

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

NAVIGATION SYSTEMS - 2017

June Happenings

Accuracy

The PATON Season Begins!

The “Quinn Sea” Navigation Systems Team is already back at work in Narragansett Bay surveying the lights on a bridge near Battleship Cove on their Wednesday night PATON and Bridge Patrols.



The **annual Aid Verifier (AV) training** was completed in May for the 2017 PATON and Bridge Season. This year was very successful and potentially productive with Aid Verifier Candidates from Divisions 3, 5, 6, 7, 9, 10 and Burlington VT. These candidates only need to take a check off ride to obtain their AV qualifications. We welcomed many attendees from First Southern this year. Also, there were many current AVs participating who were brushing up their Navigation Systems Skills.

The AV Training program format was tweaked this year by changing the focus to the final objective of submitting the CG7054 PATON Report and, then, covering all of the different topics and tools that are needed to complete the report. We also spread the training sessions from February through May to allow the AVCs to better internalize the many details that were presented. We also recorded all of the sessions and made them available so that AVC who missed a session could easily catch up. All of the training sessions are still on the Navigation Systems Web Site at www.uscgaan.com so that any AV can log on and refresh his knowledge of the various training sessions including ADSO-NS Mike Quinn’s sessions on the proper use of a GPS and how to download the free NOAA Charts to a PC. In effect, any AV can now check out the training throughout the year. Especially recommend is the reviewing Session 5 that deals with activities required when in the field.

2017 NAVIGATION SYSTEMS STATUS BY AUX DIVISION AS OF 6/1/2017

PATROL RUNS BY DIVISION	Total PATONS	VERIFY PLAN	CHECK PLAN	PHOTOS NEEDED	BRIDGE PLAN	UNAUTH AIDS	TOTAL ASSIGNED TASKS	
PRIORITY		ONE	TWO	THREE	FOUR	FIVE		COMMENTS FOR MAY, 2017
Division 1	196	42	42	91	8	89	272	Program is coming together. ADSO-NS Plunkett has a workable plan. Fred Herman has attended the Aid Verifier training sessions this spring and is becoming active this year. I see the start of a Navigation System Team in Division one. MAY ACTIVITY - Completed 101 or 37.1% on their assigned tasks to date.
ANT SWH	Completed	15	7	12	8	59	101	
SNENE	Qty to go	27	35	79	0	30	171	
	% Completed	35.7%	16.7%	13.2%	100.0%	66.3%	37.1%	
Division 2	243	98	42	106	44	3	308	Initial checks are in the works. Fixed DBNs in Mill Cove have been corrected. ADSO-NS Thornton has a doable plan. MAY ACTIVITY - Bill Thorntob is planning a PATON Patrol for Sunday, June 3rd. Jim Katz is planning a patrol in the Saco River in mid June.
ANT S PORT	Completed	0	1	0	0	0	1	
SNENE	Qty to go	98	41	106	44	3	307	
	% Completed	0.0%	2.4%	0.0%	0.0%	0.0%	0.3%	
Division 3	130	98	98	92	9	10	220	New Navigation Systems Team is being formed with newly trained AVCs. Much HMRAP event are being scheduled in this Division. AV support looks good for the future support of Navigation Systems in this Division. MAY ACTIVITY - We have four potential AVCs who completed their AV training and who need to become AV Qualified and plan to assist this Division in 2017.
ANT BOS	Completed	0	0	0	0	0	0	
SBOS	Qty to go	98	98	92	9	10	220	
	% Completed	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	
Division 4	87	66	1	44	9	5	129	Division 5 is planning to handle Saugus, Marblehead and Salem. We are looking for an experienced or trained AV to handle HMRAP events with the Beverly and Danvers Harbormasters. MAY ACTIVITY - William Bell from Div 9 has just completed AV Training and plans to become qualified with Mike Quinn in Narragansett Bay. Bill is a candidate for taking the HMRAP Runs on the Danvers and Bevely Harbors and the Annisquam River in Division 4.
ANT BOS	Completed	0	0	0	0	0	0	
SBOS	Qty to go	66	1	44	9	5	129	
	% Completed	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	
Division 5	90	24	2	3	42	16	87	Division is well supported. New AVs becoming qualified. Division 5 also supports Divisions 4 and 12. Active NS Staff in this Division. MAY ACTIVITY - Head start with the Boston Area Bridges by Todd Isherwood. He is also planning to do the Logan Airport aids in a week. Completed 33 or 37.9% of their assigned tasks in their home Division to date. Patrols planned for June 2 and 5th.
ANT BOS	Completed	0	0	0	33	0	33	
SBOS	Qty to go	24	2	3	9	16	54	
	% Completed	0.0%	0.0%	0.0%	78.6%	0.0%	37.9%	
Division 6	177	87	25	69	5	6	192	This is a one NS Team Division that will handle the 2017 NS assignments. Would like to see a second NS Team formed as backup. MAY ACTIVITY - John Stevens . A new AVC will be qualified for activity with the Wareham NM this year. John will also support the Kingston and Duxbury HMRAP programs in 2017. The Frank Mackinnon NS Team is working on the Westport River area.
ANT WH	Completed	0	4	0	0	0	4	
SSENE	Qty to go	87	21	69	5	6	188	
	% Completed	0.0%	16.0%	0.0%	0.0%	0.0%	2.1%	
Division 7	445	142	50	115	16	17	340	Well supported by multiple NS Teams and supporting AVs. Good top NS leadership. Will complete their assignments and more this year. MAY ACTIVITY - Mike Quinn's NS Team has conducted two Patrols in May surveying 5 bridges, and verifying and checking 20 PATONS. Division 7 has completed 8% of their 2017 assigned tasks to date.
ANT BRIS	Completed	17	3	2	5	0	27	
SSENE	Qty to go	125	47	113	11	17	313	
	% Completed	12.0%	0.7%	1.7%	31.3%	0.0%	7.9%	
Division 9	0	0	0	0	14	0	14	Possibility that there are no AVs in the Division to handle the 14 bridges. MAY ACTIVITY - One Bridge reported by owner. AVC William Bell has completed training as an AV and will be checked out by Mike Quinn in Narragansett Bay. Bill has agreed to assist Divisions 9 and 4 in 2017.
ANT BOS	Completed	0	0	0	1	0	1	
SBOS	Qty to go	0	0	0	13	0	13	
	% Completed	0.0%	0.0%	0.0%	7.1%	0.0%	0.0%	
Division11	913	397	76	424	16	4	914	Plan is coming together. Many new HMRAP assignments planned in 2017. Some of the Recheck assignments have been completed. Good NS Staff in this Division. MAY ACTIVITY - A Kick OFF meeting with the NS Staff Officers is planned at the DIRAUX Office on Cape Cod for Tuesday, June 6 at 11:00 AM. H. Cutts is working with the Chatham Harbormaster as the HMRAP representative for 2017.
ANT WH	Completed	1	16	4	0	0	21	
SSENE	Qty to go	396	60	420	16	4	893	
	% Completed	0.3%	21.1%	0.9%	0.0%	0.0%	2.3%	
Division12	168	74	21	69	7	13	184	Disappointed with the response from Division 12. MAY ACTIVITY The Division 5 NS Team is planning to handle Quincy, Braintree, Hingham and Weymouth. They will also make a run to New Inlet in Marshfield and Scituate to work with the Harbormasters on the three rivers. John Stevens, of Div 6 and a new AVC, will handle the HMRAP with Kingston and Duxbury HMs.
ANT BOS	Completed	0	1	1	0	1	3	
SBOS	Qty to go	74	20	68	7	12	181	
	% Completed	0.0%	0.6%	0.6%	0.0%	7.7%	4.3%	
TOTAL	2,449	1,028	285	1,013	171	163	2,660	
	Completed to Date	33	32	19	47	60	191	
	Quantity to Go	995	253	994	124	103	2469	
	% Completed	3.2%	11.2%	1.9%	27.5%	36.8%	7.2%	

Lot's of work ahead but we are off to a good start based on the weather and other delays.

An **NS SNIPPET**: **Auxiliarists who are not AV Qualified can assist with the 2017 Navigation Systems program.** There are **994 photos** to take and report in order to get the private aids records completed. Ask the DSO-NS for a list of aids in your area that need to be photographed. Take the photos with any low pixel camera, identify the private aid, and e-mail them to the DSO-NS at FrankJLarkin@verizon.net. You can take credit in AUXDATA as a private aid task for each photo that you submit.

A STANDARD ACCURACY STATEMENT IS NEEDED ON EVERY REPORT

A “**Standard Accuracy Statement**” is required for every **CG 7054 PATON Report** that reports position data. The Color Coding below reflects the frequency when specific data has to be updated on the Accuracy Statement. Use of this standard format provides uniformity of reporting and makes it easier for the private aid reviewer, the owner and the CG ANT to quickly review this supporting data or evidence of the accuracy of an AV’s activity. It is virtually impossible to be familiar with the capabilities of every GPS on the market. Yet, every CG 7054 PATON Report that is submitted by an AV must be certified to be 100% accurate by the First District PATON Report Screener before it can be submitted to the Coast Guard and the owner of the private aid.

YELLOW BACKGROUND – Indicates a **one time listing of the measuring equipment** used to take the fixes and depths. These entries list the marine-grade equipment that is used – GPS and Echo Sounder. These entries normally don’t change unless you change OPFACs.

GREEN BACKGROUND Indicates a **one time entry per patrol of the required pre-underway checks** that show how accurate the measuring equipment was operating just prior to the start of the patrol. This is a standard activity required for all Coast Guard vessels before getting underway. These entries usually don’t change for the duration of the patrol

BLUE BACKGROUND – Indicates the **quality control readings** that were recorded while on-scene at the private aid, as evidence of the operating accuracy of the measuring instruments in use. These entries often change for each individual report. The EPE reading is included in the CG 7054 PATON Report itself.

STANDARD ACCURACY REPORT

Copy and paste this statement onto your PC’s desktop. Then, copy and paste this statement into the “Accuracy Statement” field on each CG 7054 PATON Report. Make any needed changes on the report.

- 1. GPS** - A **GARMINmaps78s** GPS with **WAAS enabled**, **operating in 3D** was used. Pre-underway accuracy **was checked at the dock against another GPS set.**
- 2. ECHOSOUNDER** - A **Garmin441S** echo sounder was used to take the depth. Pre-underway accuracy **was checked at the dock by calculating depth at datum.** The Substation was **Newburyport on Boston.**
- 3. DISTANCE OFF** - The fix and depth were taken approximately **10.0 feet** from the GPS’

The data that AVs observe and report are used to update Federal records. In order to use this data, AVs must assure that the equipment that we use to take measurements is marine-grade or capable to take the needed positions and depths. And, AVs are required to provide evidence that they were operating at a high level of accuracy when any reported measurements were taken and reported.

A GPS set is operating at its most accurate capability when WAAS (Wide Area Augmentation System) **is enabled; when the GPS set is operating in 3D** (reading 4 or more satellites overhead); **and when the EPE (Estimated Probable Error) is 20 feet or less.** These are quality control readings that are provided from a marine-grade GPS as standard read-outs.

AVs must be trained to be aware of the other common GPS errors related to the location and orientation of the GPS's antenna and the proper exposure of the antenna to satellites.

Here are some various ways to pre-check your measuring equipment:

1. GPS sets can be checked for operational accuracy by:

- Placing two or more GPS set together, antenna to antenna, with the antennas in correct orientation. All sets should have the same Latitude and Longitude readings. Dissimilar sets may take longer to calculate the latitude and longitude. Be patient. Newer GPS sets will achieve accurate results must quicker than older sets.
- Check the GPS set against a known location such as the boat's slip or a fixed aid.

2. Echo Sounders can be checked for accuracy by:

- Calculating the Depth at Datum using the standard formula:
Echo Sounder Read Out
PLUS the correction for the location of the Transducer.
LESS the estimated HOT- Height of Tide.
Compare to the charted depth for the area.
- Compare the Echo Sounder read out plus the correction for the Transducer to a reading of the depth using a lead line.
- Compare the Echo Sounder read out plus the correction for the Transducer to a reading from a hand-held echo Sounder.

3. Distance Off is an important estimate for lateral floating and fixed floating private aids. Often a small distance from the GPS' antenna to the private aid can make the difference between reporting an aid as off station (OFF STA) versus reporting it as watching properly. Large distance-off reports for lateral aids are problematic and need further explanation. This is not true for regulatory aids which can never be positioned in a navigable channel and reflect local municipal laws and regulations. Distance off data is recorded on the RUN Sheet.

THE CORRECTION PROCESS FOR LATERAL PRIVATE AIDS – 2017

In order to insure that all Private Aids observed by AVs in the field with critical problems are corrected, these processes need to be followed in 2017.

AV Observations of Floating and Fixed Lateral Aids – Class I and II

Whenever a floating or fixed lateral private aid to navigation is observed with a critical discrepancy, AVs are responsible for alerting their affiliated CG ANT that manages the aid and for advising them of the problem by phone or e-mail. AVs will notate the date, time and person contacted on their CG-7054 PATON Report whenever the call was made. A list of critical discrepancies is included later in this document.

- ***The OFF STA Criterion for a floating Lateral Private aid is 50 feet.***
- ***The OFF STA Criterion of a Fixed Lateral Private aid is 25 feet.***
- ***AVs are requested to measure the distance from the Permitted POSN to their Observed POSN and report it in the "AV Observations" field on their CG-7054 PATON Reports.***

HMRAP Runs exception:

One of the primary objectives of the **HMRAP - Harbormaster Ride Along Program** is to resolve discrepancies and OFF STA issues with the Harbormaster while on-scene at the private aid. AVs will update the required fields on the RUN sheets for the area and forward it to the DSO-NS at the end of the RUN. After reviewing all of the private aids on the RUN, the DSO-NS will work with the CG ANT and DPW-1 to correct the POSN errors before submitting the CG-7054 PATON Reports on the Harbormaster System. The objective is to get all of the positions corrected so that the CG-7054 PATON Reports are submitted as **WP** - Watching Properly. This practice speeds up the correction process and minimizes any follow-up needed by the CG-ANT since the Harbormaster has already agreed to the change or correction during the HMRAP Run. Upon receipt of the CG-7054 PATON report that is screened and accepted by the D1 PATON Screener, the CG ANT should only need to file their reports at the ANT.

D1 PATON Screener:

The First District PATON Screener receives copies of every CG-7054 PATON Report on-line from the submitting AVs in the First District – Southern and Northern. The Screener’s objective is to insure that every CG-7054 PATON is 100% correct before it is accepted. The “**Standard Accuracy Statement**” that must be supplied on the CG-7054 PATON Report, contains the supporting evidence for the position and depth observations that are submitted. This is an important part of evaluating the accuracy of the AV’s position and depth at datum submissions as well as the use of proper marine-grade equipment.

Starting in 2017, the D1 PATON Screener will pay close attention to reports for **lateral** private aids to navigation – Class II PATONs – with critical discrepancies. If the AV has not noted that the CG ANT was notified, the D1 PATON Screener will immediately communicate the existence of the critical discrepancy to the CG ANT by phone or e-mail. Note that often there may be other issues on a CG 7074 PATON Report that could delay the report’s acceptance by the D1 PATON Screener. The objective is to insure that the CG ANT is alerted to critical discrepancy problems on **lateral** aids as soon as possible after the observation so that action can be taken to alert local mariners via the BNM and LNM and to get the permit, the Light List or the NOAA Charts properly corrected.

CG-ANT

Upon receipt of a notice that a **lateral** private aid (Class I or II) has a critical discrepancy, the CG ANT should take the necessary follow up steps to issue a BNM. At this point, the private aid owner may not yet have received a copy of the CG-7054 PATON Report. Or, the CG-7054 PATON Report may not have been processed by the observing AV or the report may be still pending in the D1 PATON Screener’s file on the Harbormaster System.

When the CG ANT receives the copy of the accepted CG-7054 PATON Report by the D1 PATON Screener, it will indicate the date and time when the CG ANT was notified by the AV or, if the AV fails to notify the CG ANT, by the D1 PATON Screener. The AV will also report any incidental communications with the aid owner after this point to minimize any duplication of effort or confusion. The CG ANT may request the AV to follow up with the owner regarding the reported critical discrepancy.

Generally, AVs will assume that the CG ANT is handling the follow up with the **lateral** private aid owner. Note that the private aid owner receives a copy of the CG-7054 PATON Report when it is accepted by the D1 PATON Screener. The exception will be private aids that are verified as part of the HMRAP program. In this situation,

copies of the updated Run Sheets used for the HMRAP RUN will be sent to the CG ANT and Sector to keep them informed. The aid owner was already alerted to the problem as part of the joint verification process at the aid

DSO-NS Annual Review of the RUN Sheets. (First Northern only)

At the end of the season, the DSO-NS reviews each RUN sheet in preparation of the Annual Verification Schedule for the following year. Lateral aids, that were reported with critical discrepancies and, that do not show that they have been corrected in the Harbormaster System, will be flagged for recheck during the following year. PATON owners will be notified to provide position data for these aids when they redeploy these aids. When corrections are still not received, AVs will be dispatched to recheck these aids. Aids flagged for recheck will be followed up with the owner by the assigned AV. It is hoped that the recheck follow up will be completed before the start of the boating season, if possible.

List of Critical Discrepancies on Lateral Aids.

- Aid is observed as off station.** (OFF STA) (See Criteria listed above)
- Aid is missing.** (MISS)
- Aid was adrift.** (Notify CG for instructions). (ADRIFT)
- Aid is sinking.** [Provide a photo] (SINKING)
- Aid is submerged.** [Provide a photo] (SUBMERGED)
- Aid strands at low water.** [Include Depth at Datum calculation and photo](STRANDING)
- All numbers are missing in a lateral aid.** [Provide a photo] (NO/NUM)
Partial numbers missing is a “Regular Maintenance Required” report.
- Light on a lighted lateral aid is extinguished.** (LT EXT)
- Improper Light Characteristics.**
- Light is obscured by a Dayboard.** [Provide a photo]
- Lantern is missing or damaged so it doesn’t operate properly.** [Provide a photo]
- Solar Panel on a lighted buoy is missing.**
- Battery pack is missing.**
- All Dayboards (DAYBD) on a fixed lateral aid are missing.**
- Improper Dayboards (DAYBD) per the private aid specification.**
- RACON (RACON) is off the air or missing.**
- Radio Beacon (RBN) is off the aid or is submitting the wrong signal per the private aid specification.**

HANDLING REGULATORY AIDS OBSERVED AS OFF STA - 2017

In order to insure that all Regulatory Aids observed by AVs in the field with position problems get corrected, these processes need to be followed in 2017.

AV Observations:

Regulatory private aids are not navigational aids but reflect local municipal regulations. Also, the vast majority of Regulatory buoys are not listed in the Light List and are not charted. Class II Regulatory aids that are listed in the Light List and are charted will be treated as lateral aids as explained below.

- ***The OFF STA Criterion for a Class III Regulatory aid is 500 feet.***
- ***Class II Regulatory aids that are listed in the Light List and/or are charted will be treated as a lateral fixed and floating aids that have an OFF STA Criteria of 50 feet.***

AVs will only report these aids when they are scheduled for verification on a tri-annual basis. When regulatory aids are observed as more than 500 feet OFF STA (between scheduled Tri-Annual patrols), AVs will submit a formal CG-7054 PATON Report reporting the discrepancy.

First District PATON Screener:

During the screening process, the D1 PATON Screener will make the position corrections for all regulatory aids that are observed and reported as over 500 feet off-station on the Harbormaster System. The CG-7054 PATON Report will be submitted and accepted for these discrepancies to alert the owner of the corrected position in the regulatory aid's permit and to provide a digital record of the change for the CG ANT file.

The D1 PATON Screener will notify DPW 1 in Boston of the position correction so that I-ATONIS is corrected using the "**Private Aid I-ATONIS Update Report.**" A special report has been designed for this purpose.

This procedure will be followed for both First Northern and Southern CG-7054 PATON Reports.

The PATON Owner

The PATON Owner is notified of the POSN corrections by their copy of the accepted CG-7054 PATON Report that they receive when the PATON Screener accepts the report.

The CG ANT

The CG ANT is notified of the change when they receive their copy of the accepted CG-7054 PATON Report from the D1 PATON Screener. The aid will be reported as "**WP**" (Watching Properly) when an OFF STA position is the only discrepancy observed. In this case, no follow up with the PATON owner is required and the report can be just filed.

List of Critical Discrepancies for Regulatory Aids.

- Aid is observed at more than 500 feet off station. (OFF STA)**
Corrected by the D1 PATON Screener who advises DPW 1 of change.
- Aid is deployed within a navigable channel.**

NAVIGATION TEAM CONTACT INFORMATION FOR FIRST NORTHERN

This is the list of contacts of the AVs in charge of the Auxiliary Divisions along with the contacts and phone numbers for Navigation Systems Staff Officer, Sector CG Personnel and CG ANT Personnel.

	Name	Home Phone	Cell Phone	E-Mail Address
FIRST DISTRICT				
DPW 1	Steve Pothier	617-223-8347	617-823-3947	Steven.R.Pothier@uscg.mil
SECTOR NORTHERN NEW ENGLAND				
Sector NNE	Robert Nichols BOSN3	207-347-5026	207-860-0506	Robert.F.Nichols@uscg.mil
DSO-NS D1NR	Frank Larkin	978-263-3023	617-997-7423	FrankLarkin@verizon.net
D1 PATON Screener	Frank Larkin	978-263-3023	617-997-7423	FrankLarkin@verizon.net
AUX DIV 013-01	Northern Maine			
ANT SWH	BM2 Pat Kimmel	207-244-4282	N/A	Patrick.A.Kimmel@uscg.mil
ADSO-NS No Maine	Nancy Plunkett	207-230-1279	N/A	Ku4uo@qwi.net
AUX DIV 013-02	Southern Maine			
ANT SO PORT	BM3 Daniella Caruso	207-767-0392	207-664-9744	Daniella.M.Caruso@uscg.mil
ADSO-NS So. Maine	Bill Thornton	207-232-9279		Thornton@maine.edu
FSO-NS 02-01	Bill Thornton	207-232-9279		Thornton@maine.edu
FSO-NS 02-04	Jim Katz	207-283-4601	617-283-2203	Jim@KatzMeow.net
FSO-NS 02-05	Dave Powers	207-443-2315	207-373-8889	LowlyLinda@yahoo.com
FSO-NS 02-08	Dom Ciolino	603-859-0441	603-948-0634	Fireeng20001@Yahoo.com
	Name	Phone Numbers		E-Mail Address
AUX DIV 014-15	Burlington, VT			
ADSO-NS Burl	Mike Stevenson	518-726-0790		StephensonM@hotmail.com
SO-NS 014-15	Nick Flora	802-868-2643	802-238-9172	NFlora2myfairport.net
SECTOR BOSTON				
Sector BOS	Hasenstab Richard CWO	617-557-9083	216-372-9862	Richard.J.Hasenstab@uscg.mil
ANT BOS	Noorigian, Adam BMC	617-223-3293	857-262-3913	Adam.Noorigian@uscg.mil
AUX DIV 013-03	Newburyport and Merrimac, Parker, Ipswich, Essex and Annisquam Rivers.			
FC 03-08	Steve McCann	978-465-0035	571-699-5995	McCann.CGAUX@gmail.com
AUX-DIV 013-04	North Shore of Massachusetts			
ADSO-NS BOS	Frank Larkin	978-263-3023	617-997-7423	FrankLarkin@verizon.net
AUX-DIV 013-05	Boston Inner Harbor and Dorchester			
SO-NS 013-05	Tony Silvestri	781-326-0565	781-329-9080	TipTony@msn.com
AUX DIV 013-09	Connecticut River – Western MA			
ADSO-NS BOS	Frank Larkin	978-263-3023	617-997-7423	FrankLarkin@verizon.net
AUX DIV 013-12	South Shore of Massachusetts.			
ADSO-NS BOS	Frank Larkin	978-263-3023	617-997-7423	FrankLarkin@verizon.net

Division 10 is not listed this year. Their 2017 task is to form a Navigation Systems Team this summer. Sterling McClay will form the team. The goal is to schedule a minimum of two training patrols. Mile Quinn and Frank Larkin will be available to assist.

SECTOR SOUTHEAST NEW ENGLAND				
Sector SENE	BMCS Tim Chase	401-435-2356	774-392-5244	Timothy.W.Chase@uscg.mil
ANT WH	BM1 Justin Perry			Justin.M.Perry@uscg.mil
AUX DIV 013-06 Buzzards Bay AOR				
SO-NS-06	Frank MacKinnon	503-923-1184		Lazydaze4@verizon.net
AUX DIV 013-11 Cape Cod, MA				
SO-NS-11	Mike Sokasits	917-579-6040		MSokasits@aol.com
FSO-NS 11-01	Clint Cave	617-901-5651	508-398-4246	ClintonCave@yahoo.com
FSO-NS 11-02	Jeff Paul	508-681-8490	443-566-2169	jeffeilp@gmail.com
FSO-NS 11-07	Homer Ray III Nantucket	508-776-8876	508-228-1170	HRRefrigeration@comcast.net
FSO-NS 11-09	Tim Carroll Marthas Vineyard	508-645-3159	508-990-6396	TCarroll@vineyard.net
ANT BRISTOL	BMC Elijah Reynolds	401-253-9585		Elijah.B.Reynolds@uscg.mil
AUX DIV 013-07 -013-10 Narragansett Bay				
ADSO-NS	Mike Quinn	401-487-3668	401-737-5048	Michael.S.Quinn@gmail.com
SO-NS 10	Sterling McClay	508-245-2132	508-476-3118	Sterling.uscgaux@gmail.com

Please e-mail any corrections or errors that you may note to:

DSO-NS D1NR

Frank Larkin U.S. COAST GUARD AUXILIARY

H: 978-263-3023 C: 617-997-7423

FrankLarkin@verizon.net

Please copy this newsletter and keep it in your Navigation Kit for reference when you are working in the field this year. This information was covered during the AV Training Sessions this Spring. If you missed this training, you are recommended to log on to the Navigation Systems Web Site at www.uscgaan.com. The recorded training sessions are located on the web site. Click on Session 5 for the latest info about working in the field this year. Note that this is a 2 hour training session covering the important procedures for verifying and checking private aids.



Stay Safe

*Under the Privacy Act of 1974, all information in this newsletter may only be used for official purposes. Any other use is a violation of law. This newsletter was prepared and published by the First Northern Navigation Systems Team. Contact the editor at **FrankJLarkin@verizon.net**.*