



2011 PATON Program Status as of (9/10/2011)

Sector	Total Aids	Total Verified on system	Patrols Scheduled	Must be Verified	Estimated Percent Complete In 2011
Boston	497	214	113	70	65.8%
SENE	1,565	594	30	254	39.8%
Woods Hole	1,132*	435	30	213	41.1%
Bristol	433	159	0	41	36.7%
NENE	413	85	5	145	21.8%
Southwest Harbor	182	56	5	123	33.5%
South Portland	231	29	UNK	22	12.6%
TOTAL	2,475*	893	148	469	42.0%

*131 Wind Farm aids in Nantucket Sound not established or included in this report.

We've done it again. We have met the one-third verification goal but have not been able to verify all of the private aids that have never been verified or have not been verified since before 2010. However, our efforts are focused on this issue for the balance of the season.

Many pending non-permitted aids have been activated while at the same time more have been discovered and reported. We also have deleted many aids that were detected as missing after receiving information from the owners and AVs. We plan to be more specific with our instructions to the AVs on these aids in 2012. Note that the 2011 statistics do not include these numbers. Once aids are deleted from the system, I have no way to capture these data.

We had a late start this year due to weather and, also, have had many OPFAC drop outs and some illness of a few key people. And, the recent weather has been a problem. Boat problems have also been a problem this year especially for our more active AVs. My

sincere thanks go out to those AVs who pulled their OPFACs for the hurricane and put them back after the storm.

We also have to thank the dedicated pilots of AUXAIR for their work on the offshore aids. We have been able to confirm the existence of many aids and have been able to delete a quantity of aids that have actually been pulled by their owners. After receiving missing reports, e-mails to the owners confirmed the discontinuance of these aids. AUXAIR is giving Navigation Systems an incredible new tool for handling off shore aids.

The DSO-NS 013 is working with DPW 1 and is reviewing every verification report submitted throughout the First District (Northern and Southern) and is sending "Heads Up" messages to the ANTs and AVs when problems are noted. Many PATON record updates and corrections are being accomplished this year.

If you are sitting on verification reports that have not been submitted, please get your reports transmitted as soon as possible. Old reports are most often not usable. However, let us make this decision

[Overall, the AVs have done a great job in 2011.](#) Unfortunately, most of the work has been done by a few of the old AV standbys which make up a small percentage of the total AVs in First Northern. We will be looking into this problem over the winter.

[Below is an overview of the performance of the various AORs.](#)

BOSTON: Boston had set a goal of 100% and has achieved **65.8%** of it. We still have patrols in various areas this weekend. Unfortunately, Division 3 did not respond and we still have three rivers that have not been reported which is disappointing. We are assigning a new enthusiastic AV to work on this problem. He has already scheduled Patrol on the rivers while working with the Operations members.

BRISTOL: Has achieved their one-third goal for 2011. The 41 aids that show as never verified are the non-permitted aids coming on line. They are still working on a batch of non-permitted aid in the AOR. A great job and teamwork happening in this AOR. There are 73 qualified AVs in this AOR, 19 or 26% have done all the work. We have one AV working at the ANT handling the discrepancy report follow up at the CG ANT and is doing a great job.

WOODS HOLE: Has achieved their one-third goal for 2011. They still have 213 PATONs on their list which have never been verified. We are having problems with the AV response from Division 6 and the Bay Side of Cape Cod. Both these areas are starting to respond and we have received many reports in the past week. They also have plans for more work in the coming week. We have one AV working at the ANT. Also, the Auxiliary provides First Notice E-mails service to ANT Woods Hole PATON owners regarding reported discrepancies. Verification reports are still coming in from this AOR.

SOUTHWEST HARBOR Looking at the numbers doesn't tell the whole story for this AOR. They have 81 private aids in the northern Maine area that is beyond this OPFAC capability. While they still met their 2011 goals, when you deduct the aids that they cannot reach, their numbers are **60.4%** verified in 2011. The SO-NS indicates that there season is pretty much over after Labor Day. However, they have at least one more

PATON Patrol planned this weekend. A winter project will try to deal with the 81 northern aquaculture aids that are currently beyond the existing limits of the local AVs,

SOUTH PORTLAND: The response has been light from this AOR in 2011. Many new reports have started to come in during the past week.

Plans for the 2012 season will be based on our 2011 experience.

1. We are planning to make specific PATON verification assignments to the AVs in 2012. Bristol did it this year and was very successful.
2. We want to get the **lateral aids** verified earlier in the season, weather permitting. These are the most important to the marine public and, if needed, we want them fixed and watching properly as soon as possible.
3. We need to resolve the northern Maine private aid problem. These aids are predominantly aquaculture with one main owner. We plan to work with the owners to, perhaps, submit verification reports on their aids. We also want to revisit the verification process with aircraft from AUXAIR.
4. We will be working with the system programmer on a copy of the AV Verification Report that will be sent to the PATON owners.
5. We have a new National AV PQS that needs to be introduced in 2012.
6. We plan to develop a **Navigation Systems Staff Officer Leadership Program** which we will promote and run at the **January Conference in 2012**. One of the keys to success with this program is to develop enthusiastic Navigation Systems leaders that:
 - a. Know the Navigation Systems programs – PATON, ATON, Bridges, Chart Updating and Small Craft Facility reporting.
 - b. Know what is expected of them organizationally. How do they get the job done?
 - c. Learn how to communicate and work with the CG ANTS.
 - d. Learn how to work with the aid owners and harbormasters.
 - e. Know how to organize, work with and motivate their AVs. This is the key to a successful program. **“NO”** is not allowed in the Navigation System vocabulary.

PATONS and Bridges that are deployed 24/7

Don't think that the PATON program is over in October. There are many aids that are established as Annual. These aids can be verified throughout the year. Look for aids designated as Annual as in the example below.

<u>SOUND SIGNAL TYPE:</u>	
ACTION REQUESTED:	Annual
AID DURATION:	Set: Pull:

Bridges can be surveyed all year round. However, some bridges should not be surveyed when the recreational boating traffic drops off during the winter. Plan to do these bridges the first thing in the Spring before the recreational boating traffic increases.

2011 Bridge Survey Results to Date

Division	Total	Verified	To Do	Need A Photo
1	9	1	8	0
2	47	14	33	13
3	13	1	12	0
4	13	0	13	3
5	41	11	30	2
6	12	0	12	0
7	16	16	0	0
9	15	0	15	2
11	21	0	21	11
12	7	0	7	0
194		43	151	36
		22.2%	77.8%	18.6%

There are still **151** bridges yet to be surveyed this year and **36** bridges that need to be photographed. There is still plenty of time to make a dent in these numbers. Check out your Division status above and download a list from the on-line Bridge System available at www.uscgaan.com. We need your help to get this job done. Only Division 7 has completed their 2011 assignment.

AV PQS Approved by National

National has issued an AV PQS recently. Any Auxiliarist who now wants to become AV Qualified must comply with this instruction as well as First District requirements focused on using the On-Line PATON System. There will be a full day Aid Verifier Qualification Workshop at the April District Workshop. E-Mail your ADSO-NS for a copy of the AV PQS and the D1 requirements. Use the information provided on the D1 NR Navigation Systems web site at www.uscgaan.com for self training and orientation on the bridge program requirements. Make a reservation for the April District Conference by e-mailing your ADSO-NS.

Checking the fix on a NOAA Chart



One of the most important tasks when verifying a private aid is plotting the fix on a NOAA chart before submitting your report. This photo shows a team of Division 12 AVs performing this task. The majority of discrepancies reported this year relate to aids observed off station. Many reports call the aid as watching properly when it is actually off station. Off station criteria was established this year.

Private Aid Off Station Criteria.

There are different off station criteria for the various types of private aids.

Fixed aids should be right on the position – no error. This means that you have to get up close to the aid. When, for safety reasons, you can't get close to an aid, always report your distance off the aid in feet. "Distance off" can be used in an off station calculation. Once a highly accurate position is established for a fixed aid, future verifications will be a lot easier since these aids don't move.

Floating Lateral Aids are allowed 50 feet from their permitted position. These are the aids that mark navigable channels. Extra diligence is required when taking fixes on this type of aid especially those that are seasonal—pulled and reset each year.

Floating Regulatory Aids are allowed 150 feet from their permitted position. These are not navigational aids. They support local ordinances. Sometimes owners move these aids around without reporting the position change to the Coast Guard.

There is serious focus on AV positioning reports this year. You may have already received questions about some of your reports – especially if you have reported an aid as watching properly and we calculate it as off station.

Use the **Vertical and Horizontal Error Calculator** to help determine the distance between the permitted and the your observed positions. Available at www.uscgaan.com.

RISK FACTOR LOW		AREA TYPE 3	PTE (Feet) 150	POSITION TOLERANCE ESTIMATE AID IS ON STATION		LOCATING METHOD USED GPS/WAAS	Rev F - Prepared by the First Northern Navigation Systems Team - 8-27-2011	
SECONDS to MINUTES		LATITUDE	00.000	LONGITUDE	00.000	Do not use this calculator in an unprotected mode. You can easily delete or change the various formulas.		
PERMITTED FIX (From)	Enter seconds:	01.380	Enter seconds:	35.200				
OBSERVED FIX (To)	Enter seconds:	02.500	Enter seconds:	34.890				
PERMITTED FIX (From)	Decimal Mins:	0.023	Decimal Mins:	0.587				
OBSERVED FIX (To)	Decimal Mins:	0.042	Decimal Mins:	0.582				
DISTANCE CALCULATOR		Latitude dd-mm.mmm	Longitude dd-mm.mmm	EPE (Ft) 6.8	DISTANCE OFF AID (Ft) 10.0	This is not the correction for wind or current.		
PERMITTED FIX (FROM)	40-58.023	72-23.587						
OBSERVED FIX (TO)	40-58.042	72.23.582						
Estimated Total Nautical Miles from the PERMITTED FIX:				0.019 nm	Total other corrections:	16.8	CALCULATE?	NOTE: Watch Circle calculation uses (c.) DEPTH
Estimated Total Feet from the PERMITTED FIX:				118 Feet	Est. Watch Circle Radius	22.2	yes	READING and (f.) CHAIN LENGTH data.
ESTIMATED TOTAL FEET FROM THE PERMITTED FIX, CORRECTED FOR EPE AND DISTANCE OFF THE AID:				101 Feet OFF STATION	AT	011 Degrees True	39.0	Aid is outside of Est. Watch Circle

Thanks to all for your support of the PATON and Bridge Programs.

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