

# ECDIS DISPLAY CONFIGURATION

For all its potential, ECDIS is only computer software running on a marinised PC. As a result, it suffers from all the faults and errors of any computer. The greatest single danger from ECDIS is to assume that it has been correctly configured with regard to the Route, Safety Depth, Safety Contour, Alarms and Displayed Data. A ship can ground just as easily as a consequence of improper configuration as it could from sloppy chartwork on a paper chart.

Where the ECDIS in use supports it, display configurations should be saved so that the system can be set up quickly when transiting between different environments such as Confined Waters, Anchoring, Coastal Navigation and Open Ocean. This will save time when setting up the system.

## RECOMMENDED CONFIGURATION FOR PILOTAGE AND CONFINED WATERS

*(nomenclature and functions mentioned below are not exhaustive and will vary dependent upon the system in use)*

### ROUTES

- Check:** Ensure that the correct Route is loaded for Route Monitoring.
- Action:** Check that XTD has been set to an appropriate value.
- Set up ETA.
  - Set up ETD.
  - Confirm that the Route has been checked.
  - Protect the Route.
  - Activate the Route for Monitoring.
  - Load the Secondary Route in Route Editor if required.

### WAYPOINT SELECTION

- Check:** Ensure that the correct Waypoint information is being displayed.
- Action:** Check that the following are configured correctly:
- Waypoint Selection Auto or Manual
  - Arrival Circle Auto or Manual
  - Radius Auto or Manual
  - Track History On (set appropriate value)
  - Secondary Track On.

### ROUTE DISPLAY SETUP

- Check:** Ensure that the display is configured for Route Monitoring.
- Action:** Configure the following parameters appropriately:
- Headline
  - COG Vector
  - HDG Vector
  - Ship by Contour or Symbol
  - Align by HDG
  - Course/Leg/Speed On
  - XTD On
  - Arrival Circle Off
  - Radius On
  - WPT Names On.

### CHART SETUP

- Check:** Ensure that the Chart is configured correctly.
- Action:** Check that the following parameters are configured:
- Chart Motion Relative or True (configure Look Ahead if in True)
  - Chart Orientation North Up, Head Up or Course Up
  - Chart Autoload On
  - Chart Autoscale On
  - Chart Priority ENC.

### OVERLAYS

- Check:** Ensure that all relevant Overlays are loaded.
- Action:** Check that the following Overlays are loaded and configured:
- Manual Corrections (load filename as appropriate)
  - Additional Information (load filename as appropriate).

### MAIN CHART PANEL

- Check:** Ensure that the Main Chart Panel is configured correctly.
- Action:** Check that an appropriate level of data is available for the execution of navigation.
- Check that the Palette is configured to suit the conditions.
  - Check that the screen layout is appropriate for execution of navigation.
  - Check that all relevant panels such as Route Data are open or available.

### TARGETS

- Check:** Ensure that targets are configured correctly.
- Action:** Check that the following are configured correctly:
- ARPA Contacts On, Vectors On, Tracks Off
  - AIS Contacts On, Vectors On, Tracks Off
  - CPA Alarm - Configure as necessary
  - TCPA Alarm - Configure as necessary.

### ROUTE ALARMS

- Check:** Ensure that Route Alarms are configured correctly.
- Action:** Check that the following Alarms are configured appropriately:
- End of Route Alarm Off
  - Out of XTD Alarm On
  - Out of Schedule Alarm (configure as necessary)
  - WPT Approach Alarm On (set appropriate value)
  - Off Leg Course Alarm On (configure as necessary).

### ECDIS NAVIGATION AIDS

- Check:** Ensure that navigation aids are configured correctly.
- Action:** Check that the following are configured correctly:
- Predictor On, configure as necessary
  - Manual Fixing Available.

### RADAR

- Check:** Ensure that the preferred radar is selected.
- Action:** Check that RIO and ARPA targets can be displayed.

### TIME

- Check:** Check that System Time is configured correctly.
- Action:** Check that Ship's Time is correct in the ECDIS.
- Check that the correct Time Zone settings are applied.

### POSITION SOURCE SETUP

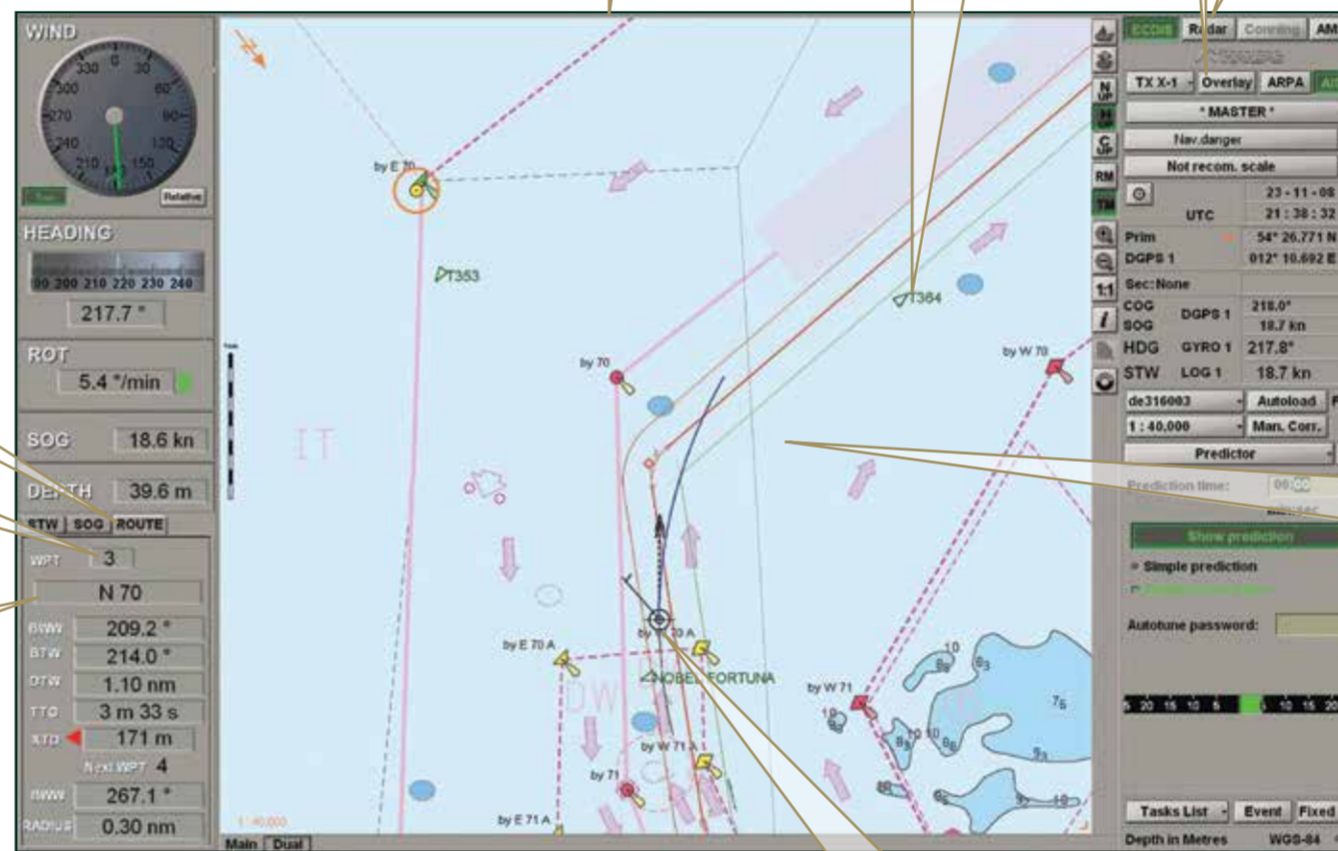
- Check:** Check that the primary position fixing system is set up correctly.
- Action:** Check that ECDIS is correct by inputting a manual fix in the system.
- Select the best available sensor as the Primary Position Source.
  - Select the best available Secondary Position Source.
  - Check Heading reading with ECDIS readout.
  - Check Log reading with ECDIS readout.
  - Set SOG or STW as speed source.
  - Confirm that Radar Information Overlay (RIO) is available and prove ECDIS correct.

### LAYERS SETUP

- Check:** Ensure that the chart is configured correctly.
- Action:** Check that the display of layers is configured appropriately:
- Display Category Standard + or Custom (or equivalent).
- Consider displaying the following layers:
- Spot Soundings
  - Isolated Dangers
  - Names
  - Cables, Pipelines
  - Buoy's Names
  - Other Info
  - All Depth Contours
  - Seabed
  - Scale Bar
  - Navtex.

### SELECT SYSTEM UNITS

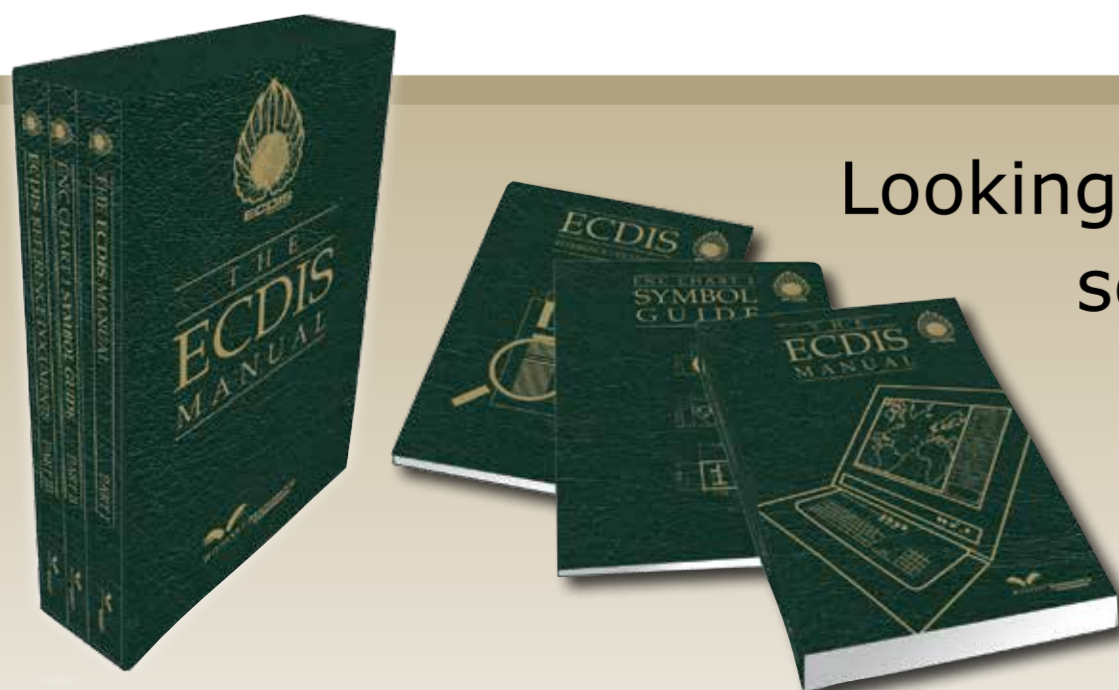
- Check:** Ensure that System Units are configured correctly.
- Action:** Set up System Units for:
- Large Distance
  - Small Distance
  - Speed
  - Depth
  - Time Zone.



### VESSEL SETUP

- Check:** Ensure that Vessel data is set up correctly.
- Action:** Check that the following are configured correctly:
- Ship Position - Centre on Ship or displaced
  - Chart - select the Best Scale chart available
  - Vectors 6 mins (set appropriate value)
  - TCS Ship Condition, Loaded, Medium or Light (configure as required).

*These extracts are from section 3 of the 'ECDIS Procedures Guide' and have been illustrated for this article on a Transas ECDIS screen. The appearance of the Transas ECDIS screen is for illustration only and does not constitute endorsement by Witherby Publishing Group.*



Looking for more information on ECDIS see 'THE ECDIS MANUAL' and 'ECDIS PROCEDURES GUIDE' on **witherbyseamanship.com**



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