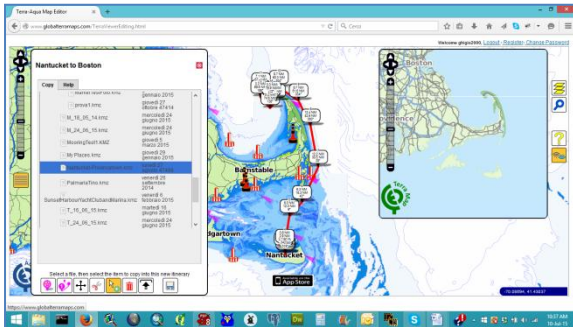



Image 9: archived files selector

Copy any object from files stored in your archive. Look for any Route to help you start the new planning. Click this button  to access your archived files.

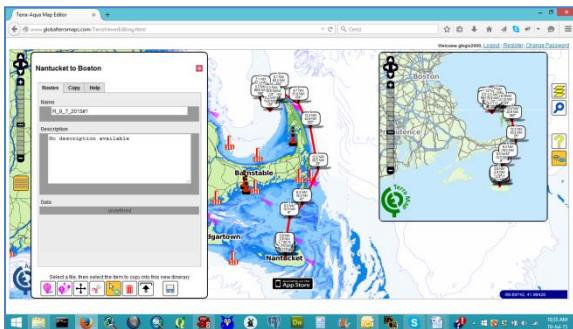



Image 10: objects copied from archive to the new Itinerary

Select any file from your archive covering also partially your new trip plan, it will be displayed on the Main map. Click on the objects (markers, photos, routes, tracks if available from the selected file) you want to transfer into your new Route, they will be displayed in the small right side map showing the content of your new itinerary (click the object again to remove it from your new itinerary).

If you found any existing Routes over the internet or got from a friend, you can add it to your new Itinerary using this button  (upload KMZ, KML and GPX file formats).

Now you have collected existing data for the new Itinerary.

Let's start adding new pieces and modify existing ones to complete your plan.

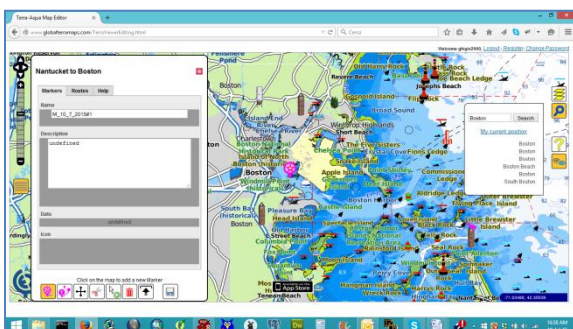



Image 11: search function and new marker placement

First of all look for your final destination, use our search button  to find major locations in the world. Once you identified it on the map then we suggest to place a marker there using this button



Place other markers for each location you would

remember/highlight on your map during the navigation.

Interesting places, nice views, attractions, whale watching, etc...there's a bounce of things you will miss and you won't, so plays with the communities to get the best suggestions if you sail in a new area. This is the time to switch on the ActiveCaptain (AC) data too. Login to your AC account by clicking this



button and more than 80.000 objects between Marinas, Anchorages, Hazards and Local Knowledges, with detailed information about the services and thousands of Ratings and Reviews, will be available to better plan your trip.

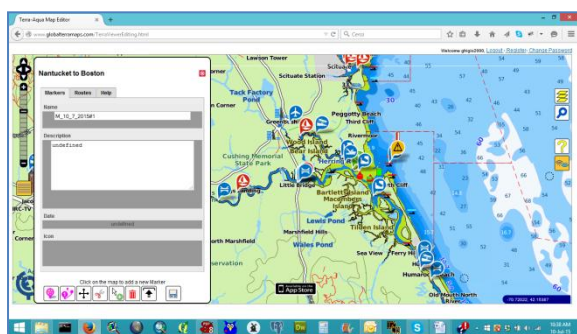


Image 12: ActiveCaptain data overlay

Let's now start drawing the final Route/s. I wrote Routes because it depends on the length of your journey, we suggest you draw a Route for each day. In this example we found an existing Route from Nantucket to Provincetown, it is around 80 Nautical



Miles long, more or less 4 hours at 20 knots.

Is it enough for your typical navigation day?

If not, then you can extend this Route using this tool



Select the object you want to modify and drag markers or the Route corners to a different position to extend or add intermediate points.




Image 13: create intermediate points on a selected Route

We do not want to repeat all the suggestions you can find in multiple blogs, forums, social networks, etc. they are more expert then us!

But... take care of your fuel consumption, tides and currents during the trip as well as at the next destination, be sure there are good anchorages in the area, do not forget weather can change in minutes, etc, etc.

If that's enough for the day, then you can start planning the tomorrow's Route to reach the final destination, or if too long just make another intermediate step.

Click on this button  to start drawing a new Route with your Itinerary.

Each Route waypoint is containing the following information:

- A progressive number
- The distance (Nautical Miles) from the previous waypoint
- The total distance (Nautical Miles)
- The Compass angle from the previous waypoint

Double click to close the Route digitalization.

To each object (Markers, Routes, Tracks) of your itinerary you can assign a name (no duplication allowed for object of the same type) and a description.

Other available tools to customize your Itinerary:


 scissor to split Tracks and Routes. Select the object to split then draw a line crossing the object, double click to close the line. Once the scissor line is closed then all crossed objects (of the same selected type) will be split along it.



Image 14: Route waypoint details



Image 15: scissor line



click this button to remove objects from your itinerary (be careful, undo is not possible).

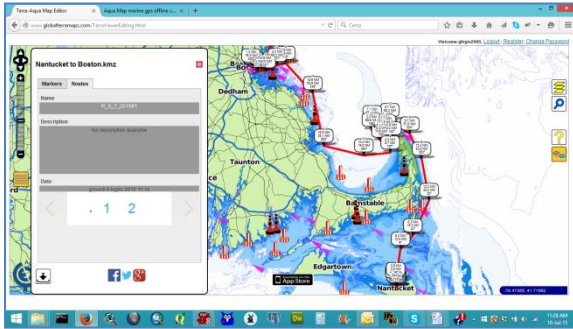


Image 16: final save Itinerary



We finally finished, press this button to save your new Itinerary to be used on your Aqua Map during the trip.

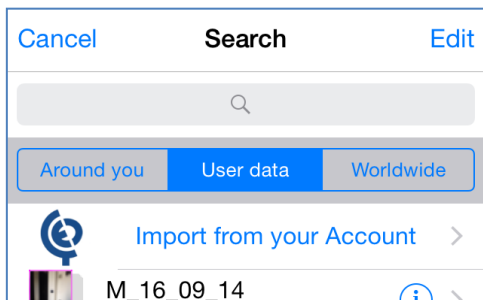


Image 17: Aqua Map app import from GEC Account function

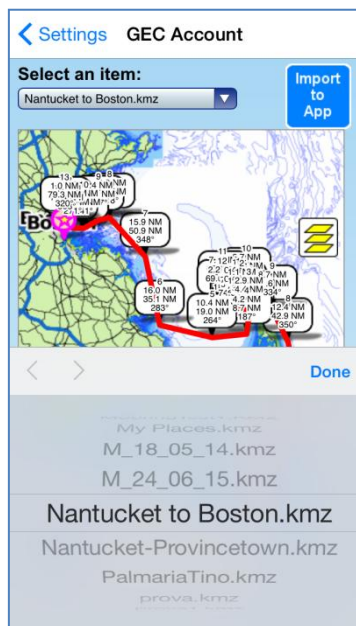


Image 18: Aqua Map app import from GEC Account function

Last but not least, remember to load your new Itinerary into your Aqua Map app before you leave, at least before you get offline 😊



Aqua Map™ is an iOS/Android application for Boating and Fishing, see www.globalaquamaps.com

