14th Meeting of the Hydrographic Services and Standards Committee
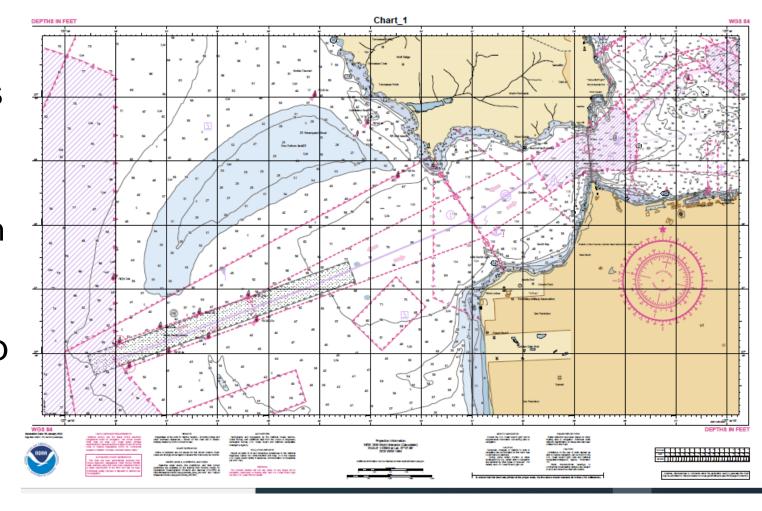
Proposed guidelines for automated paper chart output from ENC

Agenda Item 5.4C

HSSC-14, Denpasar-Bali Indonesia, 16-19 May 2022

- The IMO still considers paper nautical charts as an adequate independent back-up for ECDIS

- Many Member States are starting to drastically reduce or completely eliminate their paper chart coverage

- Progress has been made to derive ENC based paper charts in an automated fashion

- A version of this paper was presented at HSSC12 – however, it was directly deferred to the NCWG without an option for discussion
  - As part of the consideration for the future of the Paper Chart
  - NCWG recommended that their wasn't a need to develop a separate specification for simplified charts at that time
  - Focused on creating a "common IHO Baseline Symbology"
- United States continues to recognize there is a need for guidelines to help automate and print paper chart output from ENCs

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- There are two parts to developing paper charts from ENC data
  - Portrayal is being handled via the Baseline Symbology Project Team
- There are aspects that go into printing a chart that is usable for backup and situational awareness that also need to be considered

- Basic guidelines that are recommend to ensure safe ship movement for route planning situational awareness and backup navigation

- Examples include items such as:
  - Red light readability
  - Include a compass rose
  - Scale Bar
  - Include minimum symbology and labeling
  - etc

CONCLUSIONS

- It is noted that in some cases paper chart production is entirely separate from ENC production and due to resource constraints HO's are focusing their development on ENC production and transition to S-101

- This is resulting in paper charts that are not fully up-to-date and are becoming less safe than the ENC

- If we are able to automatically derive paper charts from ENC then there is alignment with the data

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- The United States is willing to lead the effort in developing a draft set of guidelines as we have recognized that without an appropriate guideline it reduces the ability to reliably allow users to create custom charts
  - Route Planning
  - Situational Awareness
  - Backup navigation

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- Note the paper

- Endorse the need for specifications relating to the printing of ENC derived paper charts

- Ask NCWG to continue to focus on the Baseline Symbology Project Team work and accelerate where possible

- Consider the proposal from the United states to lead the effort on the guidelines required for printing paper charts derived from ENCs for consideration and input by NCWG

Thank You!