TIMEZERO NAVIGATOR V4

New Features

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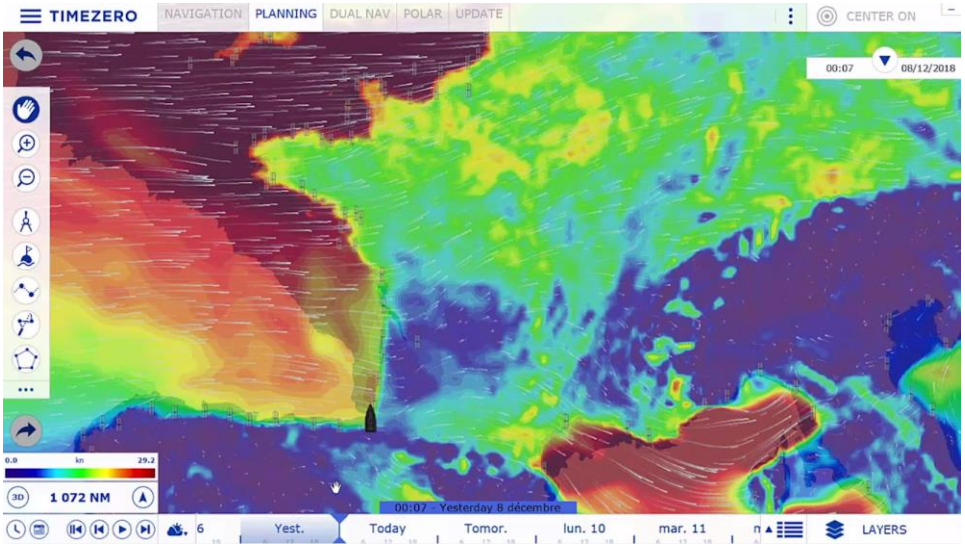
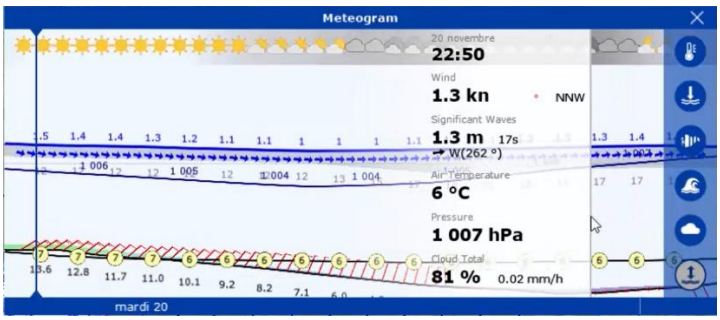
Display and Resolution Improvement

TZ Navigator doubles the display resolution of free weather forecasts (GFS model with a resolution of 0.25 degree) and offers a new and innovative weather presentation using particle animation. It is now very easy to visualize the "flow" of weather conditions such as wind, currents and waves.



TZ Navigator v4 also introduces a new "Meteogram" window that allows users to view a graphical presentation of one or more meteorological variables with respect to time at a particular location:



The Meteogram can be very useful when it comes to seeing the evolution of weather at a specific point and determine the best departure or arrival time.

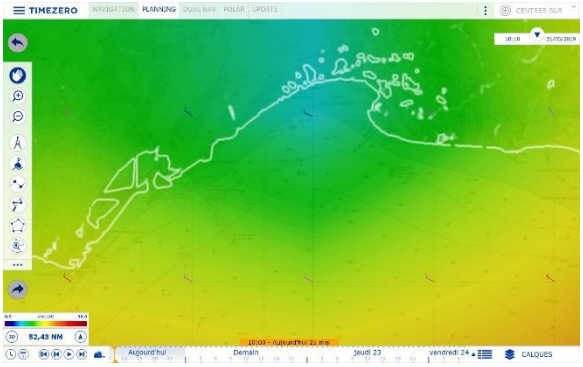
The Meteogram can also be displayed along a route. The route projected speed and ETA will be used to show the various conditions that you will encounter along your journey.

Premium Weather Service

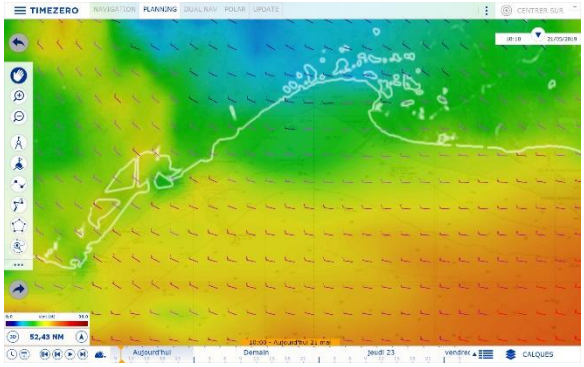
In addition to the free weather forecasts that we have been providing for years, TZ Navigator v4 introduces a new premium weather service that will provide higher display resolution. The Arpege model offers European coverage with a range of up to 10 kilometers and up to 4 days of forecast. The Arome model offers coverage of French coasts and bordering countries and has a range of up to 1 kilometer and up to 2 days of forecast. 3 wave models are also available!

You can see the added value of Premium Weather Service below:

Free weather forecast service



Premium weather forecast service



Routing

Our group, created in 1985, began its adventure by developing the first computer solution for ocean racing. The first prototype of our software was tested on board of "Crédit Agricole" in 1985 and very quickly it was adopted by Philippe Poupon and Eric Tabarly, two renown French navigators. After this, the "MACSEA" software became, over time, a reference in the domain of professional competitive sailing.

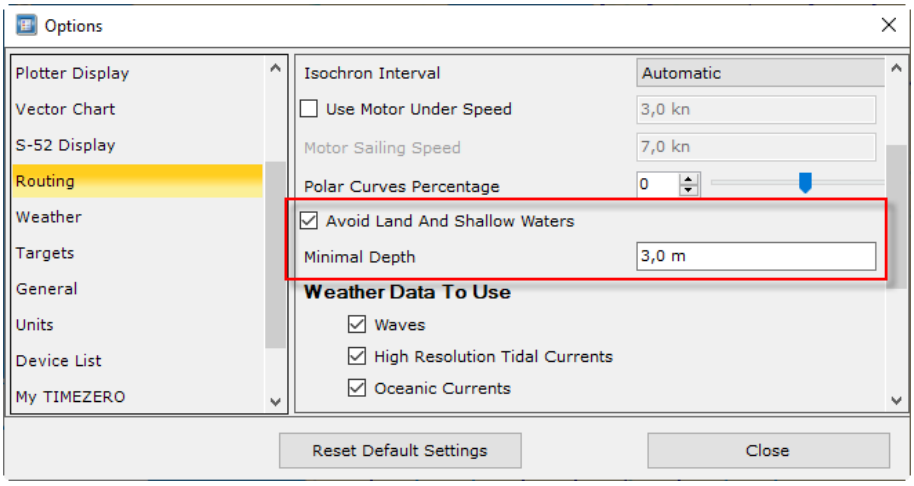
Our brand-new routing module is the result of almost 35 years of innovation while keeping one objective in mind: Making the use of the most advanced technologies accessible to all in order to guarantee maximum security on board.

Automatically Avoid Land

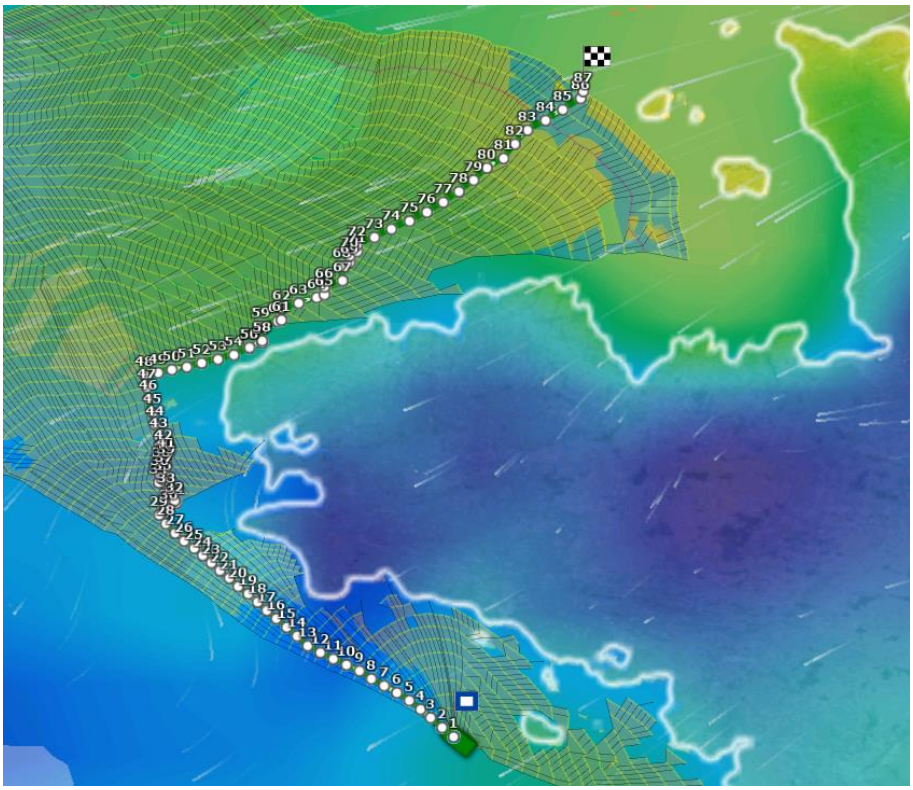
Our new routing algorithm automatically avoids the coast.

Avoid land Settings

- Checked by default
- Minimal Depth can be changed



So that the best route is accessible in just two clicks: one on your starting point and one on your destination.

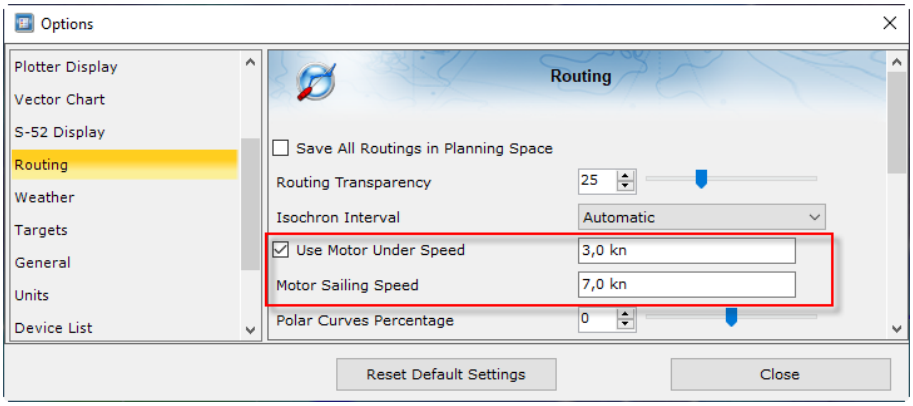


Mixed Sail/Motor Routing

TZ Navigator v4 can now do mixed sail/motor routing.

- Not Checked by default
- Minimal Speed can be changed

For example: If your theoretical speed is below 3 knots, the new routing module will change the color of your route, letting you know that you need to switch to your motor. Your theoretical speed will then be of 7 knots.



- On chart underlined in black

- And Motor indication is also available in the Sailset column of the route details.

Leg To...	Name	HTS	Speed	SailSet	ETA	TTG	Total TTG
19		53,2 °M	4,80 kn	GV / LightReaching	10:28:11 jeudi 23 mai 2019	1h00'	16h00'
20		94,9 °M	7,00 kn	Motor / Motor	11:28:11 jeudi 23 mai 2019	1h00'	17h00'
21		86,2 °M	6,77 kn	Motor / Motor	12:28:11 jeudi 23 mai 2019	1h00'	18h00'
22		90,6 °M	7,00 kn	Motor / Motor	13:28:11 jeudi 23 mai 2019	1h00'	19h00'

TZ Cloud & Local Synchronization

Cloud Synchronization

All user objects (Marks, Routes, Boundaries and Photos) can be automatically synchronized to the TZ Cloud (when Internet is available). TZ Cloud is a secure and personal storage space linked to your MyTIMEZERO account which is the perfect solution to avoid loss of navigation data but also allows you to synchronize data with your other TIMEZERO platforms.

TZ Cloud synchronization allows several TIMEZERO software or other TIMEZERO compatible platforms (for example, TZ iBoat for iPad) to automatically share data through the Internet. The data can also be consulted from your MyTIMEZERO account.

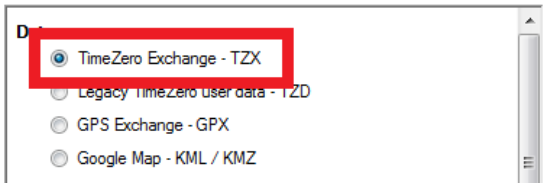
Note: User Data is kept confidential and is NOT shared with any other users.

Local Synchronization

The synchronization feature can also be executed through a local network. Create and activate your route from the PC inside your boat and it'll appear automatically on your TZ iBoat app outside! Sharing data between TIMEZERO platforms has never been easier!

New TZX exchange format

TZ Navigator v4 introduces a new file format to import/export User Objects and Tracks data:

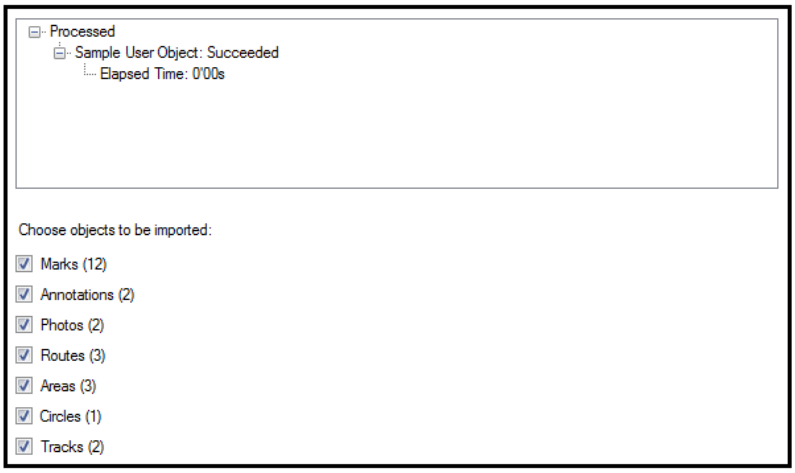


This new format was designed to handle more data and provides faster import/export.

Note: The older TZD file format is still supported in TZ Navigator v4.

Filters

The Import Wizard has been improved allowing you to view and select the type of objects before you import them in your database:



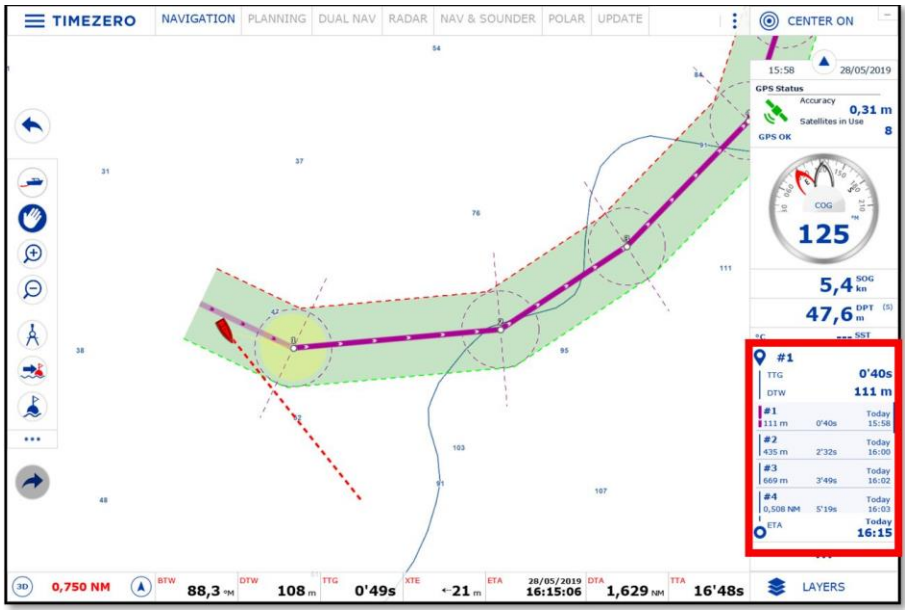
KML/KMZ Import improvements

TZ Navigator can now import areas and lines created in the KML (or KMZ) format:

Note: Lines inside the KML file are no longer imported as routes. They are now imported as lines. To import routes in TZ Navigator, make sure to use another import format such as the new TZX, TZD or GPX.

New Active Route NavData

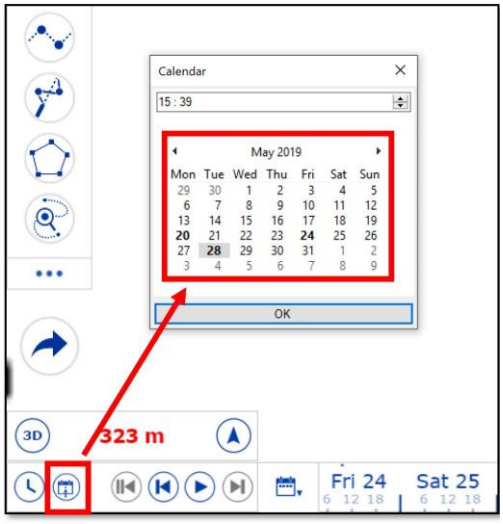
A new Active Route NavData can be added to the NavData side panel. This new type of NavData adapts its size to automatically fill the remaining space of the side panel. When a route is activated, it displays Distance, Time To Go and Estimated Time of Arrival of each waypoint:

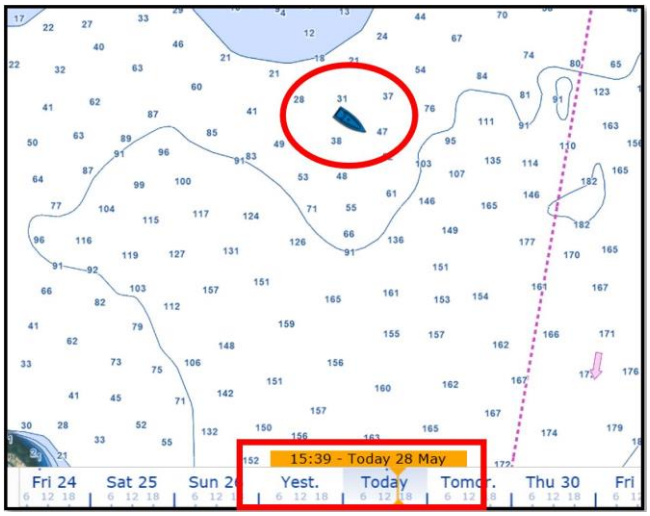


If the route contains many waypoints that do not fit inside the NavData panel, it is possible to scroll the content of the NavData to look at future waypoint information. Note that the last waypoint (the arrival) will always be visible at the bottom of the NavData.

New Logbook & Track Recall

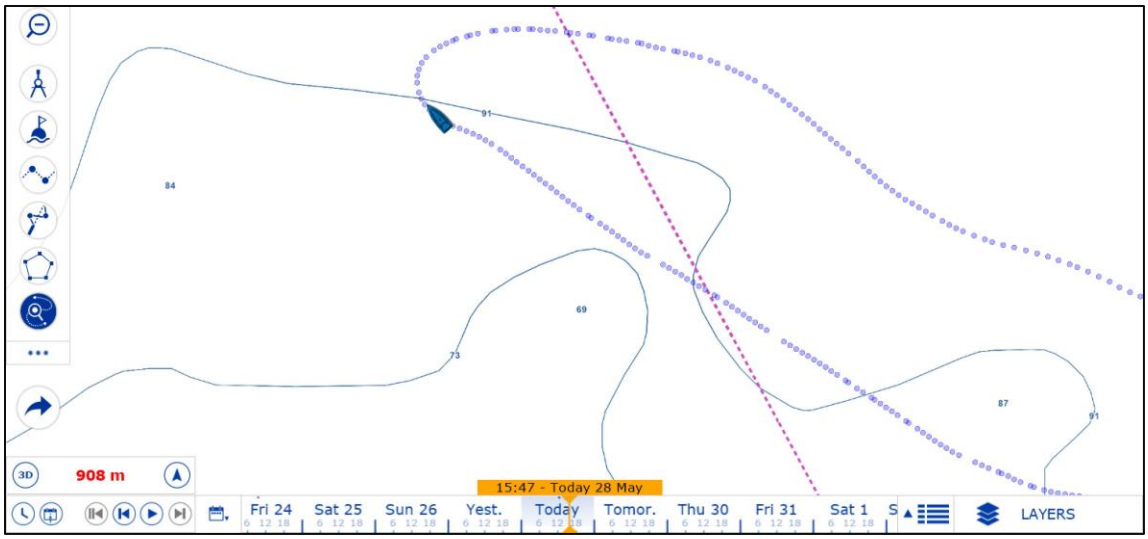
TZ Navigator v4 is introducing a new way to replay your voyages. All your trips are now being automatically saved as soon as TIMEZERO receives a valid GPS position inside a new Logbook database. Trips can be replayed from the "Planning" workspace by selecting the appropriate date/time in the Timeline. In addition, it is possible to click on the calendar icon to open a window that lets you pick a day. Any days that contain trip data will be highlighted in bold making it easy to retrieve your trips. The time bar will also display a blue line indication where trip data is available. A blue boat icon will be displayed on the chart marking the location at that time:



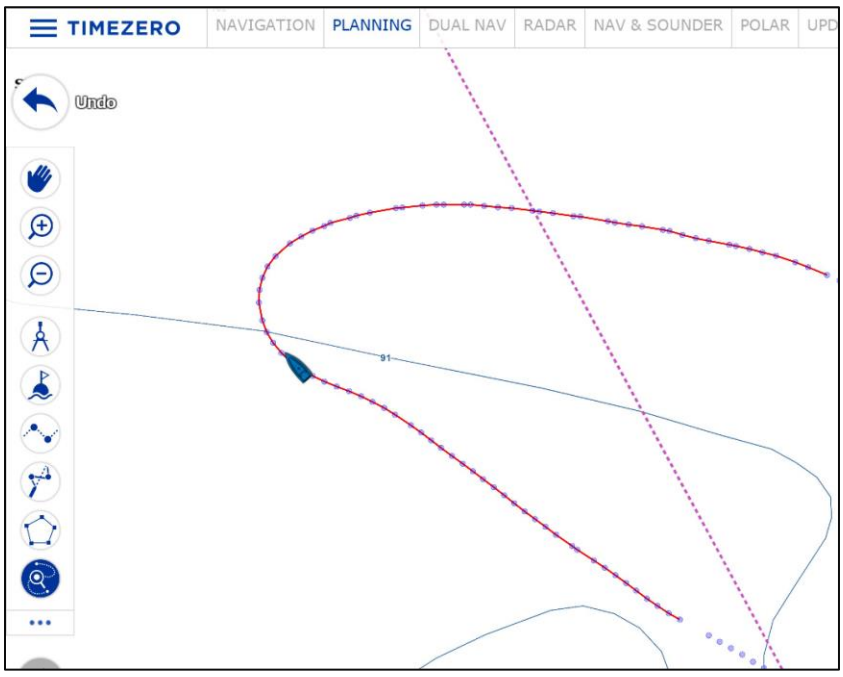


You can click on the blue boat icon (replay boat) to access the data that was recorded at that time (wind, speed, depth, etc…).

If you want to recall a track, you can use the new "Recall Track" tool. When selected, all the positions available in the logbook database will be displayed on the map (in blue) for the date range selected on the Time Bar:



You can then click on a first point to set the beginning of the track and click a second time to set the end. TIMEZERO will then create a track automatically:



This feature is useful if you forgot to record the track during a trip.

NMEA2000 Pilot Output

TZ Navigator v4 is now able to output native NMEA2000 PGN pilot sentences (PGN 129283, 129284, and 129285) with the Actisense NGT-1 USB gateway.

The NMEA2000 PGN output can be enabled from the last page of the Connection Wizard when the NGT-1 has been detected by TZ Navigator.

TZ Navigator V4 Regression

1) TZ Navigator v4 will NOT be able to synchronize marks and routes with NN3D and TZT (1st generation) over the network (including synchronization of the active route). Only NavNet TZtouch2 will be supported with firmware v7. Note that Radar/Sounder compatibility and sensor data through the network (Position, Speed, Heading, AIS…) will still be supported. If a TZ Navigator v4 user wants to exchange Route / Waypoint with NN3D, the CSV file format can be used (exchanging data via SD-Card). For exchanging data with TZT (1st generation), the TZD file format can be used.
   Note: TZ Navigator v4 will only be able to synchronize with TZT2 after a firmware update of the MFD. This firmware update is required because the synchronization will not be limited to Routes and Marks. Boundaries (Area, Lines, Circles) and Photos will also be synchronized, bringing new capabilities to the MFD. Unfortunately, it means that for a period of time, the TZT2 synchronization will not work with TZ Navigator v4 until TZT2 gets updated to firmware v7 (planned at the end of 2019).
   IF A CUSTOMER WANTS TO SYNCHRONIZE MARKS AND ROUTES OVER THE NETWORK WITH NN3D OR TZT, THEN, THEY SHOULD NOT UPGRADE TO V4.
   IF A CUSTOMER WANTS TO SYNCHRONIZE MARKS AND ROUTES OVER THE NETWORK WITH TZT2, THEN, HE SHOULD HOLD UPGRADING OR HOLD INSTALLING V4 UNTIL FURUNO RELEASE THE NEW FIRMWARE.
   Note: If a customer purchases TZ Navigator v4, he can use the TZ Navigator installer v3.3 and then use the TZ Navigator v4 installer at a later time (this will not require a new activation).

2) V4 introduces a limitation on the number of objects that can be created with TZ Navigator. The limitation is the same as TZT2 and iPad and will allow synchronization and cloud service in between all platforms. Limitations :

   - Marks = 30,000 maximum
   - Annotations = 100 maximum
   - Circles = 100 maximum
   - Photos = 1,000 maximum
   - Boundary (Areas and Lines) = 100 with up to 50 vertices per object
   - Routes = 200 with up to 500 waypoints per route

3) The old logbook feature has been depreciated in TZ Navigator V4. It has been replaced by the new TZ Log that records all own ship data automatically. In future updates, we are going to expand on that new framework.

4) It will no longer be possible to adjust the visibility of individual user objects in TZ Navigator.

5) Marks cannot belong to a route or boundary (they will be duplicated when upgrading from an old database and they will be displayed on top of the route or boundary). In general, user objects in v4 are all independents (they cannot share their points with any other objects). For example, it is not possible to create a route that uses existing marks. If the user clicks on an existing mark while creating a route, it will create a new waypoint on top of the mark at the exact same location, but they will not be linked. If the user moves the mark after

creating the route, this will not move the waypoint of the route (it will just move the mark).
Note: When building a route and clicking over an existing mark, although the objects are not shared, the waypoint will be created with the exact same position as the mark ("magnetism" is still working).

6) It is no longer possible to create a HTML note on user objects. The new user objects properties are restricted to Name and Comment (which are both text only properties). Notes will be lost during upgrade.
Note: If customer attached a picture to a user object using the "Note" HTML field, a "Photo" User Object will be created at the same position.

7) The Active Route List will no longer be available (It is replaced by the new Active Route NavData).

8) The "Start from Boat" option is removed from the Planning Route Detail.

9) TZ Navigator v4 removes the ability to send routes and waypoints to GPS using the NMEA0183 $RTE and $WPL sentences.

10) It will not be possible to reverse the Active Route. Only the planning route can be reversed.

11) TZ Navigator v4 removes the compatibility with the proprietary NMEA0183 Man Overboard ("PMXS, MOB") sentence. Proprietary MOB solutions have been largely replaced by the AIS SART standard (that TZ Navigator v4 fully supports).

12) KML file cannot be used anymore to exchange routes in between TIMEZERO users. This is because in v4, KML lines are now imported as lines and not as a route. So, a user that exports a route using a KML file and import it on another PC, he will end up with a line.

13) It is no longer possible to display the route safety tooltip on top of the XTE lines when the leg of a route is in red. In the future (v4.x) we will work on improving the Route Safety feedback (using icons where the actual danger is located).

TZ
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