



# 2009 CHART USERS SURVEY

The National Ocean Service (NOAA) is responsible for producing and distributing the nautical charting products covering the coastal waterways of the United States. The information from this survey will be used to better identify the users of NOAA nautical products, to determine the most efficient and economical way to fulfill the mission of NOAA.

**THIS QUESTIONNAIRE IS EASY TO COMPLETE AND WILL ONLY TAKE 15 MINUTES OF YOUR TIME.  
YOUR HELP IN THIS SURVEY IS APPRECIATED.**

**Q.1. Which products and services of NOAA are you aware of? CHECK ALL THAT APPLY**

- Paper Charts  1(9)
- Electronic Navigational Charts (ENC)  2
- Raster Nautical Charts  3
- Print on Demand  4
- Nautical Chart Users Guide  5
- Co-operative Charting  6
- Pocket Charts  7
- Historical Charts  8
- Coast Pilot  9
- Coastal Map and Vector Shoreline  0
- ENC Direct  X
- National Survey Plan  Y
- Bathy/Topo/Shoreline  1(10)
- Now COAST  2
- Tides and Currents  3
- Physical Oceanographic Real Time System (PORTS)  4
- On-line catalog  5
- On-line notice to mariners Chart update  6
- On-line Chart viewer  7
- V-Datum  8
- None of these  9

**Q.2. And which of these activities and services of NOAA have you bought and/or used in the last 12 months?  
CHECK ALL THAT APPLY**

- Paper Charts  1(11)
- Electronic Navigational Charts (ENC)  2
- Raster Nautical Charts  3
- Print on Demand  4
- Nautical Chart Users Guide  5
- Co-operative Charting  6
- Pocket Charts  7
- Historical Charts  8
- Coast Pilot  9
- Coastal Map and Vector Shoreline  0
- ENC Direct  X
- National Survey Plan  Y
- Bathy/Topo/Shoreline  1(12)
- Now COAST  2
- Tides and Currents  3
- Physical Oceanographic Real Time System (PORTS)
- On-line catalog  5
- On-line notice to mariners Chart update  6
- On-line Chart viewer  7
- V-Datum  8
- None of these  9

**Q.3 How satisfied are you with the services provided by NOAA? CHECK ONE ONLY**

- Very satisfied  1(13)
- Satisfied  2
- Neither satisfied nor Unsatisfied  3
- Unsatisfied  4
- Very unsatisfied  5

**Q.4. How likely is it that you would recommend a NOAA chart to another mariner to use? CHECK ONE ONLY**

- Very likely  6(13)
- Likely  7
- Neither likely nor unlikely  8
- Unlikely  9
- Very unlikely  0

**Q.5. Have you had any of the following contact with NOAA in the last 12 months? CHECK ALL THAT APPLY**

- Bought a product from a NOAA sales agent in the US  1(14)
- Bought a product from a NOAA sales agent outside the US  2
- Called/emailed NOAA customer services for information  3
- Called NOAA distribution service for information  4
- Placed an order from an online catalog  5
- Received a visit from a NOAA Navigation Manager  6
- Called NOAA Business Offices for information  7
- Downloaded an ENC  8
- Visited the NOAA Website  9
- None of these  0

**Q.6 How did you find out about NOAA products and services? CHECK ALL THAT APPLY**

- Recommendation from another mariner  1(15)
- Via a NOAA mailing  2
- Via the NOAA Website  3
- Via a Chart Agent  4
- From NOAA advertising  5
- From a Trade Show  6
- From Professional Training  7

**Q.7. Please look at each of the NOAA services listed below and rate each for how satisfied you have been with the services provided? CHECK ONE FOR EACH**

	Very Satisfied	Satisfied	Neither Satisfied Nor Unsatisfied	Unsatisfied	Very Unsatisfied	No Opinion	
Quality of products	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	(16)
Quality of services	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	(17)
Timeliness of response to requests	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	(18)
Cost of the products	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	(19)
Helpfulness of NOAA staff who dealt with you prior and/or after sale	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	(20)
Knowledge of the staff in dealing with your needs	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	(21)
Clarity and accuracy of responses from NOAA staff to your questions	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	(22)
Ease in reaching correct NOAA office to deal with your request	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	(23)
The format of the NOAA data received	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	(24)
The description of NOAA products and data in Catalogs and the Website	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	(26)
Overall satisfaction with the services provided	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	(27)
Overall satisfaction compared with products and services obtained from a Commercial publisher	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	(28)
Overall satisfaction compared with products and services from other US Federal Government Agencies	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	(29)
Overall satisfaction compared with products and services from foreign chart publishers	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	(30)

**Q.8.** Some of NOAA's users have made suggestions to us in this research as to how NOAA can improve its products and services in the future. Looking at the statements below please indicate for each whether you agree or disagree.  
**CHECK ONE FOR EACH SERVICE USING THE GRID BELOW**

	Strongly Agree	Agree	Neither Agree nor Disagree	Disagree	Strongly Disagree	No Opinion
NOAA's products and services have improved over the last 3 years	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/> (31)
NOAA should carry out more surveys in Ports and Harbors	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/> (32)
NOAA should carry out more surveys in near coast waters	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/> (33)
NOAA should carry out more surveys along US coastlines	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/> (34)
NOAA should carry out more surveys of sailing routes along US coastlines	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/> (35)
NOAA Should produce all charts in metric	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/> (36)
I tend to buy Charts published by Commercial Publishers for additional use for navigation	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/> (37)
I tend to feel secure using NOAA products and services	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/> (38)
I tend to feel secure using Charts published by Commercial Publishers	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/> (39)
There should be a increase in chart editions	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/> (40)
There should be an increase in ENC coverage	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/> (41)

**Q.9** Which of the following are closest to your experience regards Electronic Navigational Charts (ENCs)?  
**CHECK ALL THAT APPLY**

- They are better than paper charts  1 (42)
- The additional information makes them more difficult to use  2
- The additional information makes them more useful  3
- I would pay for the Electronic Navigational Charts and updates  4
- I prefer to get the Electronic Navigational Charts for free online without service included  5
- I need to learn more about how to use Electronic Navigational Charts  7
- ENCs have more information if you click on features  8

**Q.10** Do you supplement NOAA Charts (paper or electronic) with commercially published Charts?

- Yes always  1 (43)
- Yes sometimes  2
- No not at all  3

**IF YOU CHECKED 'YES ALWAYS OR SOMETIMES' AT Q.10 GO TO Q.11. IF YOU CHECKED 'NO' AT Q.10 GO TO Q.12**

**Q.11** What are your reasons for purchasing non NOAA published charts – that is Charts published by other Governments and Commercial publishers? **CHECK ALL THAT APPLY**

- The content/information on the chart  1 (44)
- The price of the chart  2
- The chart coverage area  3
- The chart publisher  4
- The suite of charts available from the publisher  5
- The size of the chart  6
- The way the material is presented on the chart  7
- I prefer the chart I was trained on at maritime school/chart class  8
- The most up to date chart  9
- A book of Charts is more value for money  0
- The Chart is readily available  Y

**Q.12** Which of the following NOAA charts do you prefer? **CHECK ONE ONLY**

- NOAA paper charts  1 (45)
- NOAA raster nautical charts  2
- NOAA print on demand charts  3
- NOAA electronic navigational charts (ENC)  4

**Q.13** Have you ever downloaded a Nautical Chart from the NOAA Website?

- Yes  1 (46)
- No  2
- Cannot remember  3

**Q.14** Would you say that you are sailing more, the same or less **in US waters** than you were....  
1 year ago, 3 years ago and 5 years ago? **CHECK ONE FOR EACH YEAR**

- |                 | <b>More</b>              | <b>Less</b>              | <b>Same</b>                       |
|-----------------|--------------------------|--------------------------|-----------------------------------|
| One year ago    | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> 1-3 (47) |
| Three years ago | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> 4-7      |
| Five years ago  | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> 8-0      |

**Q.15** Would you say that you are sailing more, the same or less **in International waters** than you were....  
1 year ago, 3 years ago and 5 years ago? **CHECK ONE FOR EACH YEAR**

- |                 | <b>More</b>              | <b>Less</b>              | <b>Same</b>                       |
|-----------------|--------------------------|--------------------------|-----------------------------------|
| One year ago    | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> 1-3 (48) |
| Three years ago | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> 4-7      |
| Five years ago  | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> 8-0      |

**Q.16** Which of these would you prefer for Nautical publication (Coast Pilot) information?

- In an ECDIS environment that is integrated with Chart Content, including all ECDIS functionality  1(49)
- As a digital stand alone application  2
- As a paper book format  3
- On line or print on demand  4

**Q.17** Below there are some statements which Chart users have made about their use of Charts. Please answer each one by indicating whether you agree or disagree by using the grid.

	<b>Strongly Agree</b>	<b>Agree</b>	<b>Neither Agree nor Disagree</b>	<b>Disagree</b>	<b>Strongly Disagree</b>	<b>No Opinion</b>
The current economic climate means that I am making less trips than last year	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/> (50)
The current economic climate means that I will sail less in future, but still buy as many Charts as last year	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/> (51)
The current economic climate means that I will sail less and also buy fewer Charts than last year	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/> (52)
I find it difficult to buy paper NOAA Charts in the waters I sail in	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/> (53)
I find it difficult to buy paper NOAA Charts when I am sailing in non-US waters	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/> (54)
In the last 12 months I have not changed the routes/or places I sail to, so it has been sufficient for me to update the Charts I bought last year/two years ago	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/> (55)
I would buy paper Charts direct from NOAA if I got a better discount as other publishers' Charts are cheaper	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/> (56)
I tend to rely on an electronic chart and paper chart updates, rather than buying new paper Charts	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/> (57)
I tend to update my paper Charts until they are difficult to read and then I buy a new paper Chart	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/> (58)
As a result of the current economic climate I am more likely to download a Free Chart from the NOAA or another website	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/> (59)
I am buying fewer paper Charts than in the past as I now download free Charts on-line.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/> (60)

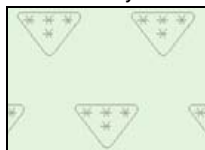
**Q.18.** How long have you been a professional, commercial or recreational mariner?  
**CHECK ONE AS APPROPRIATE YEARS**

	<b>Professional</b>	<b>Commercial</b>	<b>Recreational</b>	
Less than 2 years	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	1 - 3(61)
2 to 5 years	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	4 - 6
6 to 10 years	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	7 - 9
11 to 15 years	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	0 - Y
16 to 20 years	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	1 - 3(62)
21 to 25 years	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	4 - 6
Over 25 years	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	7 - 9

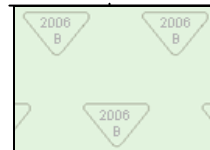
**Q.19.** If Hydrographic survey quality areas could be portrayed with the Starred Symbol (as shown in A) or the Year of the survey and the Zone of Confidence level (CATZOC) (as shown in B). Which of these would you prefer?

- A Starred Symbol  1(63)
- B Year and CATZOC  2
- C No opinion  3

**A: Starred Symbol**



**B: Year and CATZOC**



**Q.20.** There are two types of ECDIS Buoy symbology– Traditional as in A and Simplified as in B. Which do you prefer?

- A Traditional  1(64)
- B Simplified  2
- C No opinion  3

**A: Traditional**



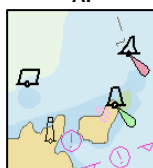
**B: Simplified**



**Q.20a)** Which ECDIS color palette do you prefer to use to navigate at night?

- A  1 (65)
- B  2
- C  3

**A:**



**B:**



**C:**



**Q.20b)** How often do you navigate at night?

- Regularly  1(66)
- Sometimes  2
- Never  3

THE FOLLOWING TWO QUESTIONS RELATE TO THE USE OF PAPER AND RASTER CHARTS.

**Q.21** Looking at the Charts in A and B, A is Major roads with landmark buildings and B is Street networks with landmark buildings. Which do you prefer?

- A Major roads with landmark buildings  1(67)
- B Street networks with landmark buildings  2
- C No opinion  3

**A: Major roads with landmark buildings**



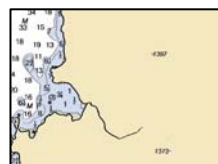
**B: Street networks with landmark buildings**



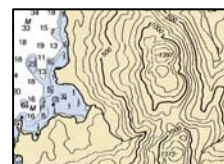
**Q.22** Looking at the Charts shown in A and B, A is Spot elevations without topographic contours and B is Spot elevations with topographic contours. Which do you prefer?

- A: Spot elevations without topographic contours  1(68)
- B: Spot elevations with topographic contours  2
- C: No preference  3

**A: Spot Elevations Without Contours**



**B: Spot Elevations With Contours**



**Q.22a** Why do you prefer topographic contours on a nautical chart?

- Used for visual location 1(69)
- Used for predicting winds 2
- Used for going ashore 3
- Contours are an indicator of overall chart quality 4
- Charts without contours look incomplete 5
- Radar ranging 6
- Visually appealing 7

**Q.23** What is your primary use of NOAA products or services? **CHECK ONE ONLY**

- Commercial Navigation 1(70)
- Recreational Navigation 2
- Scientific Research 3
- Educational studies 4
- Reference/Library use 5
- Legal use 6
- General information 7

**Q.24** Which type of vessel do you operate, work on or sail? **CHECK ONE ONLY**

- Powerboat (Recreational) 1(71)
- Sail Boat (Recreational) 2
- Fishing Boat 3
- Container Ship 4
- General Cargo Ship 5
- Tanker 6
- Bulk Carrier 7
- Passenger Vessel (Ferry or Cruise ship) 8
- Tug Boat 9
- Crewboat /Workboat 0
- Naval or Coast Guard Vessel X
- Not applicable to my use of Charts Y

**Q.25** What type of Recreational Boat do you own?

- Cruiser 1(72)
- Fishing 2
- Runabout 3
- PWC 4
- Houseboat 5
- Trawler 6
- Sail 9
- Do not own 0

**Q.26** What is your prime use for a Recreational Boat?

- Cruising 1(73)
- Racing 2
- Fishing 3
- Skiing 4
- Scuba 5
- Entertaining 6
- Personal use and charter 7
- Other (Write in) 8

**Q.27** When did you purchase your Recreational Boat?

- Within the last year 1(74)
- Within the last five years 2
- Within the last 10 years 3
- More than 10 years ago 4

**Q.28** Please indicate if you belong to any of the following organizations:

- USPS  1(75)
- USCG Auxiliary  2
- US Sailing  3
- B.A.S.S  4
- Local Yacht club/Fishing Club  5
- Other Boating Fishing organization  6
- Master and Mates Union  7
- BoatUS

**Q.29** Where do you primarily Boat?

- Atlantic Ocean Bays and Tributaries  1(76)
- Pacific Ocean Bays and Tributaries  2
- Florida  3
- Gulf of Mexico  4
- Chesapeake Bay and Tributaries  5
- Puget Sound  6
- Great Lakes  7
- Inland Freshwater Rivers and Lakes  8
- Canada  9
- The Bahamas  0
- Mexico  X
- Pacific Ocean  Y
- Alaska  1 (77)
- Other international waters
- Other (Write in)

**Q.29** Please indicate in which age group you fall:

- Under 25  1(78)
- 25-29  2
- 30-39  3
- 40-49  4
- 50-59  5
- 60 – 69  6
- 70 or above  7

**THE FOLLOWING INFORMATION IS REQUESTED BUT NOT REQUIRED. IT WILL HELP US IN CONDUCTING OUR STATISTICAL ANALYSIS.**

Your name:.....  
 Your Job Title:.....  
 Your Organisation:.....  
 Your Address:.....  
 .....

Tel: ( )                      Fax:( ) -  
 E-Mail:.....

Are you interested in taking part in future research completed by NOAA?

- Yes  1 (79)
- No  2

Are you interested in receiving a Summary of the Research?

- Yes  1
- No  2

Space to (80)



**THANK YOU FOR GIVING US THIS INFORMATION IN THE SURVEY**

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