



NOAA's Office of Coast Survey



Accelerating Data Integration Into Charts

**(Including a discussion on the role of
hydrographic certification)**

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Outline

- ▶ Process of hydrographic data application
- ▶ Current status
- ▶ Certification



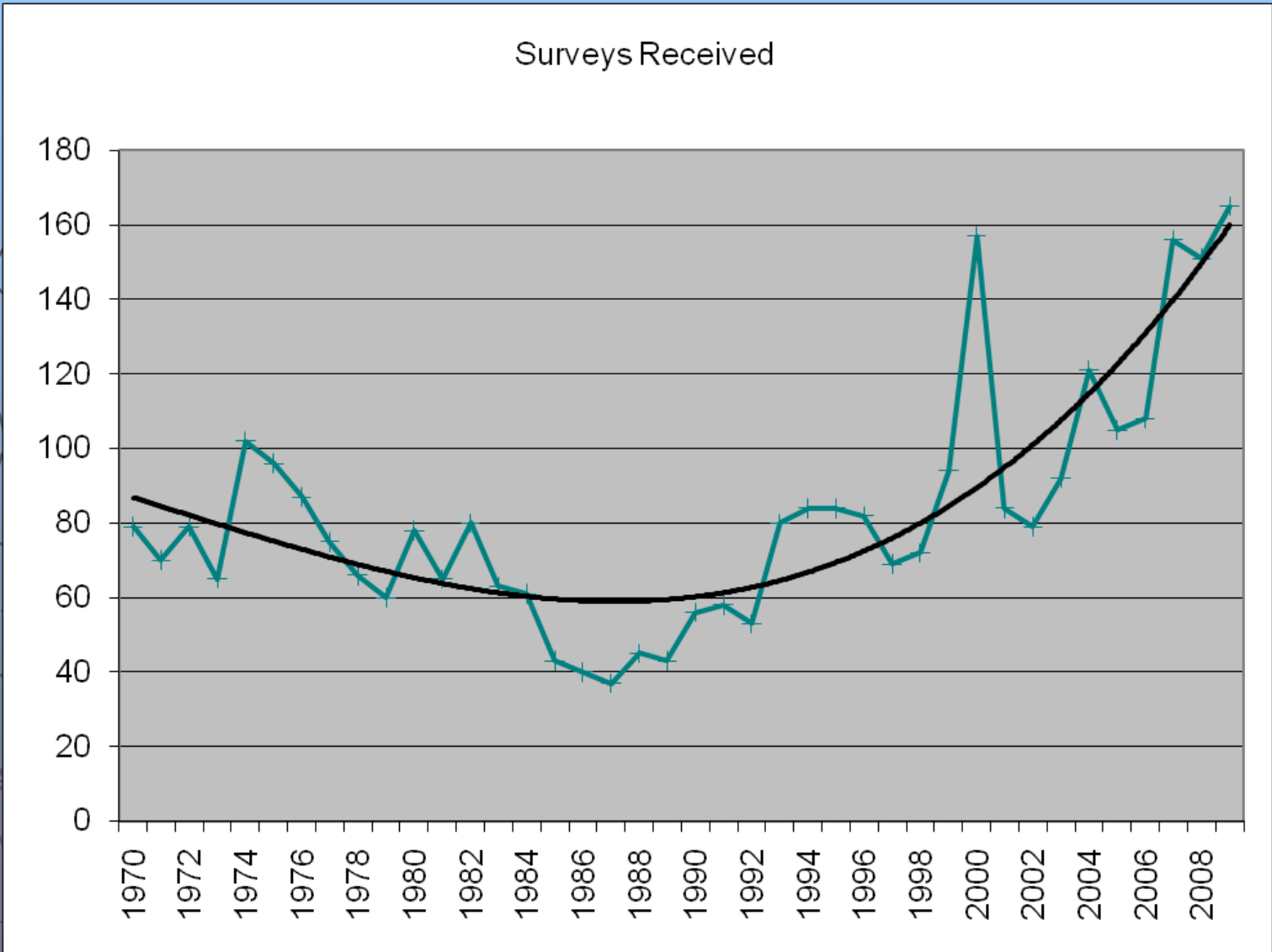
Ping-to-Chart

- ▶ Hydrographic data collected
 - First ping through last ping
 - Field processing
- ▶ Data delivered to HSD
 - Verification, Quality Assurance
 - Compilation product to update chart
- ▶ HSD delivers to MCD
 - MCD updates nautical chart
 - Distributes to public

Data Verification

- ▶ All hydrographic data comes through HSD for validation and compilation
 - Inhouse, direct contract, U.S. Navy, USGS, state, local, etc.
 - Only exception is Army COE
 - ▶ COE has authority over maintained channels
 - ▶ COE data goes directly to MCD

Incoming Surveys



Ping-to-Chart

- ▶ Prior to 2008 more surveys received than could be validated and compiled at HSD
- ▶ Process improvements start paying benefits in 2008
 - FY2008 – 151 surveys in; 185 out
 - FY2009est – 165 in; 275 out
- ▶ Survey inventory and ping-to-chart times dropping dramatically.

DTON

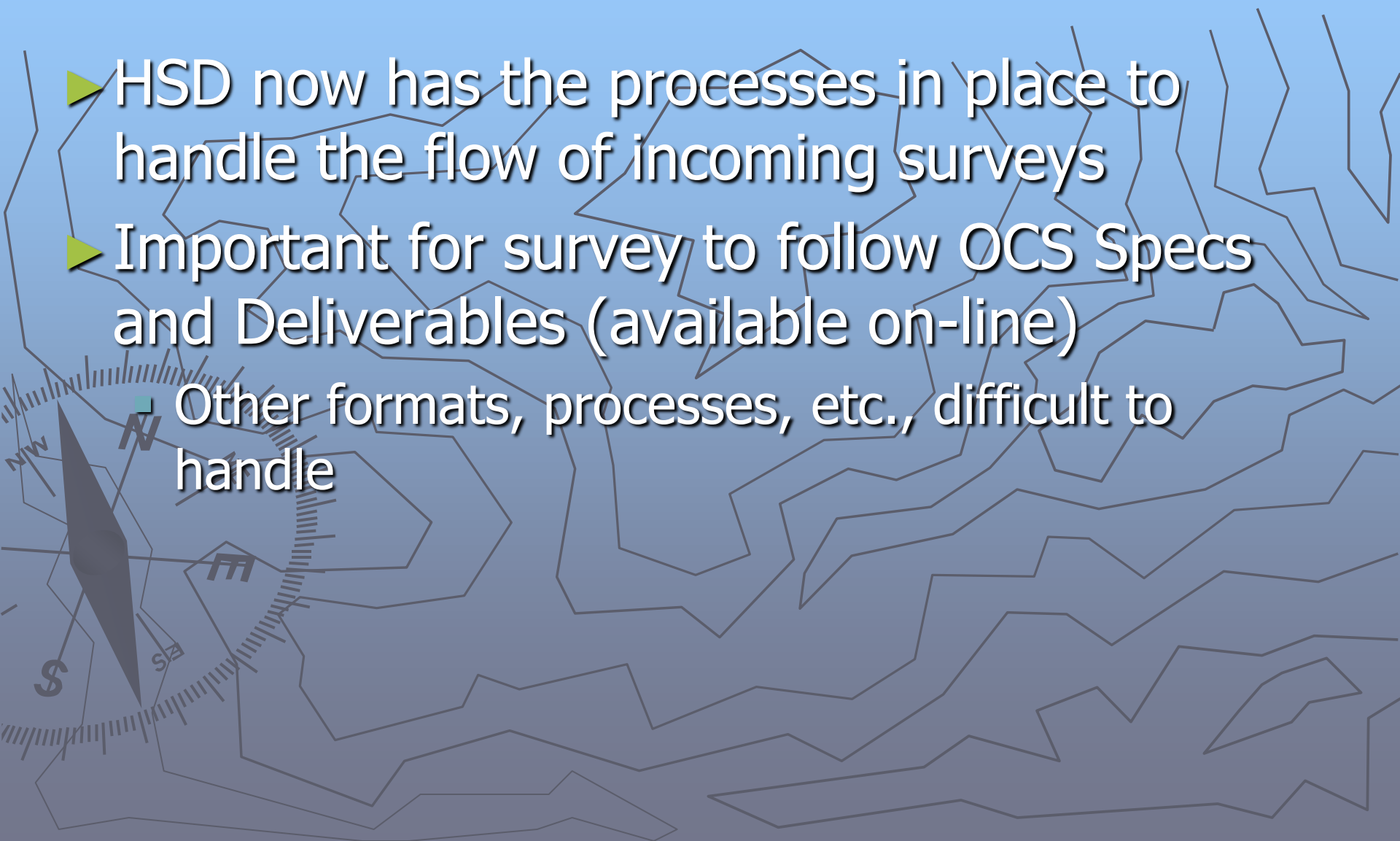
► Important Note:

- Danger TO Navigation – All important finds (new wrecks, obstructions, etc.) sent directly to MCD via field unit or initial review for immediate update.

► However, more general changes would not make it to the chart for several years.

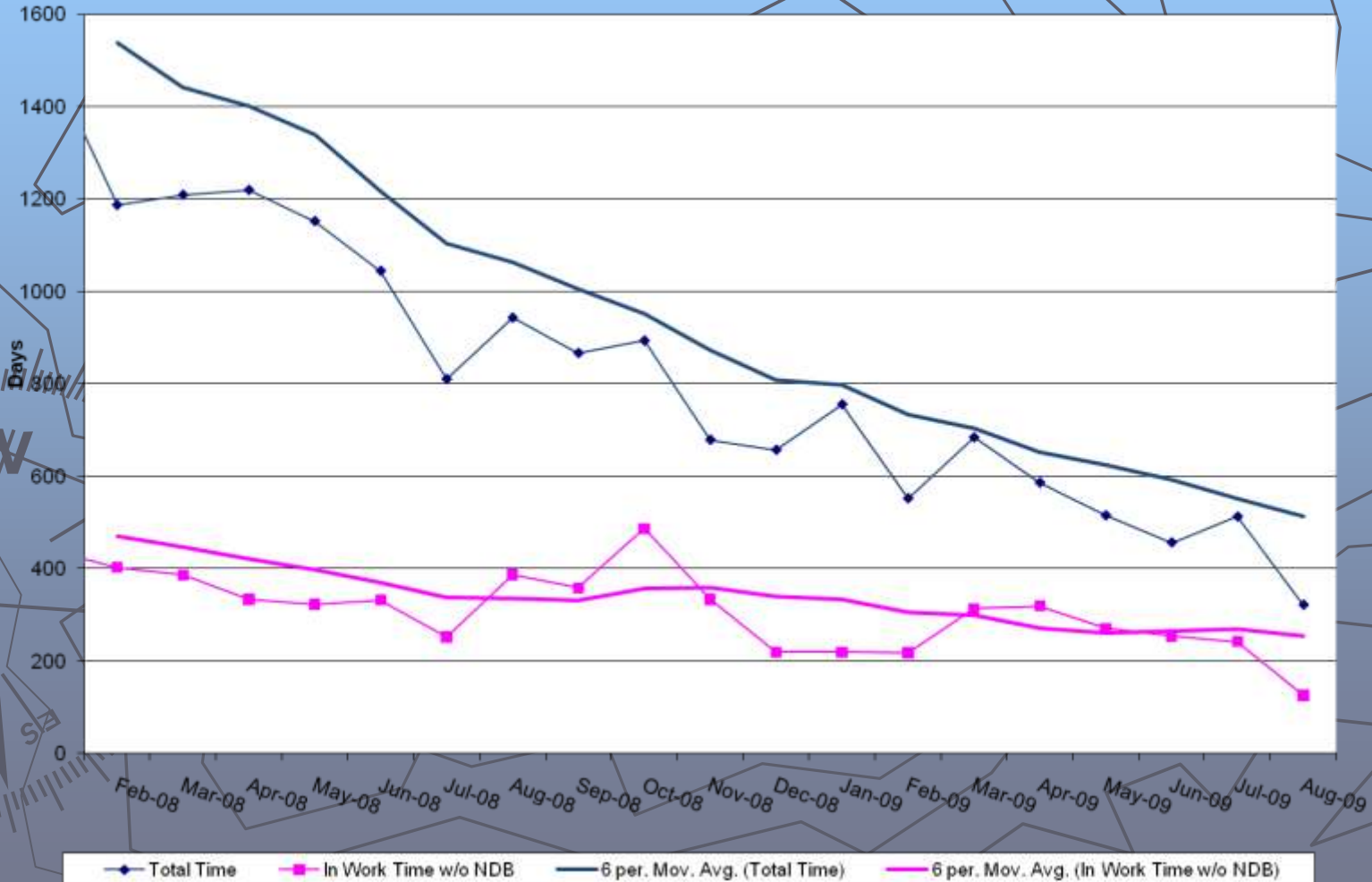
Ping-to-Chart

- ▶ HSD now has the processes in place to handle the flow of incoming surveys
- ▶ Important for survey to follow OCS Specs and Deliverables (available on-line)
 - Other formats, processes, etc., difficult to handle



Results

HSD Total Ping to Chart

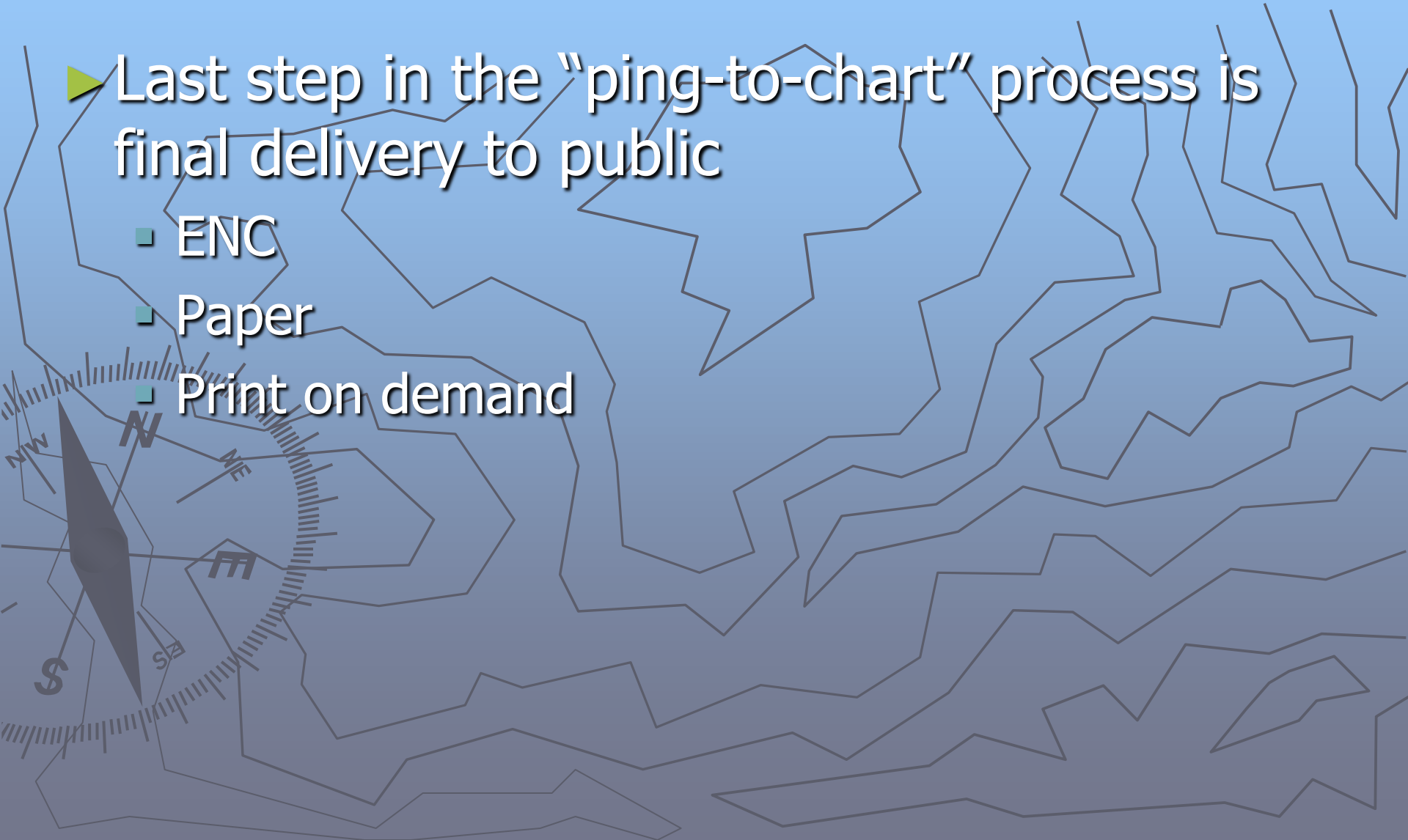


Field Time

- ▶ Historically, largest component of “Total Time” was queue time
 - Time survey sat on shelf waiting
- ▶ Due to decreases in inventory, largest component of “Total Time” is now “Field Time”
 - Time from last ping until the survey is delivered to HSD

MCD and NCSII

- ▶ Last step in the “ping-to-chart” process is final delivery to public
 - ENC
 - Paper
 - Print on demand



Certification

- ▶ Currently no requirement
 - Government positions filled competitively
 - Contractor selection - it is taken into consideration, but is not a requirement
 - Would not remove the need for HSD to validate a hydrographic survey and produce product for MCD

Certification

- ▶ American Congress on Surveying and Mapping (ACSM) and The Hydrographic Society Of America (THSOA)
 - No official relationship with OCS or NOAA
 - First certificate awarded in 1985
 - 200 total, about 100 still “active”
 - Since 2001, 69 applications, 32 certified
 - ▶ 5 years experience + 3 hour exam

Certification

▶ IHO Cat A

- A course of study is certified
- Usually about one-year in length
- UNH and USM only two in U.S.

▶ IHO Cat B

- Shorter course (~6 months)
- USM only in U.S.

Certification

- ▶ OCS working with ACSM to make certification more relevant
- ▶ OCS and Navy beginning discussion on government training and career ladder
- ▶ OCS inhouse training and development

Summary

- ▶ HSD has made significant improvements in its ping-to-chart times
- ▶ Key is getting clean, complete data that follows OCS Specs and Deliverables
- ▶ Certification may play a role, but would not be a "cure all"



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Questions?

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