

U.S. Coast Guard Auxiliary, First District, Northern Region

NAVIGATION SYSTEMS

NOVEMBER, 2015

NEWSLETTER





Calling All Volunteers!

That sound you hear is
opportunity knocking...

Listed below are Auxiliary activities that are perfect for Auxiliarists just like you. Take a look. You might find something you've always wanted to do ... and [Navigation Systems](#) is offering that opportunity to you. But don't just think about it. Send us an e-mail or give us a call to find out more about these volunteer positions, and then make plans to join us.

Some of these activities can be accomplished as part of a Navigation Systems Team for those who like to work in the field and would like to volunteer. Some of our busiest volunteers have full or part-time jobs. Others are retirees looking to stay active during their retirement years. If you are boat crew qualified, Navigation Systems activities can spice up your underway experiences. Please contact us at FrankJLarkin@verizon.net to inquire.

PRIVATE AID PHOTOGRAPHER: Do you love to take pictures? If so, this is the project for you. You don't have to be AV Qualified to perform this task and there are approximately **1,150 PATONs** waiting to be photographed in the First District during 2016. After just about 20 minutes of training you can be ready to participate in this activity.

AID VERIFIER - AV: After completing a comprehensive training program, you will be able to perform highly accurate verifications and checks of private aids and bridge surveys throughout the First Northern District. You may want to join a Navigation Systems Team or act as an individual contributor. Whichever route you choose, you will become a skilled navigator and an important part of the support for the local Coast Guard Aid to Navigation Team (CGANT). There are approximately **2,500 private** aids in First Northern. One third of these aids are verified annually and many others checked. All reports are made on-line from your home on a personal computer. The 2016 AV Training Program schedule is attached to this Newsletter. Free Open CPN NOAA Charts are provided and all Coast Guard Nautical catalogs are free.

BRIDGE SURVEYOR: There are approximately **180 bridges** scattered throughout First Northern. As part of your AV Qualification, you will be trained to check the lighting and other safety equipment on these bridges. Our annual goal is to survey every bridge within the District. All survey observations are communicated to the Coast Guard Bridge Branch using on-line reports from your home computer. Bridge activity can be performed by land or by boat.

CHART UPDATER: Much of the corrections to the NOAA charts in First Northern originate from both the Auxiliary and the Power Squadron. In the remote areas, where recreational boaters operate, there are many opportunities for chart corrections. While most of the updates to aids to navigations are generated by the PATON System through the LNM –

Local Notice to Mariners, all of the charted objects are corrected through the Chart Updating Program by reporting on-line directly to NOAA. Activity in the Chart Updating program is generally performed by land.

NS: NS stands for Navigation Systems, and we could use your help in 2016. If you are detail oriented and like to work with GPS and Eco Sounders and prepare detailed and highly accurate reports, don't miss this volunteer opportunity.

NAVIGATION SYSTEMS



Navigation Systems Staff will kick off their 2016 training programs on Monday, January 11th at 20:00 on WebEX. Plan to join in to help expand your experience in the Navigation Systems programs. Here are the 2016 Training Schedules:

SESSION 1 – Monday, January 11, 2016 @ 2000 to 2200 hrs. – [AV TRAINING 1](#)

- Understanding the AV Qualification Process.
- A quick review of the AV/PQS.
- A quick review of the required District Specific Tasks.
- An introduction to Nautical Almanac.

SESSION 2 – Monday, January 25, 2016 @ 2000 to 2200 hrs. – [AV TRAINING 2](#)

- Nautical Almanacs recapped.
- Understanding the Federal Regulations for Private Aids to Navigation (PATONs).
- An Introduction to NOAA Nautical Charts.

SESSION 3 – Monday, February 8,, 2016 @ 2000 to 2200 hrs. – [AV TRAINING 3](#)

- Nautical Charts presentation recapped.
- A brief Introduction on the use of Open/CPN NOAA on-line charts.
- The Basic Aid to Navigation (ATON) Training presentation.

SESSION 4 – Monday, February 22, 2016 @ 2000 to 2200 hrs. – [AV TRAINING 4](#)

- Wrap up of a Basic ATON Specification Review.
- Private Aid to Navigation (PATON) Discrepancy Training.

SESSION 5 – Monday, March 7, 2016 @ 2000 to 2200 hrs. – [AV TRAINING 5](#)

- Discrepancy Training Recapped.
- How to Use the new PATON Run Sheet.
- Operational SOP for performing a scheduled tri-annual verification or check on a Private Aid.

SESSION 6 – Monday, March 24, 2016 @ 2000 to 2200 hrs. – [AV TRAINING 6](#)

- Using Open/CPN Charts for verifying and checking Private Aids.
- Using Open CPN Charts for Chart Updating projects.

SESSION 7 – Monday, April 4 , 2016 @ 2000 to 2200 hrs. – AV TRAINING 7

- Downloading Open/CPN NOAA Charts onto your personal computer.
- Updating your Open/CPN NOAA charts on your personal computer.

SESSION 8 – Monday, April 18, 2016 @ 2000 to 2200 hrs. – AV TRAINING 8

- Understanding bridge lighting and safety equipment specifications.
- Using the on-line Bridge Reporting System.

SESSION 9 – Monday, May 2, 2016 @ 2000 to 2200 hrs. - AV TRAINING 9

- How to prepare the required 7054 PATON Report on-line on the Harbormaster System.
- Understanding the PATON Program Screening Process.
- Review of the AV's Copy of the 7054 PATON Report.
- Review of the AV's Copy of the PATON Rejection Report.

SESSION 10 – Monday, May 16, 2016 @ 2000 to 2200 hrs. – CHART UPDATING TRAINING

- Discussion on the Chart Updating program.
- How to use the NOAA Reporting System to enter simple chart updates.

INSTRUCTIONS FOR LOGGING INTO SCHEDULED WEBEX TRAINING SESSIONS

- Go to the Navigation Systems Web Site @ WWW.USCGAAN.COM.
- Click on the **“WebEX Training”** web page button located at the left.
- Follow the instructions on the screen for logging into the scheduled WebEX training session.



SINCE THERE ARE OVER **1,150 PHOTOS STILL WAITING TO BE TAKEN,
HERE ARE A FEW TIPS FOR PHOTOGRAPHING PRIVATE AIDS.**

1. Use a camera with a low pixel rating. Cell phone cameras work fine for this purpose.
2. Focus in on the aid itself. *Avoid panoramic views.* Only a photo of the aid is important for the PATON record.
3. Take the photo so that the important characteristics of the aid are showing in the photo – the aid's number or lettering, retro material, lantern, shape, color, etc.
4. If possible, crop off any excess area from the photo so that only the aid is showing.
5. Submit the photo as a **JPG.file**.
6. Reference some identification when you save the file before forwarding to FrankJLarkin@verizon.net. Here are a few identification alternatives:

- a. If you are submitting photos from a specific waterway, indicate the name of the waterway and the number of the aid. i.e. "**10011726105 Muddy River 3**" or "**12553 Muddy River Junction BY MB**."
 - b. If the aid is part of a group of similar aids in an area, show the description and alpha-reference, i.e. "**Salem HBR NWB A**."
7. It is best if you download the photos to your PC as a JPG. File and name them as indicated above, and then, e-mail them to the DSO-NS at FrankJLarkin@Verizon.net. This provides a clear and easy platform for selecting the photos and for quickly adding them to the proper PATON Record. The DSO-NS will respond to your email to indicate that the PATON Records have been updated and will also report any photos that are rejected.
8. Aids that need photos can be identified by these methods:
- a. Check each **Patrol Run Sheet**. Request the latest copies from the DSO-NS. This will avoid duplicated photos.
 - b. Check whether a photo is showing on the "**One Page Verification Report**" for the PATON.
 - c. Or, on the **Standard PATON listing**, click on the icon that appears in the "Description field" to view whether there is a photo on the PATON's record. Some aids show a "**Need a Photo**" message. Don't assume there is a photo just because an icon appears on this listing. Note that the lack of an icon in the PATON's Description field does indicate that the photo is missing.

**YOU DON'T HAVE TO BE AV QUALIFIED TO TAKE AND SUBMIT PHOTOS.
PREPARE A LIST OF AIDS THAT NEED PHOTOS FOR YOUR OPS PEOPLE.**

- You may take a **Mission 31- PATON credit** for each photo that you submit using the **AUXDATA 7030 Activity Report – Individual**. Send your 7030 report to your SO-IS for processing.

WARNING – WARNING – WARNING – WARNING

CAVEATS FOR ATTACHING DISCREPANCY PHOTOS TO YOUR 7054 PATON REPORT

When you attach an **over-sized photo** to your 7054 PATON Report, it impacts the PATON's record so that it becomes unreadable. Currently, the D1 PATON Screener's only recourse is to **reject** your 7054 PATON Report back to you for resubmission without the photo or with a cropped photo. If your intention is to supply a photo to update the PATON's record, please e-mail them directly to your DSO-NS.

**DID YOU
KNOW???**

MARINER RADIO ACTIVATED SOUND SIGNAL (MRASS)

The U.S. Coast Guard is making a change to the listed Aids to Navigation (in alphabetical order):

Browns Head Light (LLNR 3965)
Burnt Island Light (LLNR 5520)
Cape Elizabeth Light (LLNR 60)
Dog Island Light DI (LLNR 930)
Egg Rock Light (LLNR 1865)
Fort Point Light (LLNR 3585)
Goat Island Light (LLNR 105)
Goose Rocks Light (LLNR 3885)
Heron Neck Light (LLNR 3760)
Marshall Point Light (LLNR 4780)

Owls Head Light (LLNR 4105)
Portland Head Light (LLNR 7565)
Sequin Light (LLNR 35)
Spring Point Ledge Light (LLNR 7610)
Two Bush Island Light (LLNR 4540)
West Quoddy Head Light (LLNR 1040)
Whitehead Light (LLNR 4580)

Marine Radio Activated Sound Signal (MRASS) implementation:

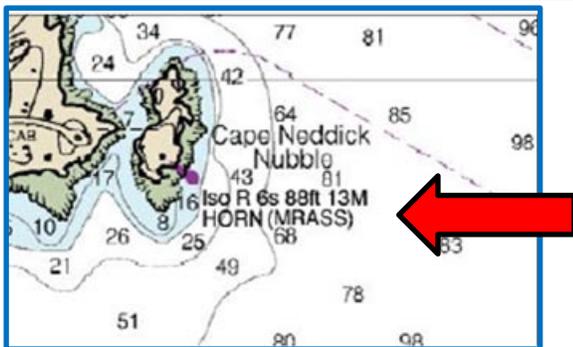
The Captain of the Port, Northern New England will complete the transition from automatically activated sound signals to “marine radio activated” sound signals. Eight sound signals in Maine and New Hampshire have already been converted to MRASS since 2009.

Mariners requiring the use of sound signals during periods of reduced visibility will be able to activate them on demand. In order to turn them on, mariners are required to momentarily turn their VHF-FM radio to channel **83A** and key the send button 5 times consecutively to activate the fog signal for 60 minutes.

What is MRASS?

Marine Radio Activated Sound Signal (MRASS) enables mariners to activate the fog sound signal on a selected lighthouse by using their VHF-FM Marine Radio.

How MRASS capability appears on a nautical chart.



How MRASS capability appears in the Light List (LL).

Here is an example of the LL entry for Boston Light. Updates also appear in the LNM – Local Notice to Mariners when a lighthouse is converted to MRASS and becomes operational.

425 11340	Boston Light	42-19-40.855N 070-53-24.266W	Fl W 10s	102	27	On white conical tower. 89	Emergency light of reduced intensity when main light is extinguished. Two emergency lights may be visible from 336° to 001° and from 156° to 181°. HORN: 1 blast ev 30s (3s bl). Fog signal is radio activated, during times of reduced visibility, turn marine VHF-FM radio to channel 83A/157.175Mhz. Key microphone 5 times consecutively, to activate fog signal for 60 minutes.
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Why is the Coast Guard converting lighthouse fog signals to MRASS?

The existing VM-100 fog detection system is antiquated, prone to failure, and inefficient. Spare parts are also extremely limited and no longer being manufactured.

Will there be any changes in the light characteristics or sound signals at these lighthouses?

No. All light characteristics and sound signals will remain the same. The only change will be the way in which the sound signals will be activated.

Do any other lighthouses have MRASS installed currently?

Yes. Many lighthouses across the country have MEASS installed including the entire Great Lakes region, portions of the west coast, and New England, including Boston Light. Eight light houses in Maine and New Hampshire already have MRASS installed.



● **AV TRAINING IS STARTING UP IN EARLY JANUARY THIS YEAR ON WEBEX.**

This training will run through May, 2016. Pass the word. Dates and times are shown above.

● **NAVIGATION SYSTEMS WILL NOT BE PRESENTING AT THE JANUARY D-TRAIN IN QUINCY / BRAINTREE, MA.**

However, we plan to have a kiosk where you can get Open/CPN charts updated or added to your PCs. You will also have an opportunity to check out the **GARMINmaps 78s GPS sets**. Knowledgeable senior AVs will be available to answer any of your questions about our PATON, ATON, Bridge and Chart Updating programs.

● **NAVIGATION SYSTEMS PLANS TO PRESENT AT THE APRIL D-TRAIN IN NEWPORT, RI.**

Plan to attend a "Navigation Systems Tune Up Program" where the 2016 Goals and Objectives will be explained along with a brush-up program on how to perform verifications, checks, surveys and report chart updates. The use of the new Patrol Run sheets will also be presented. This program will get you ready for another active Navigation Systems experience in the field next summer. This program will also be offered during June on WebEX.

● **THE DEADLINE FOR SUBMITTING YOUR NAVIGATION SYSTEMS 2015 ACTIVITY TO AUXDATA IS DECEMBER 31ST.**

Please submit your PATON, ATON and BRIDGE activity to AUXDATA this year. Your AV Qualifications and Currency depend on these reports. Use the on-line 7030 AUXDATA Activity report – Individual to submit your information. Click on Navigation Systems Missions. Use Mission 30 for Federal Aid Reports, use Mission 31 for PATON Reports and use Mission 32 for Bridge Reports. It only takes a minute.

Attention All Navigation Systems Staff Officers!

Currently, we are reviewing the 2015 PATON Run Sheets and updating them for use in the field during the 2016 season. In the process, we are correcting the following informational planning information for our AVs:

- Your 2015 report results are being updated on each aid, such as, verification results in 2015, check results in 2015, positions updates by DPW-1, description corrections by DPW 1, and special PATON activity needed for 2016 field observations.
- Your 2016 Plan schedules for each private aid is being established, such as, tri-annual verification, aid rechecks required with the reason for the recheck, need for a PATON photo, etc.
- The need for PATON Owner information on identified "Unauthorized" aids. These aids are only being authorized to municipal authorities such as harbormasters. The Auxiliary and the Coast Guard need to share information and support in order to get the over 200 authorized corrected during 2016. A master list of pending "Unauthorized" aids will be sent to you later during the winter for your review and update. Start making a list of your known "unauthorized" aids now so you will be ready for this winter project. In the meantime, work on researching any missing owner information.
- Each PATON's current documentation is being checked to insure that the many position corrections that were made during 2015 have been updated to the Run Sheets. This will save our AVs much time in the field during the verification and checking process and provide a one-source information media for the AV.
- Each NS Staff officer will be asked to review their Run Sheets for their AOR to insure they are correct and to check that they understand all of the data for each aid. They will also be asked to insure that the aids are listed in the correct order so that the assigned AVs can transit the Run in the most efficient manner.
- NS Teams will be asked to plot new aids and update the plot for all corrected and uncharted PATONs on their Open/CPN Charts using the latest data from the Patrol Run Sheets. They can use this information directly from their PCs when on the patrol or can print out chartlets of the various areas on the Patrol Run so that they can readily identify the PATONs while on-scene.
- The DSO-NS will maintain the master copies of the Patrol Run Sheets in an updated condition.
- AVs will be required to use the latest Run Sheets for recording their observations in the field for each aid.
- AVs will be asked to return copies of the Run Sheets after each patrol to the DSO-NS so that they can be corrected and updated to insure that the proper reporting is performed on the Run in a timely manner.

THE 2016 HARBORMASTER RIDE PROGRAM

During 2015, we tested out a new NS Program named "*Harbormaster Ride*" where we worked with the local harbormasters to correct their private aids. At many locations, major PATON corrections were accomplished. In 2016, we plan to expand the program to selected areas on Cape Cod, Buzzards Bay, and the south shores and north shores of Massachusetts. A good example was Kingston Harbor where, on a run with the Kingston Harbormaster, we were able to verify all of the private aids using the new Patrol Run Sheet to record the observations of their 25 private aids in less than one hour. Follow up activity involved correcting the positions on all of the aids by DPW 1 and the publication of the completed Run sheet to the local SO-NS and to the Harbormaster who then submitted PATON Applications for the unauthorized aids that were identified while on the Run. In one short hour, the whole of Kingston Bay was completed for the year, very early in the season when the position corrections are most beneficial for use by the local mariners.

Division 7 ran a similar project that was more complicated where 49 aids were repositioned and renamed in Great Salt Pond on Block Island. Currently, Division 7 AVs are helping the Harbormaster with the submission of Paton Applications for the 10 unauthorized aids that were identified through this project. More later!



My personal thanks go out to all of the Aid Verifiers in the First District who helped us achieve our 2015 Navigation Systems goals for the Coast Guard. In the immortal words of Winston Churchill, “Never has so few, did so much, for so many.” I would only add, “Again this year.” It is a genuine pleasure working with such loyal shipmates each year. Bravo Zulu!

Well Done!



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Please pass copies of this newsletter on to other members of the Auxiliary and the Coast Guard who you feel would be interested in the Navigation Systems programs.