



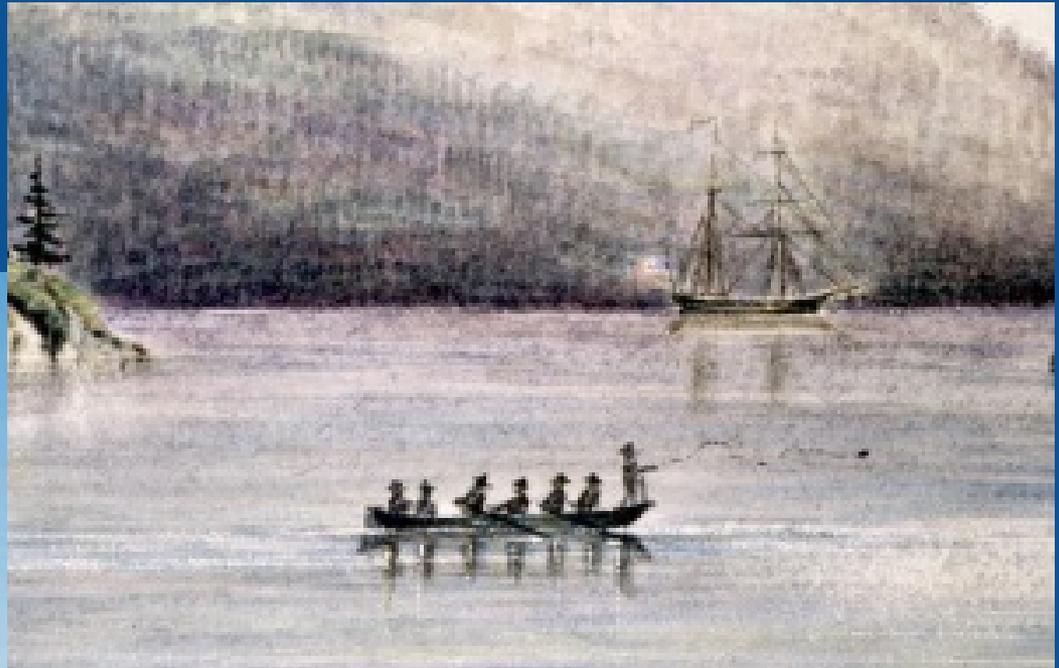
# A New Way of Doing Business

RDML Gerd Glang, Director  
Office of Coast Survey

Hydrographic Services Review Panel  
September 18, 2014

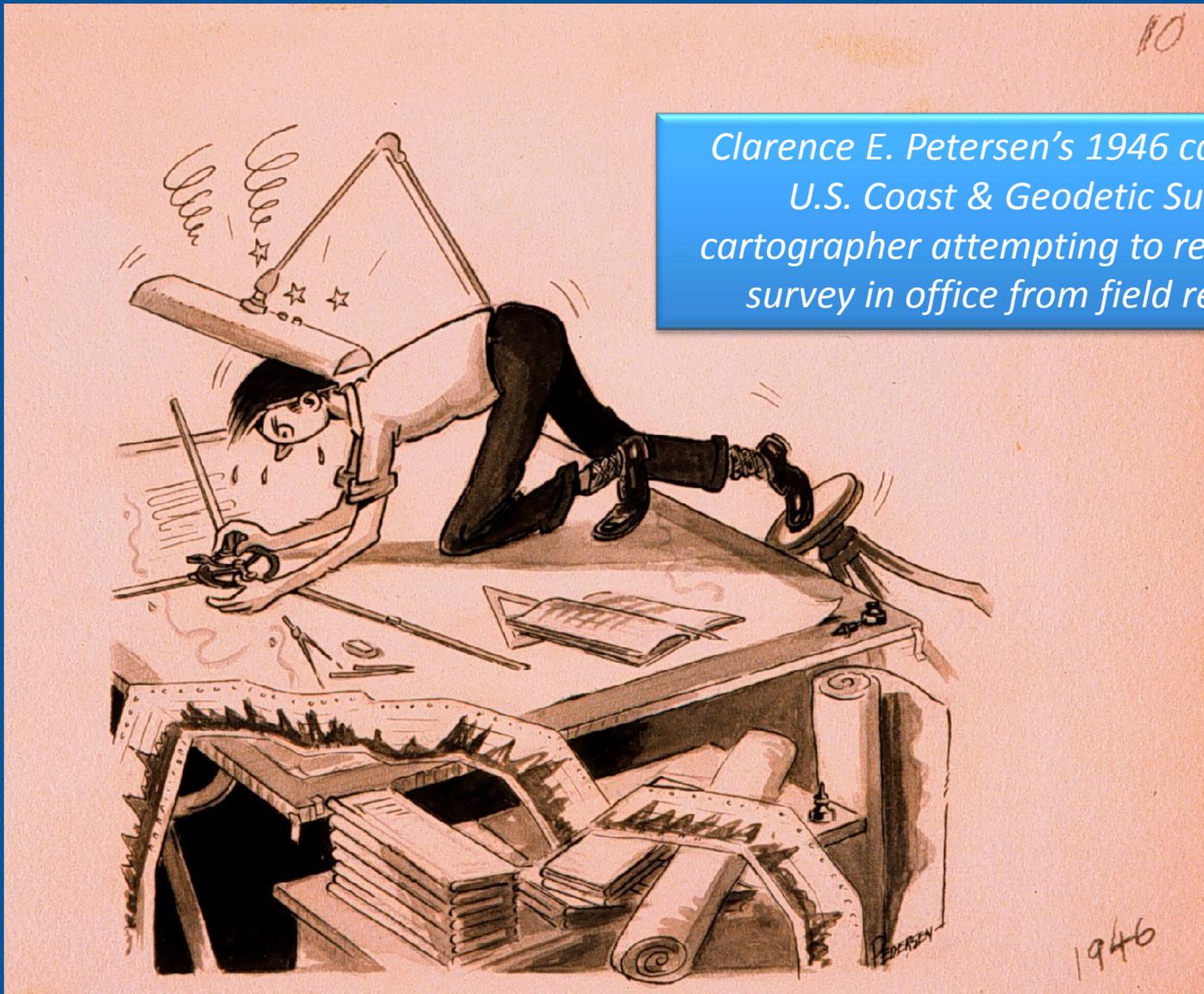
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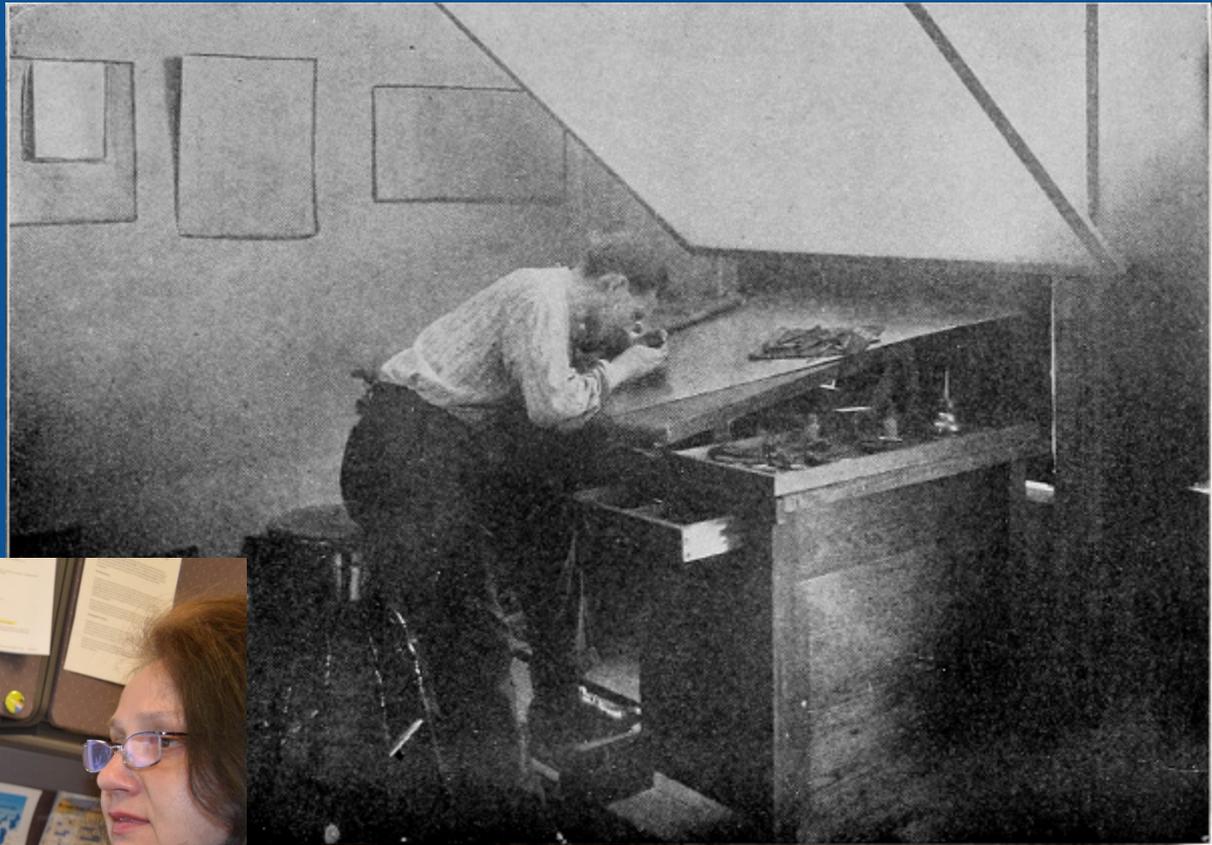


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Clarence E. Petersen's 1946 cartoon of U.S. Coast & Geodetic Survey cartographer attempting to reconstruct survey in office from field records.



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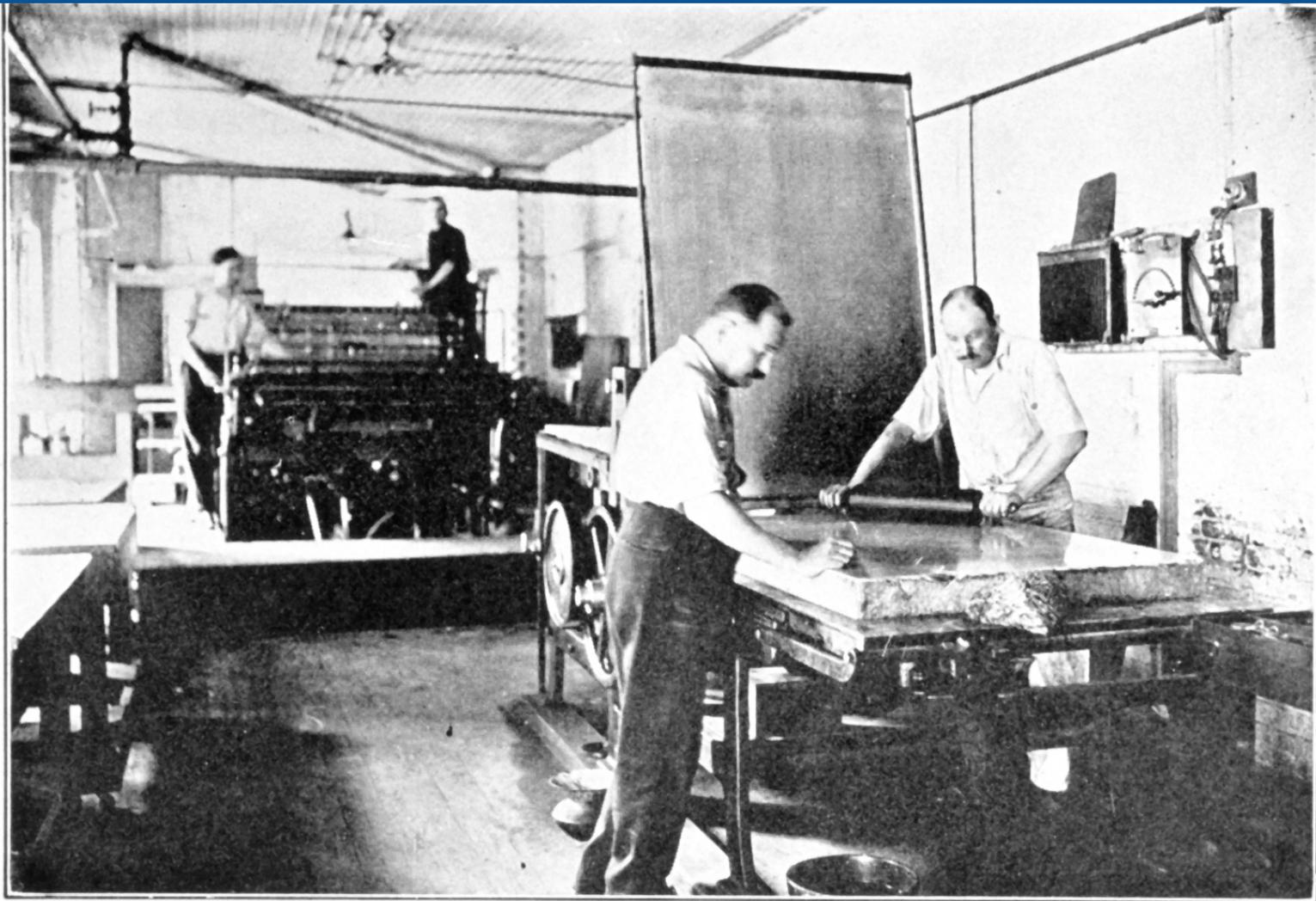
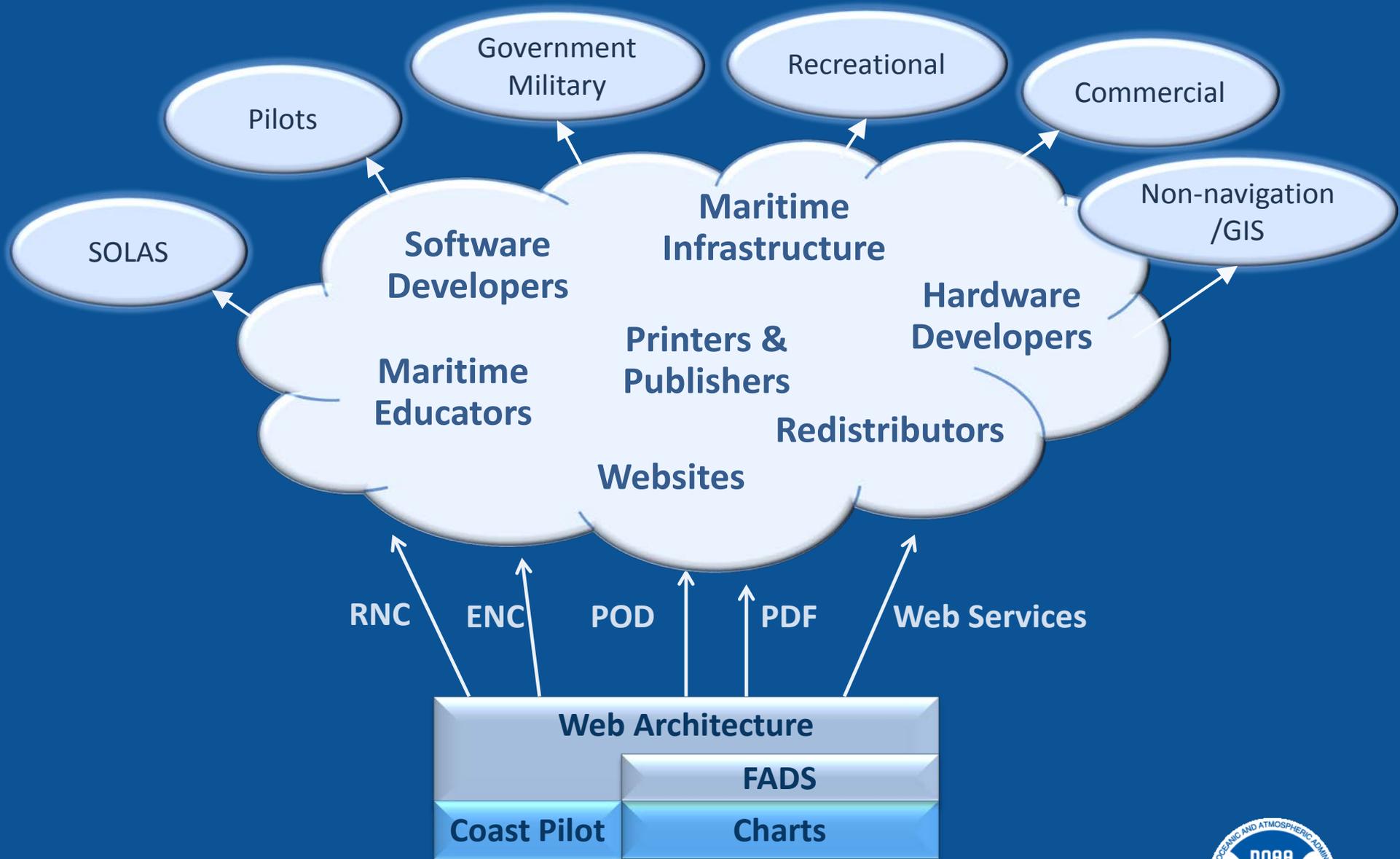


FIG. 31. LITHOGRAPHING PRESSES FOR PRINTING CHARTS; LITHOGRAPH STONE ON TRANSFER PRESS.

# Understanding the range of customer needs





# SOLAS

- ECDIS demonstration & conversation
- Working with industry groups
  - CLIA, PVA

WHAT ARE WE HEARING?

*NOAA ENC's are not well suited to ECDIS*

*NOAA ENC's need additional depth areas*

*NOAA ENC's have too many isolated dangers*

*ENC's not being updated as frequently as raster charts*

*Cruise line industry having difficulty getting NGA charts at certain ports of call*



# PILOTS

WHAT ARE WE HEARING?

*Difference between precise navigation in ports vs. coastal navigation*

*Portable pilot units do not use NOAA data to full potential*

*They need better decision support tools to manage risk*

*NOAA data is on different website, but not available in context of decision support systems*

- Navigation managers regularly interact with Harbor Safety committees; use ESRI Arc Collector to capture pilot requests
- Navigation response teams work with pilots on survey requests and emergency response
- Leadership meeting with pilots on site visits



# GOVERNMENT & MILITARY

*Military transition away from paper charts is years away*

*Defense Logistics Agency has taken over printing and distribution of NOAA charts for military and government use*

*NGA charts of foreign waters are being withdrawn. Those that are available are not being updated*

- Managers serve on Allied Maritime Sub Group
- Managers part of an advisory group to transition military to electronic navigation
- Navigation managers serve on incident response teams
- Coordinating with NGA, Navy, and U.S. Coast Guard



WHAT ARE WE HEARING?

# RECREATIONAL BOATERS

WHAT ARE WE HEARING?

*Mobile navigation apps are increasingly popular*

*Boaters want more tide and current info*

*ENC/ECDIS not popular with this community*

*Boaters who use charts often use chart kits*

*Desire on-screen charts for planning and reference*

*Almost unanimously favor keeping “magenta line” in Intracoastal Waterway charts*

- Customer satisfaction surveys
- Attending rec association meetings, boat shows
- MOAs with U.S. Power Squadron and Coast Guard Auxiliary
- “Listening” thru ActiveCaptain navigation hazard reports
- Federal Register request for comments



# LIGHT COMMERCIAL VESSELS

- Customer satisfaction surveys
- One-on-one meetings
- Conferences

WHAT ARE WE HEARING?

*Requirement to carry paper charts and publications is outmoded – they are all electronic in practice*

*Hand-correcting charts and publications is onerous*



# NON-NAVIGATION

WHAT ARE WE HEARING?

*Shifting to web mapping services*

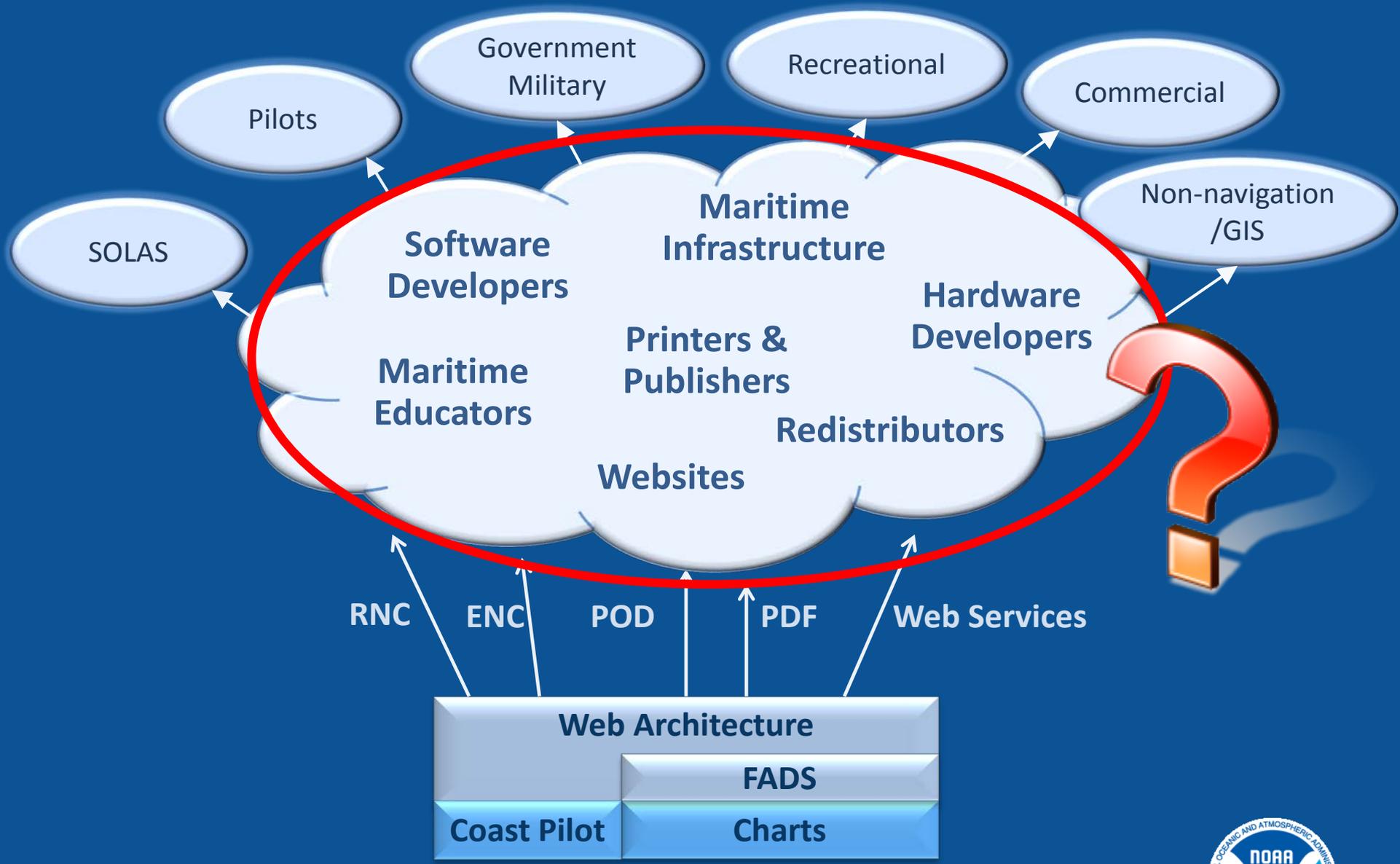
*Interested in more bathymetry – including digital terrain models*

*“Charty” data is too nautical – need plain language*

*Recognizes NOAA ability to manage geographic info*

- Working with Reinsurance Association of America
- Working with American Institute of Marine Underwriters
- Participating heavily in Esri and other technology conferences





# NOAA Navigation INDUSTRY DAY



**NOAA is open for business...**  
and wants to meet with application and web developers,  
and equipment manufacturers, at the **Annapolis Boat Show**.

**October 10, 2014**  
8 am to 3 pm  
**Annapolis Yacht Club**

**Free NOAA data adds functionality to navigation systems and maritime apps.  
Meet NOAA experts to discuss how you can use NOAA data.**



## NAUTICAL CHARTS

NOAA charts are available for free, in both raster (BSB) and vector (ENC) formats. In response to the rapid change of web and mobile technology, NOAA will release its entire suite of nautical charts in pre-quitiled tile sets for online use. They will also be available in regional geo-packages for use in disconnected applications. Like all NOAA charts, the tile sets will be updated with new information every week.

## TIDES AND CURRENTS

Many applications use NOAA's tide and current predictions and observations at specific stations, but NOAA makes continuous models of tides and currents in all coastal areas – not just at pre-determined stations. These models are three-day predictions of tides and currents, updated every six hours. The data is free. NOAA is developing new methods of distributing these models for public use.



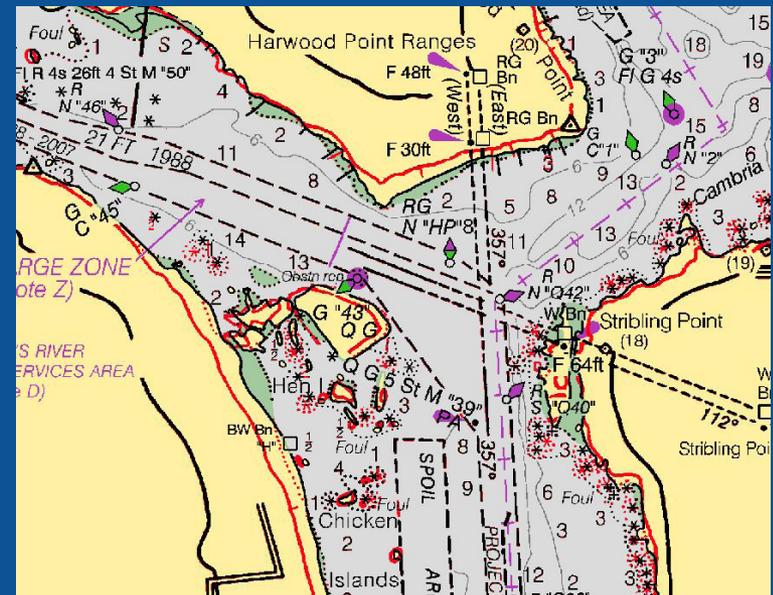
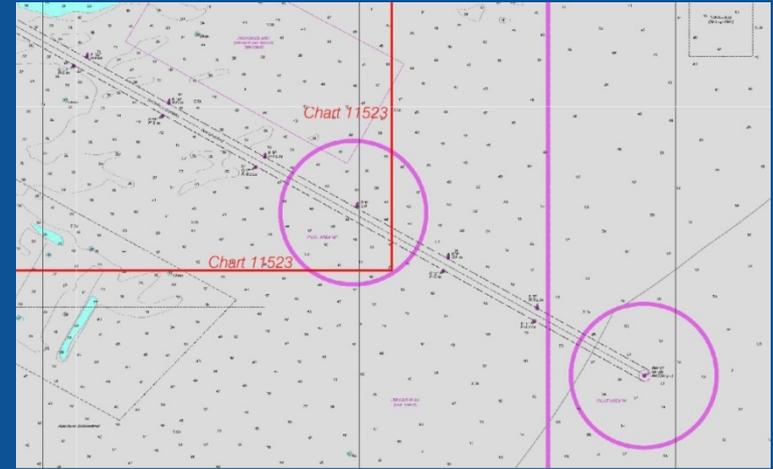
## WEATHER

## OFFSHORE CURRENTS



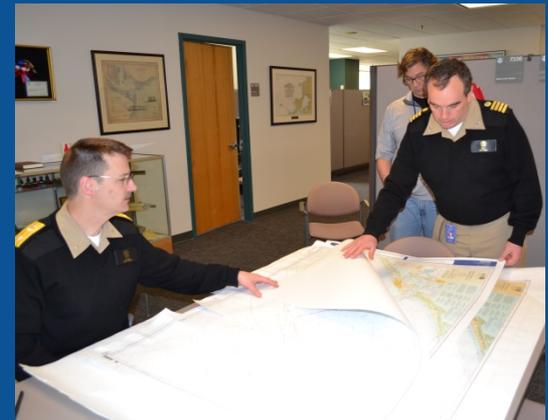
# TRADITIONAL SERVICE

- New Charleston chart 11528
- New chart 14887 for St Mary's River, Great Lakes
- Recapitalizing NRTs to better support operations under U.S. Coast Guard direction



# “LIGHT” DIGITAL TECHNOLOGY

- Easier access to free chart products
  - PDFs
  - BookletCharts
- Seeking U.S. Coast Guard approval, so digital *U.S. Coast Pilot* can meet carriage requirements
- Successful transition from lithographic printing to “print on demand”
  - Certified 15 POD partners in less than a year



# TRULY REVOLUTIONARY PROGRESS

## NOW AVAILABLE

- ENC viewer
- Quicker chart updates, continuous process

## IN PROCESS

- Making NOAA datasets compatible with web services and other distribution mechanisms
  - New online wrecks database

## FUTURE PRODUCTS

- LA/Long Beach overlays
- Tile services
- Working with PPU manufacturers to improve data delivery to mariners

Changing the  
organizational  
paradigm:  
**“ENCs First”**

# Econometrica analysis

What is our  
value to the  
Nation?

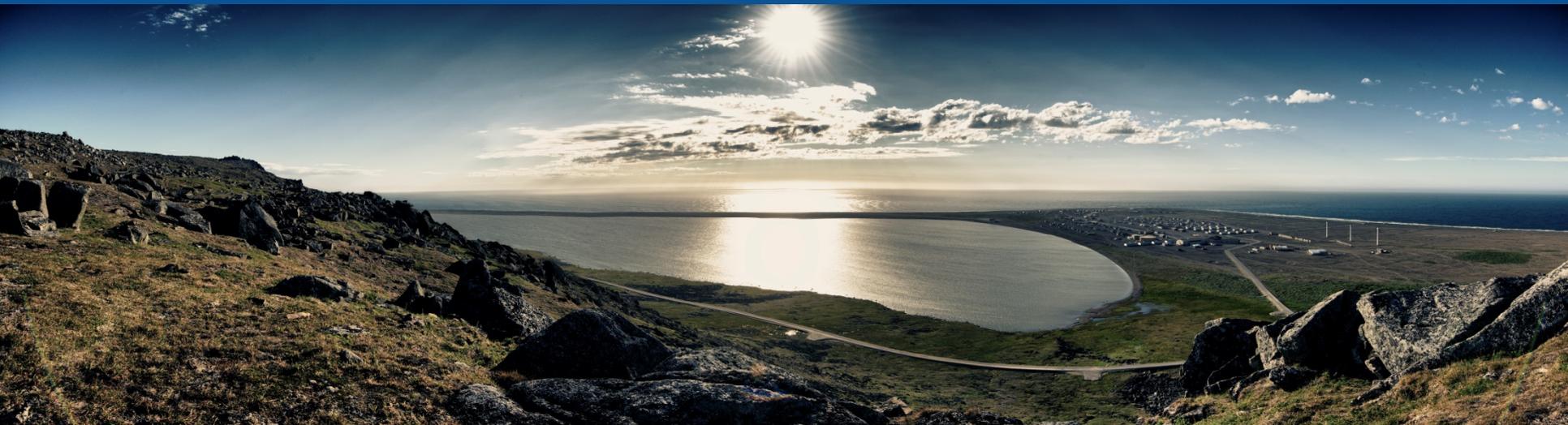


What:

- Socio-economic study to quantify the economic benefits of Coast Survey's products and services

Timeframe:

- One-year contract
- Awarded September 2, 2014
- Final deliverable, September 1, 2015



Office of Coast Survey

