

ENC'S & ECDIS

A View from the Bridge



Captain Michel Claveau

Software Uploading

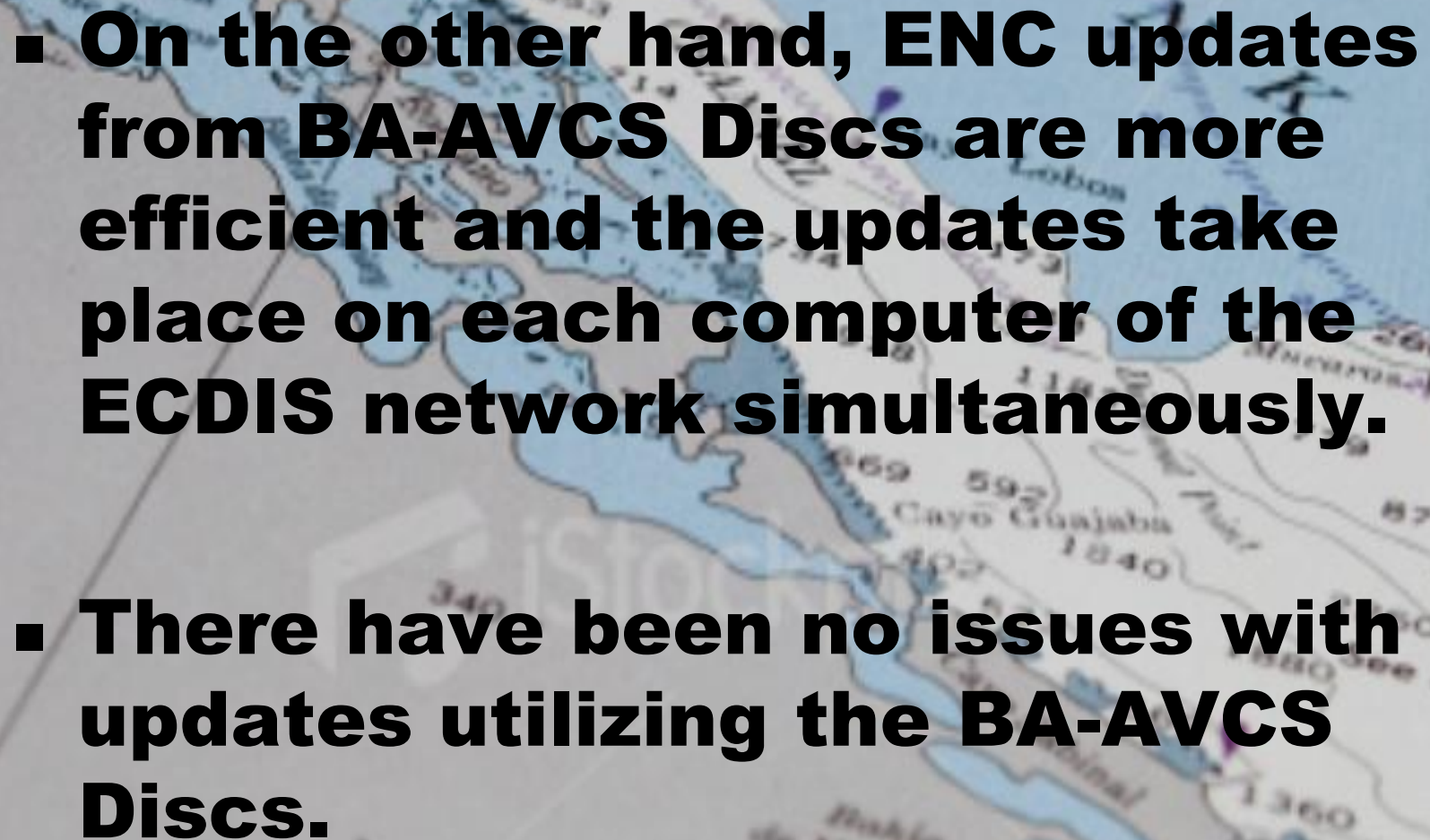
- **There have been no issues with uploading new ENC permits from our approved ENC dealer (Marine Press of Canada).**

ENC Updates/Corrections

- **We presently utilize an email ENC updating service.**
- **A benefit of this service is updates can be loaded immediately.**
- **There is no delay while waiting for the BA-AVCS discs to arrive in the mail; which can sometimes be weeks later.**

- However the process of email chart updating is very complicated and involves a great many steps.

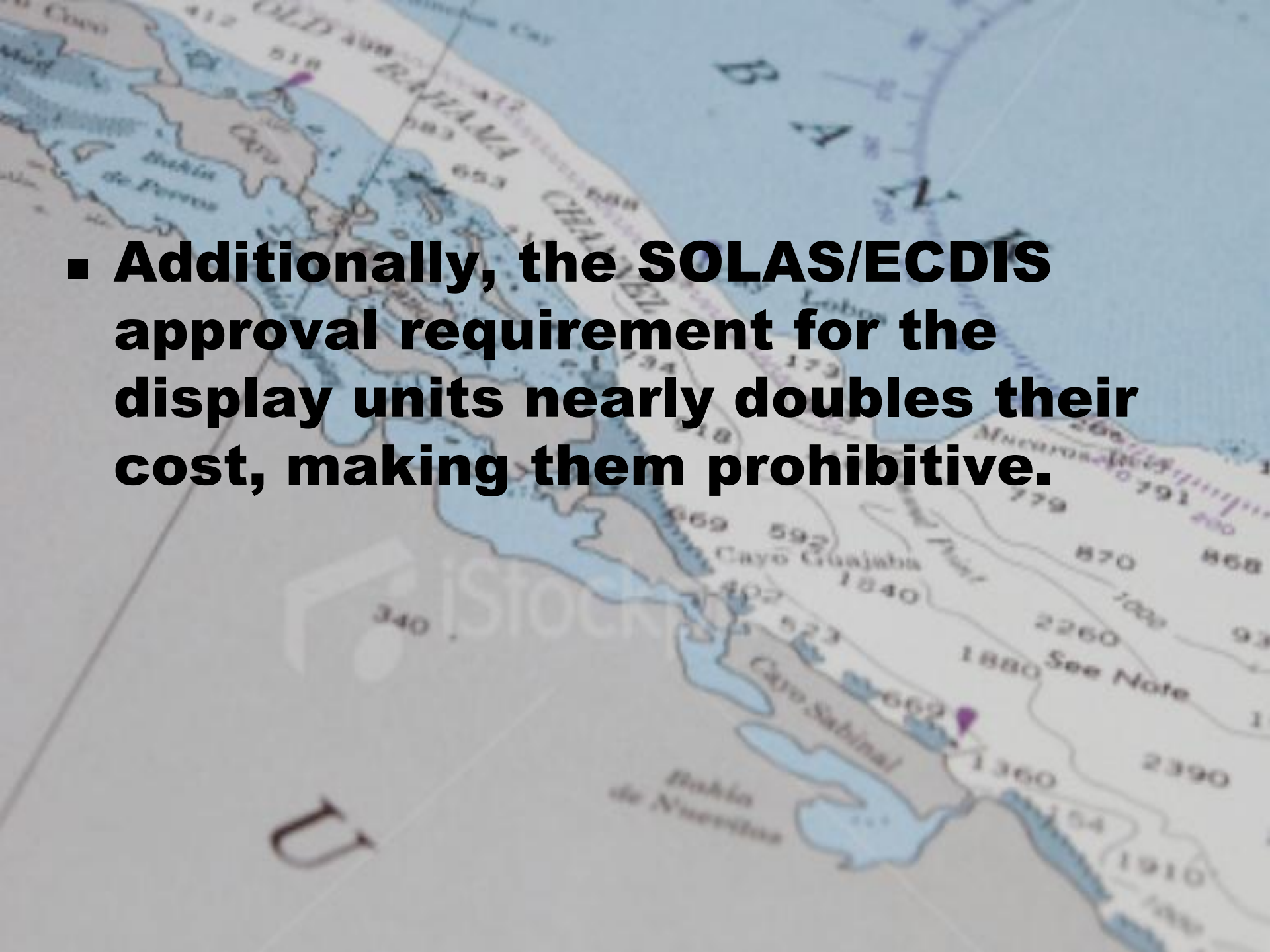


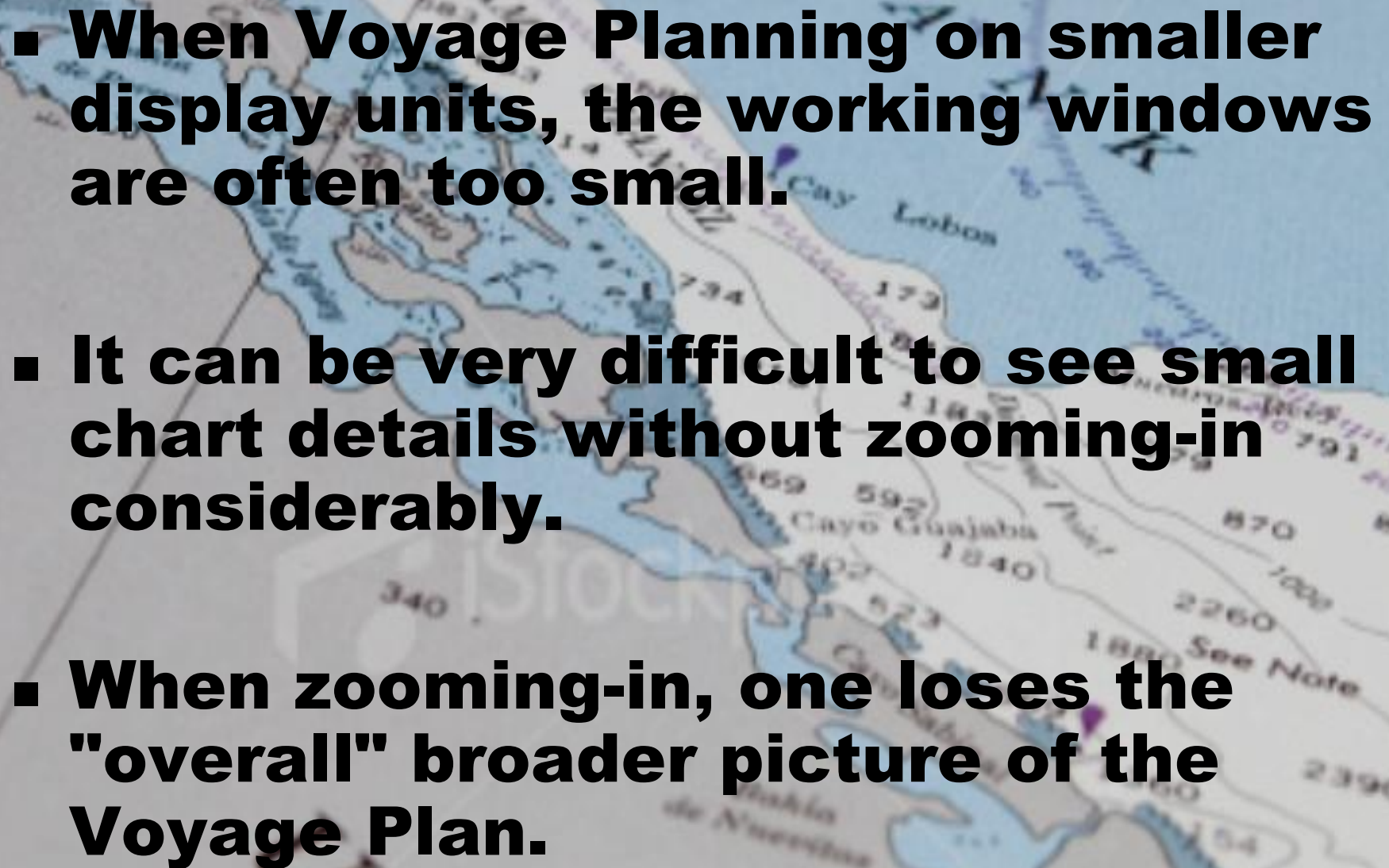
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- **On the other hand, ENC updates from BA-AVCS Discs are more efficient and the updates take place on each computer of the ECDIS network simultaneously.**
 - **There have been no issues with updates utilizing the BA-AVCS Discs.**

The background is a nautical chart of the Mediterranean Sea region, showing coastlines, depth soundings, and various navigational markers. The text is overlaid on this map.

Voyage planning utilizing Video Display Units vs use of Paper Charts of the appropriate scale

- **Large "chart sized", high definition, flat-screen technology is available on the market. However, due to their very expensive price tag, few ships are fitted with these display units.**

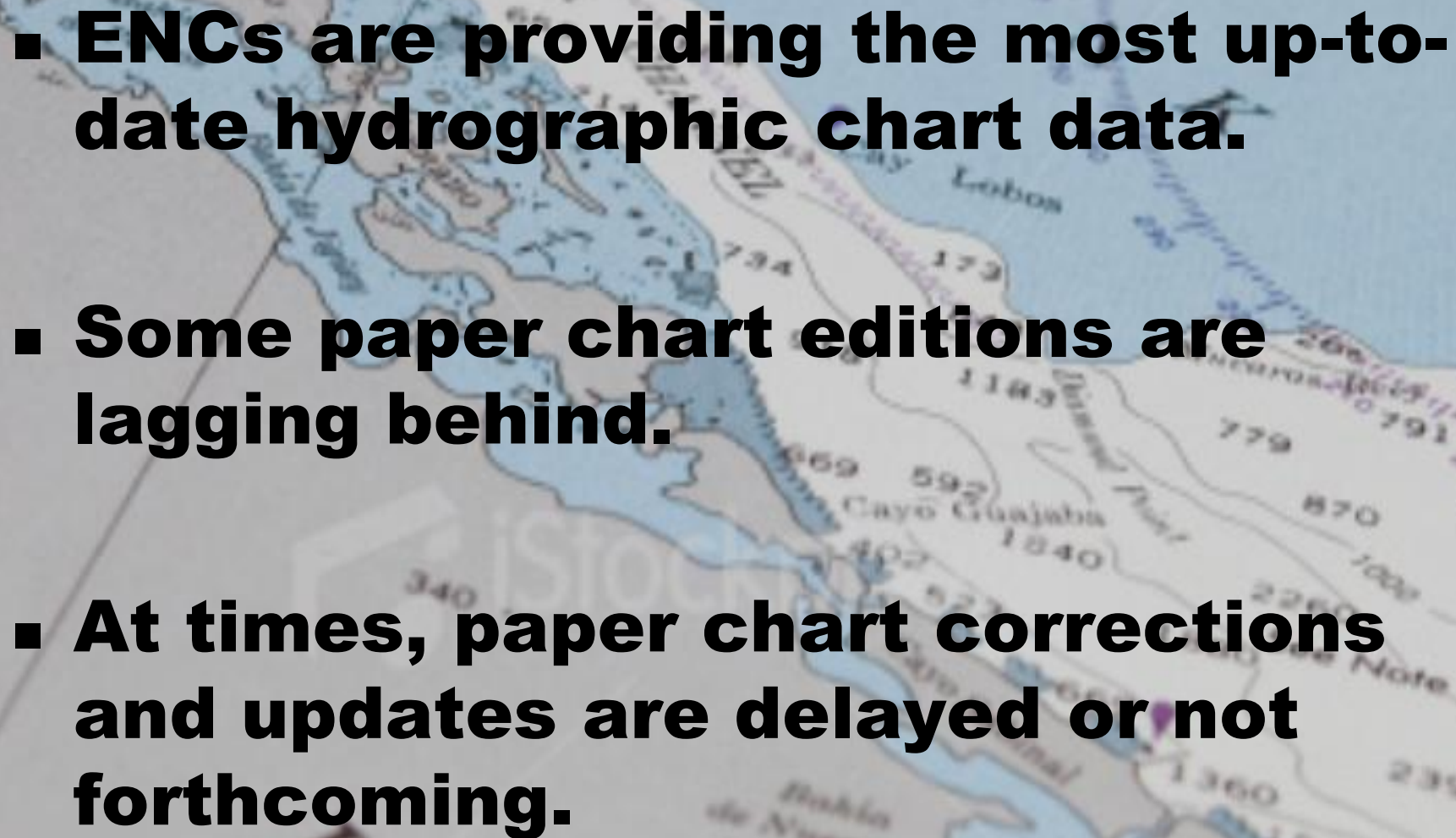
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- A nautical chart showing a coastal area with various islands and bays. The chart includes depth soundings, names of locations like 'Bahía de Nuercitas', 'Cayo Sabinal', and 'Cayo Guajaba', and a 'See Note' label. A large, bold, black text box is overlaid on the chart, containing a single bullet point. The background is a light blue and tan nautical chart with white text and lines.
- **Additionally, the SOLAS/ECDIS approval requirement for the display units nearly doubles their cost, making them prohibitive.**

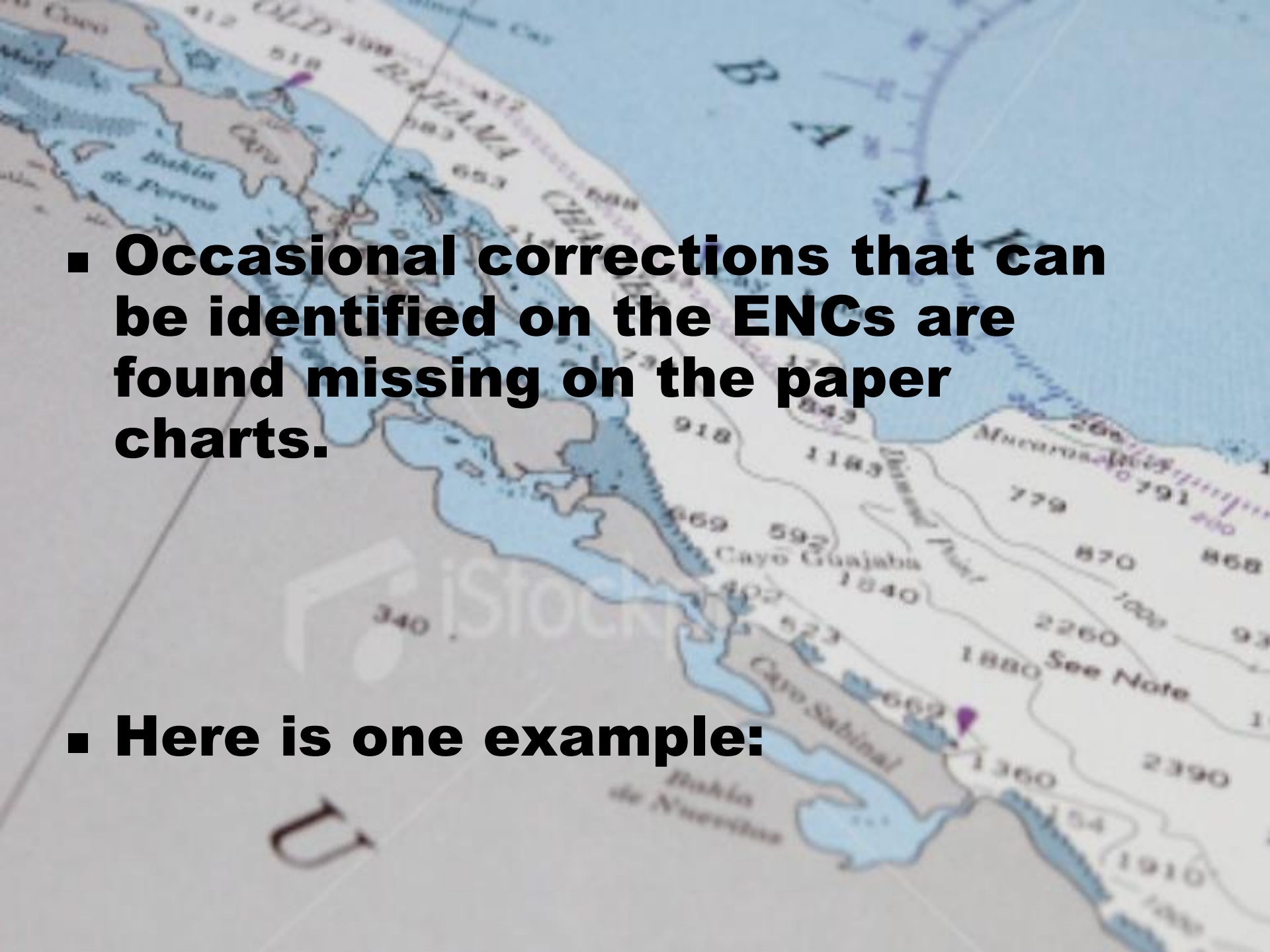
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- A nautical chart of a coastal area, likely in the Caribbean, showing a bay and several islands. The chart includes depth soundings, island names like 'Cayo Lobos' and 'Cayo Guajaba', and a 'See Note' label. A large, semi-transparent watermark 'iStock' is visible across the center of the chart. Overlaid on the chart are three bullet points in bold black text.
- **When Voyage Planning on smaller display units, the working windows are often too small.**
 - **It can be very difficult to see small chart details without zooming-in considerably.**
 - **When zooming-in, one loses the "overall" broader picture of the Voyage Plan.**

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- A nautical chart showing a coastal region with various islands and bays. The chart includes depth soundings, contour lines, and labels for geographical features like 'Bahía de Nueveceras' and 'Cayo Guasaba'. Two purple markers are placed on the chart. The text is overlaid on the left side of the chart.
- **Lower definition display units cause loss of picture contrast and sharpness.**
 - **LCD Flat Screen display units emit significant background light that prevents the retention of night vision during navigation**

Quality of ENC data

- **Significant improvement in ENC chart data has been noted in the last few years.**
- **Alignment of chart features with WGS84 datum has improved with negligible off-set observed.**

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- A nautical chart of a coastal region, likely the Gulf of Mexico or Caribbean Sea, showing depth contours, landmasses, and various navigational markers. The chart is overlaid with three bullet points in bold black text. The text discusses the advantages of ENC data and the challenges of paper chart updates. The chart background shows depth contours in fathoms (e.g., 10, 20, 30, 40, 50, 60, 70, 80, 90, 100, 110, 120, 130, 140, 150, 160, 170, 180, 190, 200, 210, 220, 230, 240, 250, 260, 270, 280, 290, 300, 310, 320, 330, 340, 350, 360, 370, 380, 390, 400, 410, 420, 430, 440, 450, 460, 470, 480, 490, 500, 510, 520, 530, 540, 550, 560, 570, 580, 590, 600, 610, 620, 630, 640, 650, 660, 670, 680, 690, 700, 710, 720, 730, 740, 750, 760, 770, 780, 790, 800, 810, 820, 830, 840, 850, 860, 870, 880, 890, 900, 910, 920, 930, 940, 950, 960, 970, 980, 990, 1000) and various geographical features like 'Cayo Guajaba' and 'Bahia de Nuevitas'.
- **ENCs are providing the most up-to-date hydrographic chart data.**
 - **Some paper chart editions are lagging behind.**
 - **At times, paper chart corrections and updates are delayed or not forthcoming.**

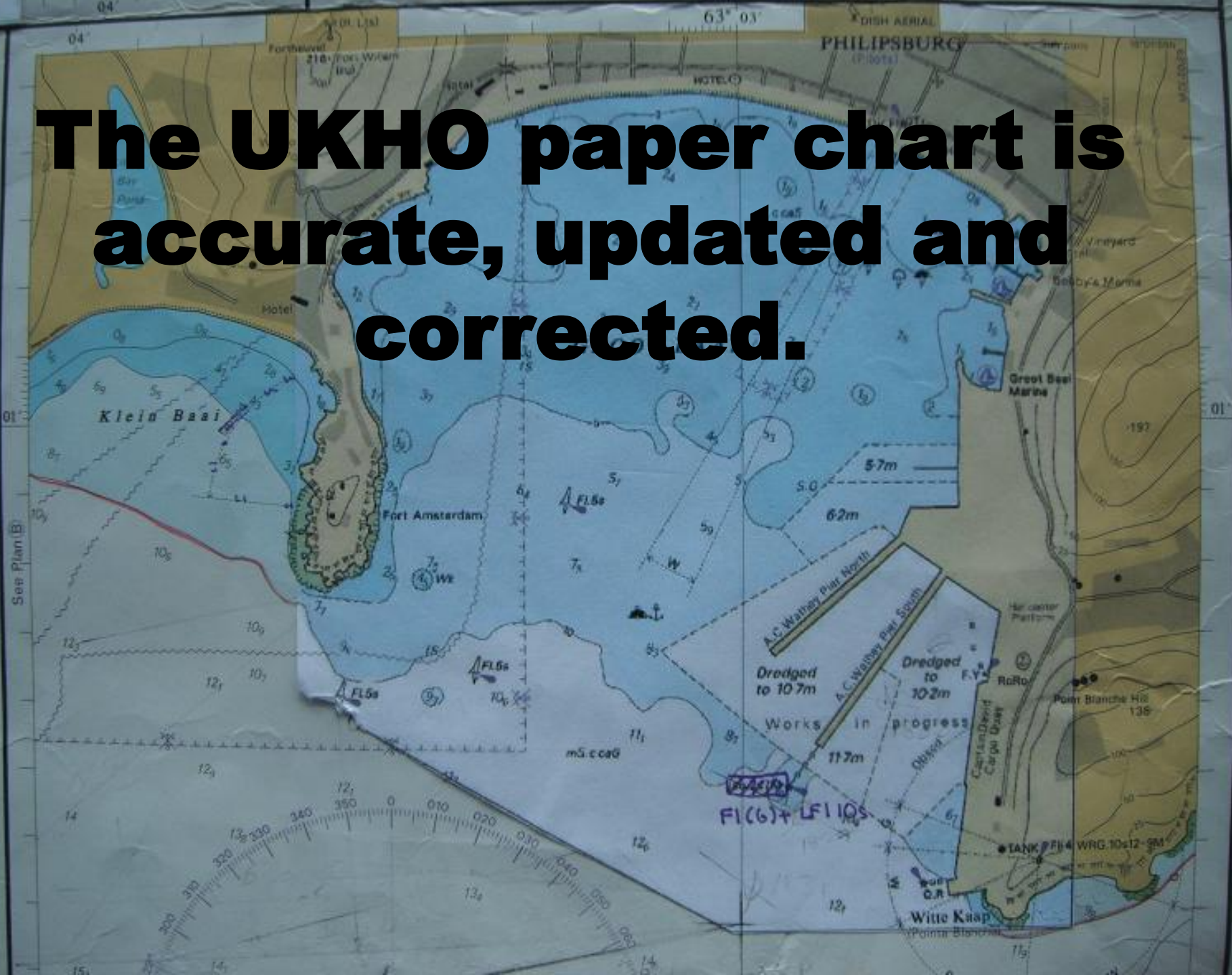
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- Occasional corrections that can be identified on the ENCs are found missing on the paper charts.

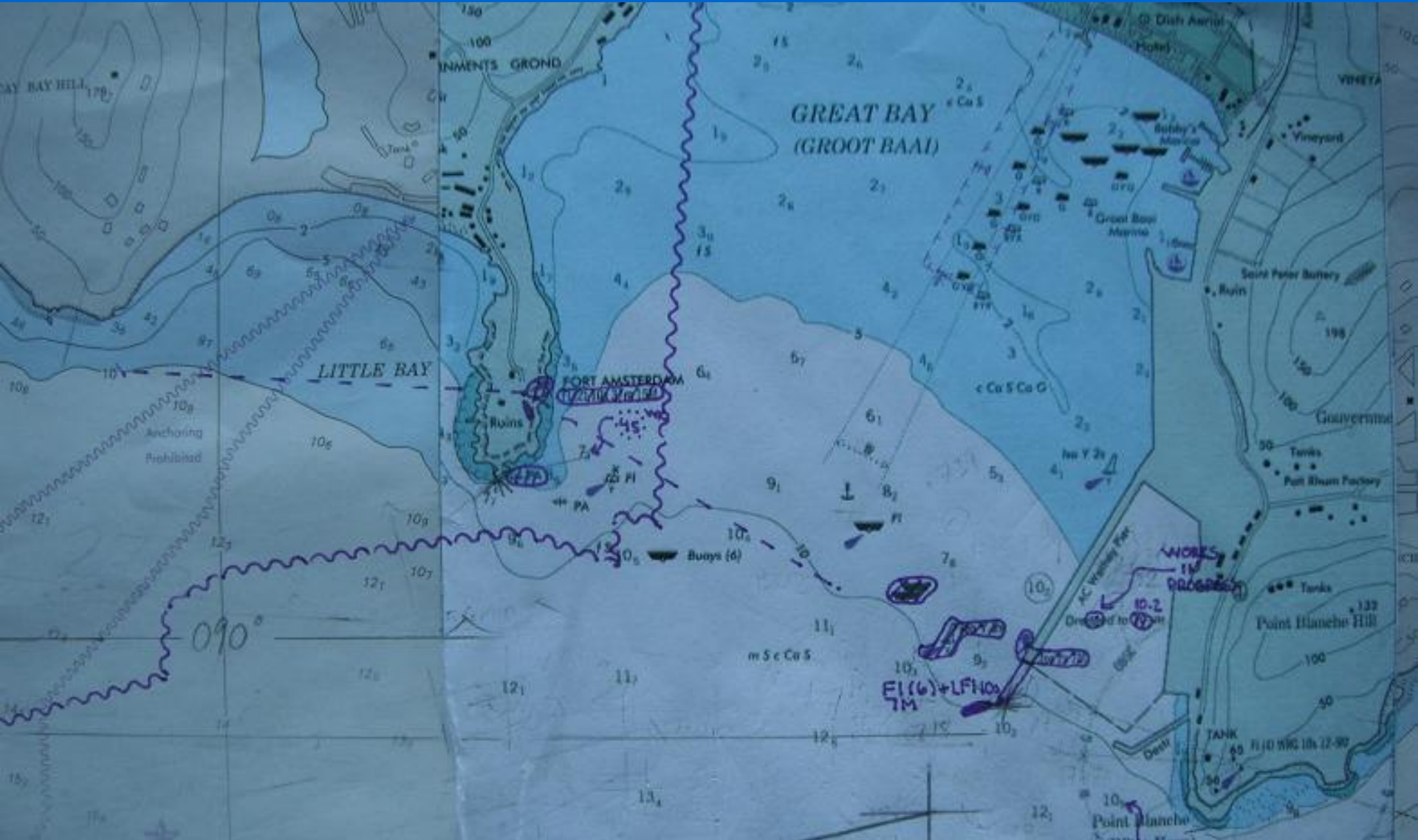
- Here is one example:

ENC display of the new pier in Philipsburg, St Maartens.



The UKHO paper chart is accurate, updated and corrected.

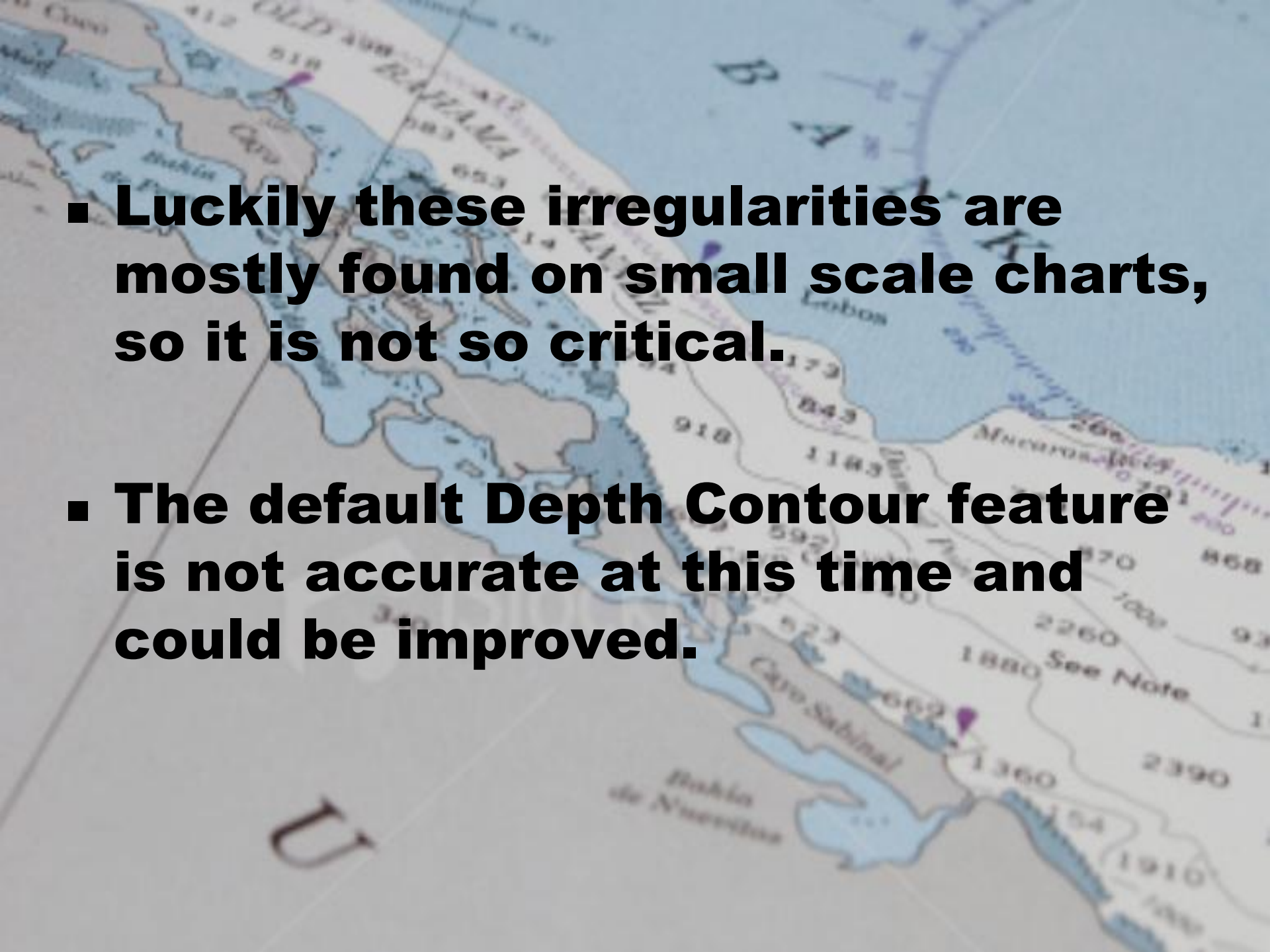




However the DMA paper chart has not been updated

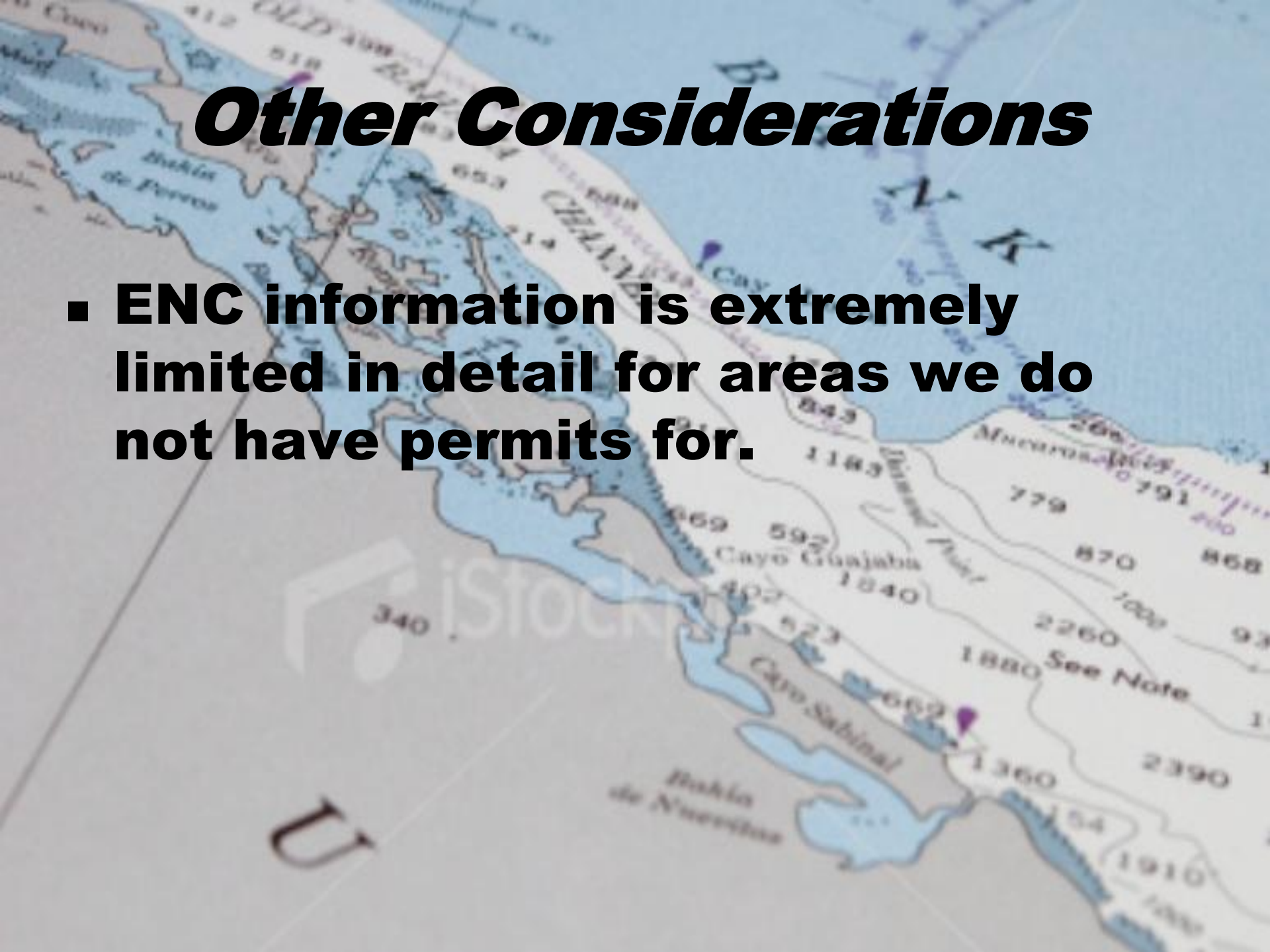
Presentation of ENC information

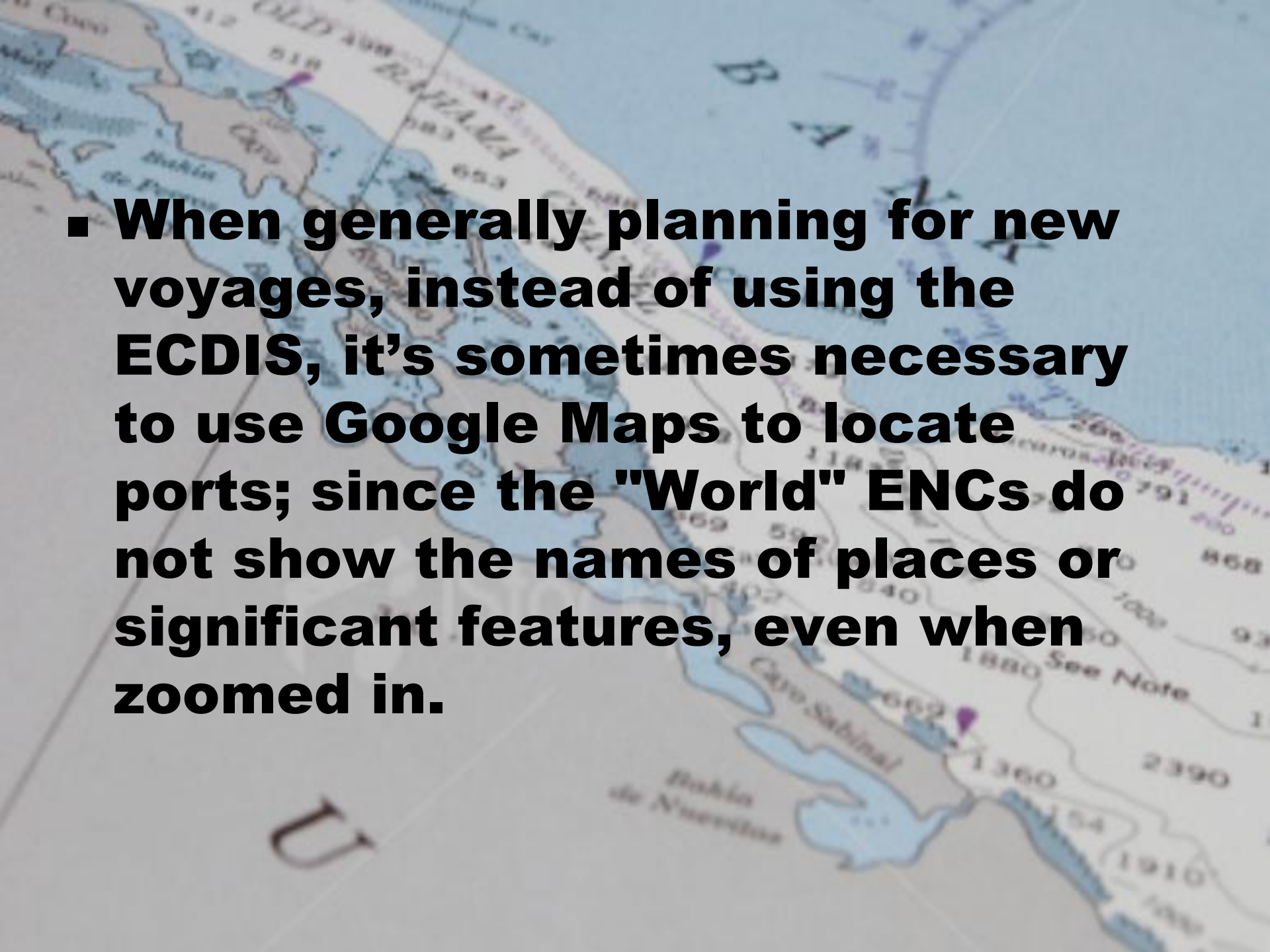
- **Although gaps in electronic chart coverage are much fewer than before, there remain some transitions from one chart coverage to another where gaps exist or there is a large difference in scale.**

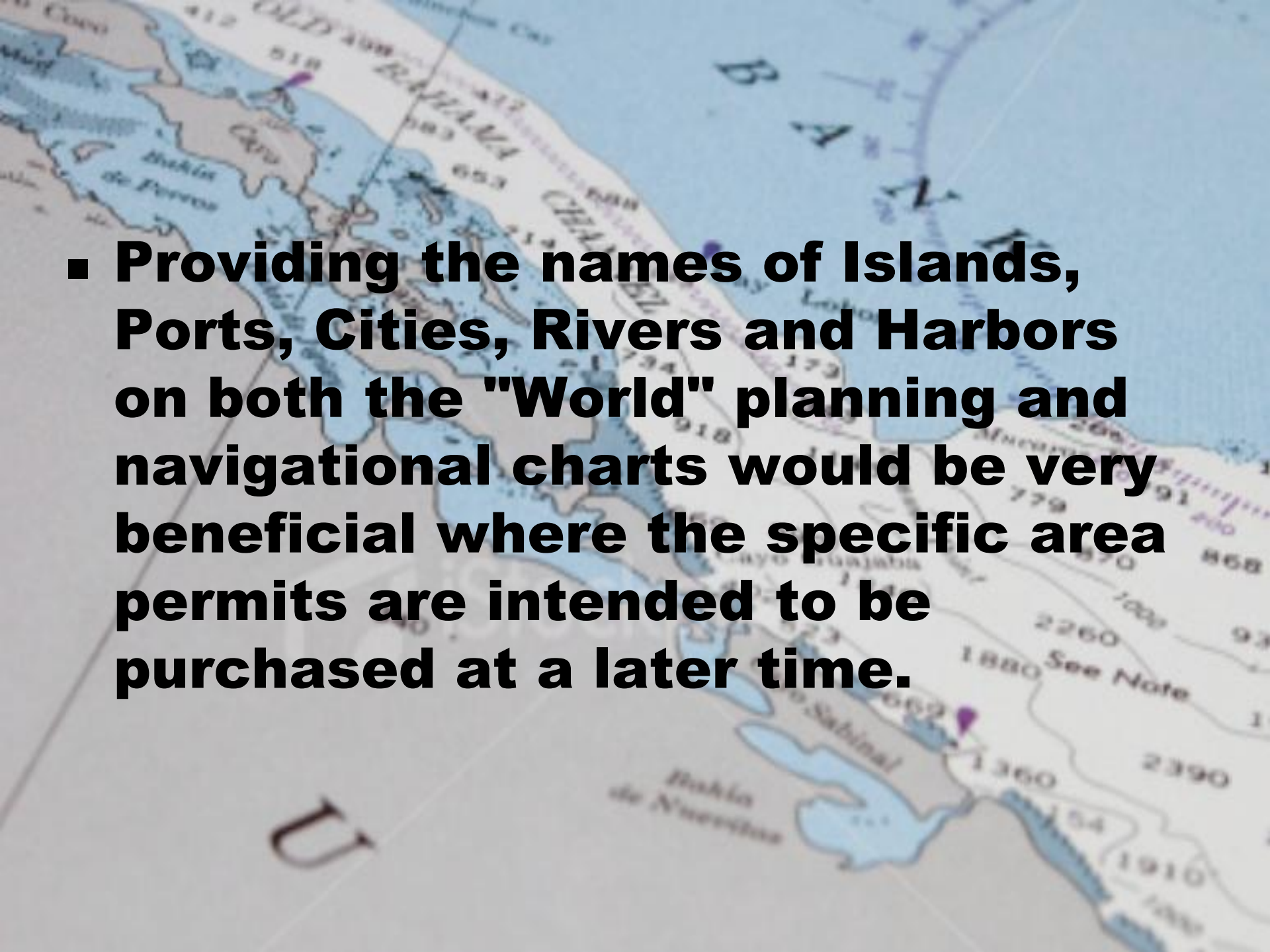
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- A nautical chart showing depth contours and geographical features. The chart includes labels for 'Cabo Sabinal', 'Bahía de Nuercitas', and 'Cabo'. Depth contours are marked with values such as 179, 843, 918, 1183, 592, 523, 662, 1360, 1880, 2260, 2390, 1910, 870, 868, 1000, 900, and 100. A note 'See Note' is visible near the 1880 contour. The chart also shows 'Cabo' and 'Bahía de Nuercitas' in the lower left. The word 'U' is visible in the bottom left corner.
- **Luckily these irregularities are mostly found on small scale charts, so it is not so critical.**
 - **The default Depth Contour feature is not accurate at this time and could be improved.**

Other Considerations

- **ENC information is extremely limited in detail for areas we do not have permits for.**



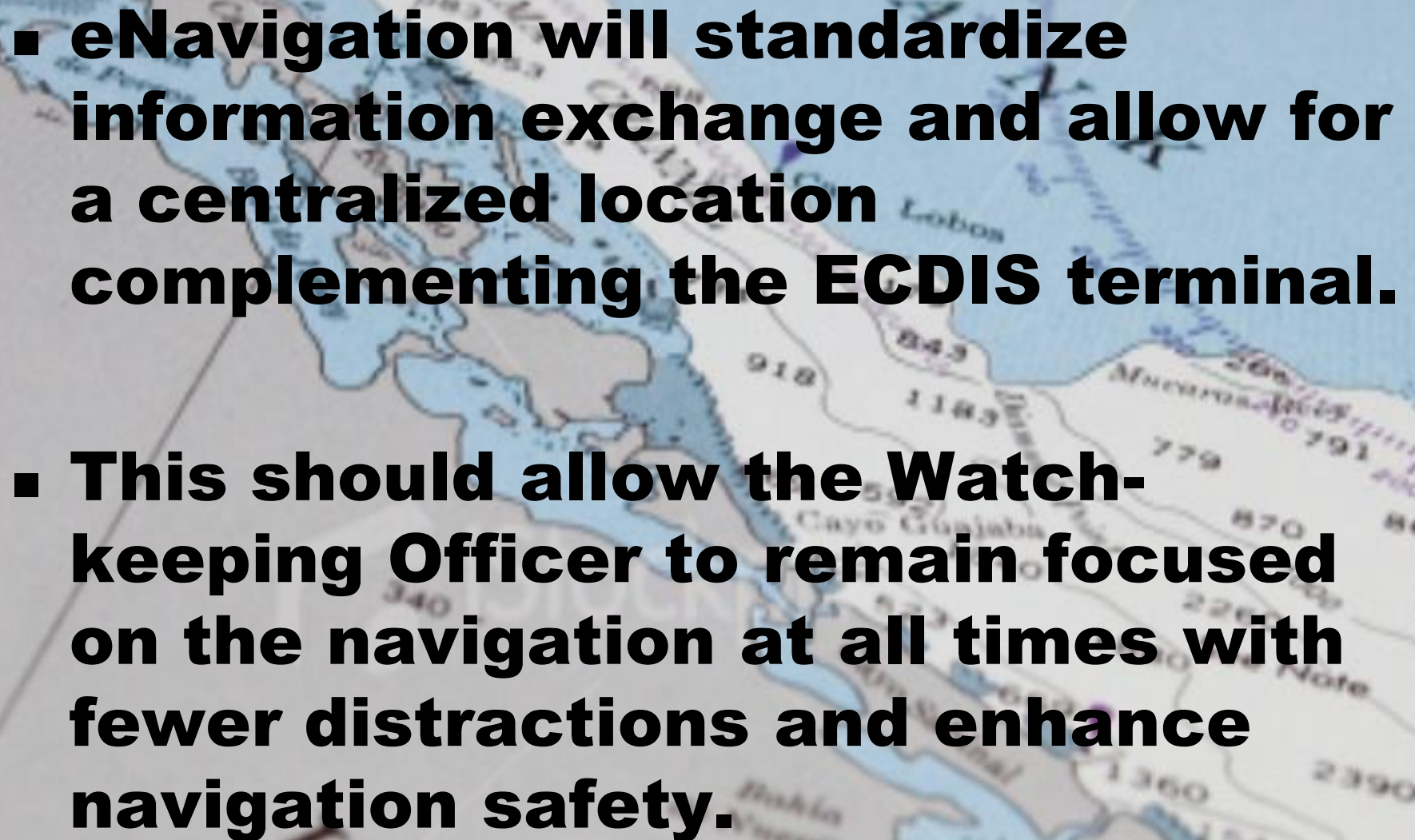
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- A nautical chart showing a coastal region with various features like 'Bahía de Nueros', 'Cabo Sabinal', and 'Cabo'. The chart includes depth soundings, contour lines, and a grid. A purple pin is placed on the coast near 'Cabo Sabinal'.
- **When generally planning for new voyages, instead of using the ECDIS, it's sometimes necessary to use Google Maps to locate ports; since the "World" ENCs do not show the names of places or significant features, even when zoomed in.**

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- A nautical chart of the Gulf of Mexico and Caribbean Sea region. The chart shows the Gulf of Mexico to the north and the Caribbean Sea to the south. Key geographical features include the Yucatan Peninsula, the Gulf of Campeche, the Gulf of Yucatan, and the Gulf of Mexico. Major ports and cities are marked, including Campeche, Progreso, and Yucatan. The chart also shows numerous islands and reefs, such as the Yucatan Islands and the Yucatan Peninsula. Depth soundings are provided in fathoms, ranging from 100 to 2390. The chart is titled "GULF OF MEXICO AND CARIBBEAN SEA" and includes a scale of 1:100,000. The text "See Note" is visible on the chart.
- **Providing the names of Islands, Ports, Cities, Rivers and Harbors on both the "World" planning and navigational charts would be very beneficial where the specific area permits are intended to be purchased at a later time.**

Looking to the Future

- **ENCs are here to stay and will likely become the chart media of choice.**
- **Although ENC coverage is presently very good, we can expect better coverage, higher definition and more detail in the future.**

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- A nautical chart of a coastal area, likely the Gulf of Thailand, showing islands, reefs, and depth soundings. The chart is overlaid with three bullet points in bold black text. The text discusses the future of paper charts, the integration of ECDIS requirements with eNavigation software, and the cost barrier for smaller operators.
- **Paper charts might eventually grow out of favor.**
 - **New requirements for ECDIS will likely be integrated with eNavigation software.**
 - **However the cost may be prohibitive for smaller operators.**

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- **eNavigation will standardize information exchange and allow for a centralized location complementing the ECDIS terminal.**
 - **This should allow the Watch-keeping Officer to remain focused on the navigation at all times with fewer distractions and enhance navigation safety.**

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- **Hopefully, the cost of ENC chart permits will decrease in the future as ENC services becomes mainstream.**

***Thank you for your
Attention***



Captain Michel Claveau