United States Coast Guard Auxiliary
First Northern
Aid to Navigation Team

TRAINING CHECKLIST FOR THE AV - AID TO NAVIGATION VERIFIER

Version D1NR – 2010
Revised 3/19/2010

AVC Name _____

Auxiliary Member Number __ __ __ __ __ __ __ __

District/Division/Flotilla **0 1 3 -** __ __ **-** __ __

INTRODUCTION

1. The Auxiliary Aid to Navigation Verifier Training Guide has been designed to help Auxiliarists become AV-Aid Verifiers. Each section of this guide contains a listing of training tasks that allow Auxiliarists to demonstrate their proficiency in the skills needed to complete the AV mission.
2. This guide can function as the agenda for a workshop or may be used as a self-study tool.
3. If an AVC – Aid Verifier Candidate has difficulty finding qualified examiners, they are encouraged to contact:
    a. Their Flotilla NS Staff Officer - FSO-NS.
    b. Their local CG ANT-Aid to Navigation Team.
    c. Their Assistant District Staff Officer - ADSO-NS or District Staff Officer - DSO-NS.
4. The AVQ can be any qualified, current and active Aid Verifier that has been approved by the DSO-NS and is listed on the PATON Page of the Navigation Systems Web Site at www.uscgaan.com.
5. Check off each task as you complete it so you don't lose track of each training element.
6. When the final tasks are completed, the AVC will contact their AVQ who will validate the required PATON verifications and AUXdata entries and will notify their ADSO-NS.

7. AV Certification is complete only when endorsed by the District Director of Auxiliary and posted to the member's Auxiliary record.

List of assisting AVQ – Aid Verifier Qualifiers:

Each participating AVQ should be listed in this section.

Name of AVQ	CG ANT	Date.
_____	_____	_____
_____	_____	_____

1. PATON Policy Statement.

a. ____ Review the First District PATON Policy Statement available on the Navigation Systems Web Site at www.uscgaan.com.

2. Boat Crew Qualification.

a. ____Members pursuing AV qualification should be currently or formerly boat crew or coxswain qualified. If not, they must complete the following sections of the Boat Crew Qualification Guide:

i. ____BCM-02-08-AUX Type III PFD, Anti-Exposure Coverall Or Dry Suit Swim
ii. ____BCM-02-09-AUX Identify Boat Crew Survival Equipment
iii. ____BCM-02-10-AUX Use The Emergency Signaling Mirror
iv. ____BCM-02-11-AUX Describe The Use Of Hand Held Distress Flares
v. ____BCM-02-12-AUX Describe The Use Of Aerial Flares
vi. ____BCM-02-13-AUX Operate The Personal Marker Light (PML) or Strobe Light
vii. ____BCM-02-14-AUX State Survival Procedures In Event The Boat Capsizes Or Swamps
viii. ____BCM-06-01-AUX Identify The Basic Parts, Symbols And Abbreviations Found On A Nautical Chart
ix. ____BCM-06-02-AUX Identify Common Aids To Navigation Used In Small Boat Piloting
x. ____BCM-06-03-AUX Identify Local Landmarks Used In Piloting On A Nautical Chart
xi. ____BCM-06-04-AUX Plot A Position Using Latitude And Longitude
xii. ____BCM-06-05-AUX Plot A Magnetic Course On A Nautical Chart
xiii. ____BCM-06-06-AUX Measure Distance On A Nautical Chart
xiv. ____BCM-06-07-AUX Compute Time, Speed And Distance
xv. ____BCM-06-08-AUX Determine The Depth Of Water Using A Fathometer And/Or A Sounding Pole

3. Required Pre-workshop readings and downloads:

a. NOS Chart No. 1.

i. ____ Purchase or download a copy of the NOS Chart No.1 for your PATON Navigation Kit.
ii. ____ Browse through this publication and become familiar with the parts symbols and abbreviations used on NOAA nautical charts.

b. **NOAA Nautical Chart**.

i. ____ Acquire the latest NOAA nautical chart for the patrol area where you plan to verify PATONs.
ii. ____ Scan this chart and become familiar with the charted features in your AOR.

c. **NS-PN03-03 Chart Orientation**.

i. ____ Review this PowerPoint presentation on-line at www.uscgaan.com.

d. **NS-CU02 Chart Update Training Guide**.

i. ____ Read pages 2 thru 8.This guide is available at the Navigation Systems Web Site at www.uscgaan.com.

4. Other Navigational-related documents and publications.

a. **LNM – Local Notice to Mariners**.

i. ____ Sign up for the free weekly copy of ***LNM-Local Notice to Mariners*** on the First District Aid to Navigation Web Site. Access to this site is available at www.uscgaan.com.

ii. ____ Familiarize yourself with the section of the ***LNM*** where information regarding discrepancies and corrections to Private Aids to Navigation is presented n the LNM.

b. NS-PN03-04 More Documents

i. ____ Review this PowerPoint presentation on-line at www.uscgaan.com

c. U.S. Coast Pilot

i. ____ Download and read the pages of the local ***Coast Pilot*** edition that reflects the AOR where you normally operate and include these pages in your PATON Navigation Kit for on-scene reference.

d. Light List – Volume 1 – Atlantic Coast COMDTPUB P16502.1.

i. ____ Download and review the pages of the local ***Light List*** edition that reflects the AOR where you normally operate and include it in your PATON Navigation Kit. Links to the on-line Light List are available at www.uscgaan.com

ii. ____ Familiarize yourself with the pages of the ***Light List*** for the AOR where you normally operate. Understand that some Private Aids may not be listed in the Light List and, also, may or may not be charted on a NOAA chart.

iii. ____ Understand that changes in the Light List are directly related to the Coast Guard additions, deletions and updates to the Coast Guard's I-ATONIS System.

5. NS-AN02 Auxiliary Short Range Aids to Navigation Training Guide

a. ____ Download and read the NS-AN02 Auxiliary Short Range Aids to Navigation Training Guide.

b. ____ Include a copy in your PATON Navigation Kit for use as reference when on-scene.

6. 33 CFR, PART 66--Private Aids To Navigation

a. ____ Read the *33CFR, Part 66-Private Aids to Navigation* section in this training guide**.**

7. Preparing a manual NS-PN04 Aid to Navigation Report.

a. ____ Download and review the ***NS-PN04 Private Aid to Navigation Report*** on www.uscgaan.com. Enter your static data (data that normally doesn't change) on the form and save this form to your home computer.

8. Understanding the I-ALA Aid to Navigation System.

a. ____ Acquire, read and place a copy of the USCG Aids to Navigation System Booklet in your Navigation Kit for use as a reference document.

b. ____ Read pages 9 through 24 of the *NS-AN 02 Auxiliary Short Range Aid to Navigation Training Guide.*

9. Reviewing lights and lanterns used on Aids to Navigation.

a. ____ Read pages 25 and 26 of the NS-AN02 Auxiliary Short Range Aid to Navigation Training Guide.

b. ____ Review the PowerPoint Presentation, "*NS-PN03-07 Basic ATON System*" that is available on the NS Web Site at www.uscgaan.com.

c. ____ Simulate a lighted aid report by entering the information relating to the lighting system specified for the aid in *Section 5 – AID TO NAVIGATION Characteristics* on a *NS-PN04 Private Aid to Navigation Report.*

d. ____ Become aware that the guideline for checking the light characteristic and period of a light is performed by using a stop watch to time five successive period light cycles and by dividing the total time by five. This activity must be performed at night.

10. Understanding the sources of information about a Private Aid to Navigation.

a. ____ Understand that **not** all of the permitted PATONs are available from the downloaded pages of the local ***Light List*** or reflected on the NOAA chart of the area. Realize that all permitted PATONs are listed in the Web-Based PATON System.

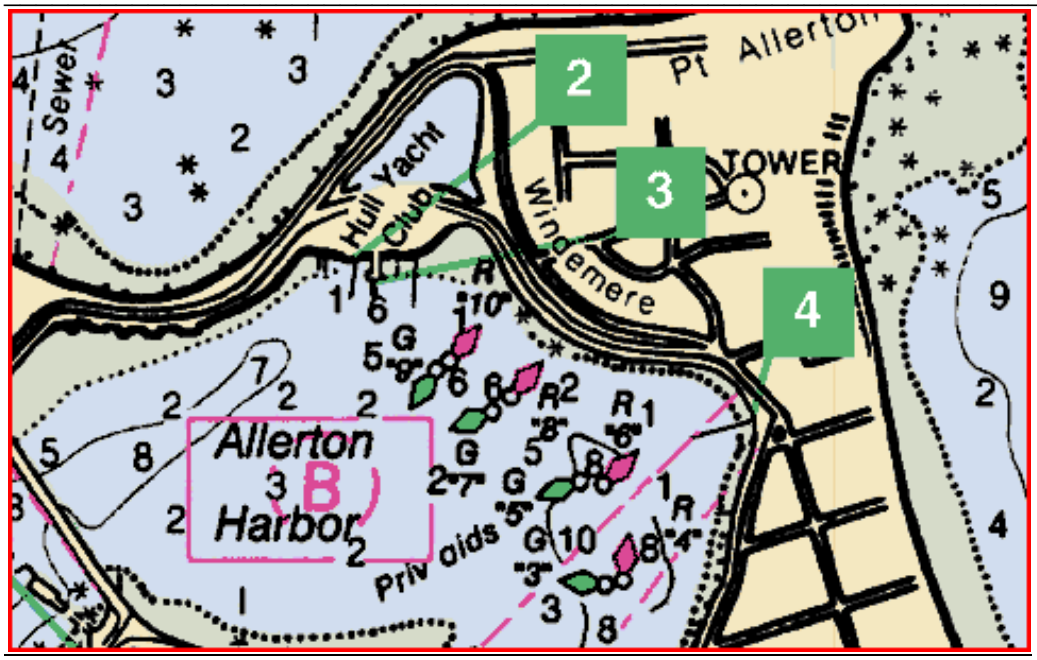
b. ____ Locate the Allerton Harbor Buoy No. 6 on the Light List and the NOAA Chart shown below.

Copy of Light List showing Allerton Harbor

Allerton Harbor
Aids maintained from May 15 to Sep. 30.

12125	- *Lighted Buoy 1*	42-17-56.400N 070-53-18.120W	Fl G 4s	Green.	Private aid.
12130	- *Lighted Buoy 2*	42-17-56.400N 070-53-17.160W	Fl R 4s	Red.	Private aid.
12135	- Buoy 3	42-18-06.900N 070-53-15.480W		Green can.	Private aid.
12140	- Buoy 4	42-18-07.140N 070-53-14.280W		Red nun.	Private aid.
12145	- Buoy 5	42-18-12.180N 070-53-17.280W		Green can.	Private aid.
12150	- Buoy 6	42-18-12.010N 070-53-15.600W		Red nun.	Private aid.
12151	- Buoy 7	42-18-15.720N 070-53-23.280W		Green can.	Private aid.
12152	- Buoy 8	42-18-16.500N 070-53-22.020W		Red nun.	Private aid.
12153	- Buoy 9	42-18-17.820N 070-53-27.120W		Green can.	Private aid.
12154	- Buoy 10	42-18-18.300N 070-53-26.220W		Red nun.	Private aid.

Chart of Allerton Harbor is available on page 5.



c. ____ Use the "*2554-Application PATON Edit Report*" below as a source of information about a PATON. You can click on the PATON Name to access this report when operating on-line.

d. ____ Prepare a *NS-PN04 Private Aid to Navigation Report* using the data from the 2554 Application PATON Edit Report above.

2554-Application
PATON Edit Record

LLNR:	**12130.00**
AID NUMBER	**125**
PATON NAME:	**ALLERTON HARBOR LIGHTED BUOY 2**
PATON TYPE:	☉ Floating ○ Fixed
OPFAC:	41949
UNIT_RESPONSIBILITY:	CG ANT BOSTON
FIRST_NAME:	KURT
LAST_NAME:	BORNHEIM
Your Organization:	HULL HARBORMASTER
PHONE:	781-925-0316
CLASS:	II
LATITUDE:	42-17-56.10 N
LONGITUDE:	070-53-17.80 W
Chain Length:	25 feet
Depth of water:	8.1 feet at Datum

Mooring Size:	200 lbs
Suggested Aid Name:	ALLERTON HARBOR LIGHTED BUOY 2
Aid Purpose:	Marks a channel
Light Period:	4s
Light Color:	RED
Light Characteristic	Fl - Flashing
Height of light:	
Aid Structure:	LB – Lighted Buoy
Action Requested:	Seasonal Establishment
Aid Duration:	5/15 to 9/30
Aid Necessity:	STARBOARD HAND LATERAL MARK
Aid General Locality:	ALLERTON HARBOR HULL MA
USACE:	

11. Becoming familiar with the typical conditions that can cause a PATON to be discrepant.

a. ____ Download a copy of the *NS-AN03 ATON Kit* and include it in your PATON Navigation Kit for future reference while on a patrol. This kit is available on the Navigation Systems Web Site at www.uscgaan.com.

b. ____ Understand that a private aid is discrepant when it does not conform to descriptions of the PATON described in ***I-ATONIS,*** in the ***Light List***, listed in the ***Web-Based PATON System*** and displayed on the NOAA chart.

c. **NS-PN03-09 PATON DISCREPANCY REVIEW**

i. ____ Review this PowerPoint presentation on-line at www.uscgaan.com.

ii. ____ Review the typical discrepancies found on a private aid and corrolate them to the discrepancy listings shown on a "*NS-PN04 Private Aid to Navigation Report.*"

12. Reporting Non-Permitted Aids to the Coast Guard.

a. ____ Understand the importance of providing clear data, the name and address of the owner, and a photo of the aid. Basically, nothing can happen to resolve this issue until the aid's owner applies for a permit to the DPW.

b. ____ Simulate and complete the additional information required for a non-permitted PATON report using the ***NS-PN02 Private Aid to Navigation Report***.

13. Guidelines for reporting the depth of water to a Federal Agency.

a. **Echo Sounder Set Up**:

i. ____ Read your echo sounder's operating manual to fully understand the operation of your unit. Echo sounders used to measure depth should have a digital reading for partial feet.

ii. ____ Understand how to set up an echo sounder in order to insure it is operating accurately before getting underway.

iii. ____ Understand how to determine the correct depth unit of measure by referencing the current *General Information Block* of NOAA Chart.

iv. ____ Pre-check that the correct depth unit of measure is set up in your echo sounder--feet, meters, or fathoms.

v. ____ Understand the correction required for the location of the echo sounder's transponder on an OPFAC's hull and how it was determined.

vi. ____ Understand how to use of depth alarms on an echo sounder.

vii. ____ Understand how to pre-calibrate your echo sounder before getting underway to insure that it is operating accurately and how to report this information.

b. <u>Compensating for Current and Wind.</u>

i. ___ Understand the effects on a floating aid from the influence of Set and Drift of the current, wind and other elements and the meaning of the term, "*Watch Circle*."

ii. ____ Understand that more accurate depth readings are possible by taking the reading up wind and/or up current from the aid.

c. <u>Correcting the depth of water for the height of tide.</u>

i. ____ Understand the concept of "Height of Tide at any time."

ii. ____ Understand how to use a GPS set to look up and state the tide predictions for a specific date and time.

iii. ____ Understand how to read a charted depth on a *NOAA Chart* and how it compares to the reading from an electronic echo sounder.

iv. ____ Understand that the depth reading from an echo sounder is corrected by adding the correction for the position of the echo sounder's transducer to the echo sounder's depth read out.

v. ____ Understand and actually correct the "***Substation***" reference on the Almanac screen of the GPS. Also, understand that Substations change as you transit from one area to another.

vi. ____ Understand how to correct a depth reading to charted datum by subtracting the *<u>HOT-Height of Tide</u>* taken from the Almanac screen on their GPS that is referenced to the correct "*Substation*."

d. **<u>On-scene precautions and processes</u>**:

i. ____Be aware that while taking soundings near any aid to navigation that the boat should never transit outside of the navigable channel at any time for any reason while verifying PATONs.

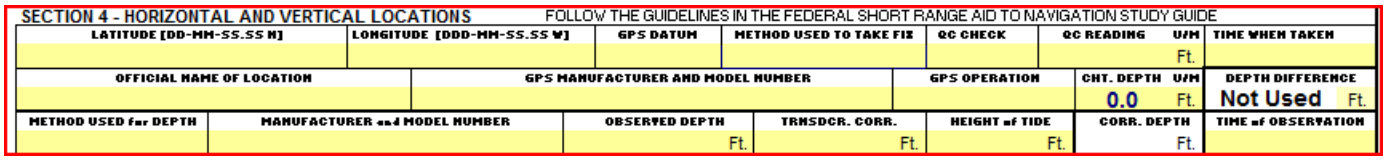
ii. ____ Understand that the boat should be maneuvered close aboard the private aid taking extra precautions that the aid could be positioned over shoals and/or obstructions. Depths, recorded from an electronic echo sounder, are always corrected for the position of the echo sounder's transducer.

iii. ____Be aware that special precautions must be taken near fixed aids to navigation due to the possibility of shoaling or obstructions near the aid's position. Understand the term "*riprap*" and how it should be handled when

positioning a private aid and how to recognize the symbols used to identify riprap on a nautical chart.

iv. ____Be aware that floating aids are anchored to the seabed with a harness and, often, will not be directly over the anchor due to wind and tide. Depths should be taken upwind and up current on these aids to insure a more accurate depth reading for the aid.

v. ____ Understand the importance of recording and reporting the exact time when each depth is taken.



SECTION 4 - HORIZONTAL AND VERTICAL LOCATIONS — FOLLOW THE GUIDELINES IN THE FEDERAL SHORT RANGE AID TO NAVIGATION STUDY GUIDE

LATITUDE [DD-MM-SS.SS N]	LONGITUDE [DDD-MM-SS.SS W]	GPS DATUM	METHOD USED TO TAKE FIX	QC CHECK	QC READING U/M	TIME WHEN TAKEN
					Ft.	

OFFICIAL NAME OF LOCATION	GPS MANUFACTURER AND MODEL NUMBER	GPS OPERATION	CHT. DEPTH U/M	DEPTH DIFFERENCE
			0.0 Ft.	Not Used Ft.

METHOD USED for DEPTH	MANUFACTURER and MODEL NUMBER	OBSERVED DEPTH	TRNSDCR. CORR.	HEIGHT of TIDE	CORR. DEPTH	TIME of OBSERVATION
		Ft.	Ft.	Ft.	Ft.	

14. Understanding the use of GPS.

a. **<u>Background Information</u>**:

i. ___ View the PowerPoint presentation "*<u>NS-PN03-11 GPS Orientation</u>*" available on the AV Training Page at www.uscgaan.com.

ii. ____Be aware that the accuracy of a WAAS reading is approximately 10 feet, 95% of the time. State that "*WAAS*" corrections are satellite generated in conjunction with ground stations and additional satellites.

b. **<u>GPS Set Ups</u>**

i. ____ **Horizontal Datum** - Be aware that only charts showing NAD83 or WGS84 datum may be used for verifying PATONs.

ii. ____ **Heading** – Understand that the term "Heading" is related to the type of Compass used on the vessel and that an analog compass generates magnetic headings that must be compensated and corrected for Deviation Error.

iii. ____ **Speed Unit of Measure** – Understand that while operating on the water, the Speed Unit of Measure in a GPS set must be set to Knots – Nautical Miles per Hour. Most sets come preset to MPH—Statute Miles.

iv. ____ **Deviation** – Understand that certain magnetic influences aboard an OPFAC can affect the direction of your compass and that a Deviation Table is necessary for accurate navigation.

v. ____ **Variation** – Understand that new GPS sets have automatic variation correction capability while older sets may have to be corrected manually. Variation can be obtained from the nearest compass rose on your chart.

vi. ____ **Date and Time –** Understand that most GPS sets obtain date and time data from the satellites which is more accurate that any watch or clock.

vii. ____ **Latitude and Longitude** – Understand that the Coast Guard uses *Deg—Min—Sec* readings and that GPS sets must be adjusted to reflect the Coast Guard standard.

c. **<u>GPS Alarms</u>** – Be aware of the following available alarms:

i. ____ **Waypoint Alarm** – Defines a pre-set diameter in miles that triggers an alarm whenever a boat penetrates the protective circle around the waypoint entered on a GPS Set.

ii. ____ **Off Course Alarm** – Establishes a XTE—Cross Track Error parameter in the GPS, creates this alarm which sounds whenever the boat crosses the error limit on either side of a track line.

iii. ____ **Anchor Alarm** – Indicates that an alarm is created by establishing a diameter (nautical miles) that triggers an alarm whenever a boat drifts outside the limits of the circumference.

d. Quality readouts:

i. ____ THREE DIMENSION POSITIONS – Understand that a three-dimension position is obtained by the GPS after acquiring data from *four* or more satellites and that a three-dimension fix must be attained at a minimum when locating (fixing) private aids. This condition must also be included on your PATON Report. 3D Differential fixes are highly desirable.

ii. ____ HDOP – Dilution of Position Error – Understand that this statistic is a measure of the accuracy of the geometry of the satellites in relation to your position on the earth's surface. Lower readings indicate possible lower accuracy. If DGPS is being used, review the HDOP scale in the GPS' Operating Manual and express the accuracy of the current satellites position readings being generated by the GPS set – Optional. This condition must also be included as part of your PATON Report.

iii. ____ EPE – Estimated Position Error (in feet) – Know that this error is an expression of the accuracy of the fix being generated by your GPS and that the expression, in feet, represents the diameter of a circle in which the fix exists. This quality measurement must also be included as part of your PATON Report.

e. Waypoints

i. ____ Understand the composition of a Waypoint as used by GPS, including Latitude and Longitude, a number, and a symbol.

ii. ____ Review the PowerPoint presentation, "*NS-PN03-12 GPS Waypoints*" available on the AV Qualification page at www.uscgaan.com.

iii. ____ WAYPOINT VALIDATION – Follow the practice that considers every new waypoint as suspect until verified by actually visiting the waypoint site and by correcting any LAT-LON position error in the GPS while at the site.

f. **Routes:**

i. ____ Understand the composition of a Route as used by a GPS to be a series of verified waypoints linked together in a planned sequence.

ii. ____ Review the PowerPoint presentation, "*NS-PN03-13 GPS Routes*" available on the AV Qualification page at www.uscgaan.com.

iii. ____ Read the section on Routes in your GPS' Operating Manual.

15. Guidelines for taking and reporting a fix to a Federal Agency.

a. **Background Information**:

i. ____ Record the manufacturer's name and model number for the GPS(s) being used on the "*NSN04 Private Aid to Navigation Report."*

b. **Pre-underway activity:**

i. ____ Understand how your GPS set should be checked for accuracy before getting underway.

1. Verified that units of measure are correct.
2. Horizontal DATUM is set correctly.
3. LAT/LON is formatted correctly.
4. WAAS is enabled.
5. GPS readout is compared to a known location or other GPS.

c. On Scene Activity:

i. ____ Understand that a coxswain must be able to hold the OPFAC alongside the aid while remaining in the navigable channel when a fix and depth is being recorded so that the AV can record all of the required information.

ii. ____ Understand the need to record the accuracy of the GPS readings as the Fix is taken:

1. EPE or HDOP reading.
2. 3D or 3D Differential indications.

iii. ____ Know that all fix data must be recorded in degrees, minutes and seconds when reporting data to the Coast Guard.

iv. ____ Simulate a FIX and enter the information on a *NS-PN04 Private Aid to Navigation Report.*

16. Activity reports to AuxData:

a. ____ Understand that the purpose of reporting PATON activity in a timely manner is to provide support statistics regarding the performance of the PATON program concerning PATON Missions, PATON Verifications and PATON Discrepancies that Mission 31 is used for reporting PATON activity.

b. ____ Be aware that each person performing PATON verifications is responsible for preparing their own "*ANSC 7030 ACTIVITY REPORT – MISSION*," referencing *UNIT/INDIVIDUAL* as Type of Resource.

c. ____ Accurately complete an "*ANSC 7030 – ACTIVITY REPORT – MISSION - INDIVIDUAL*."

d. ____ Understand that when the PATON verification is performed as part of an authorized Patrol, the total time allowed for Individual ATON activity is limited to 15 minutes since the time underway is recorded in POMS by the coxswain.

DEPARTMENT OF HOMELAND SECURITY
U.S. COAST GUARD
ANSC-7030 (10-08)

U.S. COAST GUARD AUXILIARY

ACTIVITY REPORT - MISSION

Division 10 Flotilla 07

MISSION DATE DDMMMYY

SECTION I TYPE OF RESOURCE ☐ Air ☐ Boat ☐ Radio ☑ Unit/Individual

SECTION II TIME & MISSION

Always record START TIME, START MISSION, and FINISH TIME. (See MISSION list on page 3.) Use change boxes if mission changes. See instructions.

	START	Change 1	Change 2	Change 3	Change 4	Change 5	FINISH
TIME							
MISSION	31 ▼	▼	▼	▼	▼	▼	

SECTION III ACTIVITY LOG DETAILS

Location: OPCON ▼

PATROL MISSIONS ONLY

SAR ASSISTS ONLY

ATON						
	ATON Discrepancies		PATON Discrepancies		Bridge Discrepancies	
	ATONS Watching Properly		PATONS Watching Properly		Bridges Watching Properly	

SECTION IV CREW ASSIGNMENTS

	Member ID	Last Name and Initials	Trainee
LEAD			----
2			☐
3			☐
4			☐
5			☐
6			☐
7			☐
8			☐
9			☐

PE End-of-Course ONLY

LOCAL NOTES (non-AUXDATA):
Recipient's email address:

Your email address:

SUBMIT

SECTION VI REMARKS

*Use **Member Activity Log (ANSC-7029)** for missions not reported on VE (ANSC-7038), RBSVP(ANSC-7046) or this form and for Travel & Prep time previously reported on this form.*

Date submitted | Submitting Member Name *(print)* | Report number

Previous edition may be used until supply is exhausted COPY 1 - MEMBER ▼ PRINT ... ✓

7R7.08RB

17. Registering on the Web-Based PATON System.

a. ____ Download and print out a copy of the "***NS-PN06 Web-Based PATON System Training Guide"*** and add it to your PATON Navigation Kit. This guide is available in the Navigation Systems Web Site at www.uscgaan.com.

b. ____ Using the format on the next page, practice entering the personal data needed for registering on the Web-Based PATON System.

PATON REGISTRATION

* Indicates required fields

Name *	
Type of User *	Harbormaster Private Citizen USCG Auxiliary
Organization	
Address *	
City *	
State *	
Zip *	
Email Address*	
Text Messaging Email:	
Work Phone: *	
Cell Phone:	
Cell Phone Service Provider	(For emergency messaging only)
Fax Number: *	
What USCG station are you affiliated with?	
Username: *	
Password: *	
Re-Enter Password: *	

USCG AUXILIARY ADDITIONAL FIELDS:

DISTRICT/DIVISION/FLOTILLA	

18. Preparing a 2554 PATON Application Report.

a. ____ Use the ***"2554 – WEB-BASED PATON APPLICATION FORM"*** below, enter the PATON data as if you are applying for a private aid permit on the Web-Based PATON System as a PATON owner.

You are logged on as **YOUR NAME**

PRIVATE AIDS TO NAVIGATION FOR - CG ANT BOSTON

Private Aids to Navigation Application - CG 2554

Entry Form

* Indicates required fields

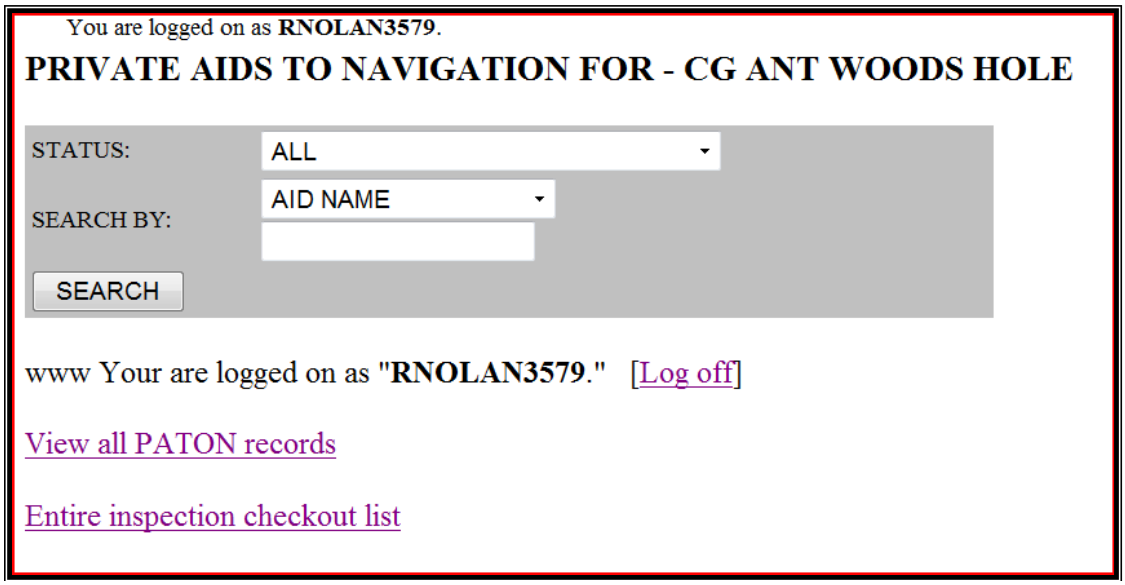
FIRST NAME *	
LAST NAME *	
PHONE *	
LAT *	
LON *	
Email *	
Aid type:	○ Floating ○ Fixed
Chain Length *	(Chain length in feet)
Depth of water *	(Depth in feet)
Mooring Size/Weight *	(Size/Weight in pounds)
Suggested Aid Name *	
Aid Purpose *	Mark Channel
Light Characteristic	
Color *	
Light Manufacturer	
Sound Signal	☐ Horn
Aid Height *	
Structure	
Action Requested *	Establish and Maintain throughout the year
Aid Duration *	Throughout the year
Aid Necessity *	
General Locality	

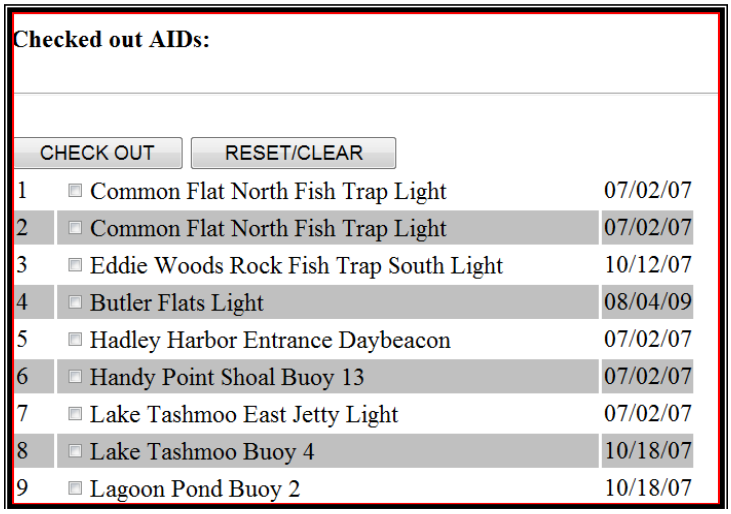
19. Logging on to the Web-Based PATON System.

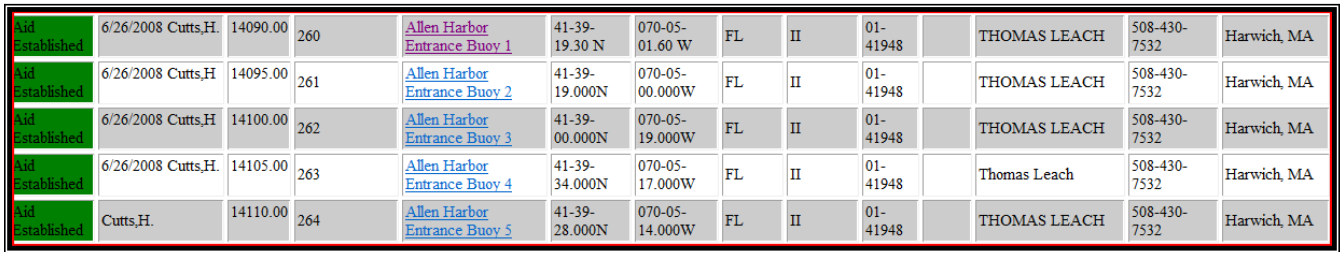
a. ____ Understand how to log on to the Web-Based PATON system.

b. ____ Understand how to sort data and find specific PATONs.

c. ____ Understand how to print out a one-page PATON Report.







Aid Established	6/26/2008 Cutts,H.	14090.00	260	Allen Harbor Entrance Buoy 1	41-39-19.30 N	070-05-01.60 W	FL	II	01-41948		THOMAS LEACH	508-430-7532	Harwich, MA
Aid Established	6/26/2008 Cutts,H	14095.00	261	Allen Harbor Entrance Buoy 2	41-39-19.000N	070-05-00.000W	FL	II	01-41948		THOMAS LEACH	508-430-7532	Harwich, MA
Aid Established	6/26/2008 Cutts,H	14100.00	262	Allen Harbor Entrance Buoy 3	41-39-00.000N	070-05-19.000W	FL	II	01-41948		THOMAS LEACH	508-430-7532	Harwich, MA
Aid Established	6/26/2008 Cutts,H.	14105.00	263	Allen Harbor Entrance Buoy 4	41-39-34.000N	070-05-17.000W	FL	II	01-41948		Thomas Leach	508-430-7532	Harwich, MA
Aid Established	Cutts,H.	14110.00	264	Allen Harbor Entrance Buoy 5	41-39-28.000N	070-05-14.000W	FL	II	01-41948		THOMAS LEACH	508-430-7532	Harwich, MA

20. Reporting a PATON Verification on the Web-Based PATON System.

a. ____ Using the *WEB-BASED USCG AUXILIARY AV PATON REPORT 5474* below, simulate a PATON verification and enter the data for reporting the verification of a private aid on the Web-Based PATON System report.

You are logged on as **YOUR NAME**.

PRIVATE AIDS TO NAVIGATION FOR - CG ANT BOSTON

USCG AUXILIARY AV PATON REPORT 5474

SECTION I - PATON SPECIFICATION and OBSERVER'S INFORMATION

BRAINTREE YACHT CLUB CHANNEL BUOY 38C

	PERMITTED	OBSERVED
PATON NUMBER:	28935	
PATON TYPE:	FL	---select one ---
LIGHT LIST NUMBER:	11795.00	
DEPTH:	3-13' FT.	ft.
HEIGHT OF TIDE:		ft.
LATITUDE	42-13-39.54N	Latitude N S *
LONGITUDE	070-57-40.32W	Longitude W E *
AID LOCATION:	Braintree	*
LOCATION VERIFIED BY:		GPS
LIGHT CHARACTERISTIC:	(Flash Length: n/a Color: Red	---select one --- Light Color:
AID CLASS:	II	
SOUND SIGNAL TYPE		---select one ---
BOUY MATERIAL	n/a	Wood Metal Plastic Foam Other
STRUCTURE MATERIAL	n/a	Wood Metal Other
OPCON	**01-41949** -	

PATON USE:	Mark Channel
PATON WILL BE OPERATED:	Temporarily
DATE LAST REPORTED:	28-Jul-2009

TIME WHEN VERIFIED: (HH:MM)	20:02
DATE OBSERVED:	*
DATE REPORTED:	*
THE OBSERVATIONS OF THIS PATON MATCH THE ENTRY IN THE LIGHT LIST, THE PATON'S PERMITTED RECORD, AND THE ENTRY FOR THIS PATON ON ITS NAUTICAL CHART. :	(•) YES ( ) NO*
PATON complies with the IALA-B ATON System	(•) YES ( ) NO *
AID IS WATCHING PROPERLY:	(•) YES ( ) NO*

SECTION II - DESCRIPTION OF DEFICIENCY

Check off the discrepancies that you observed:

- ☐ PATON is off station.
- ☐ PATON is not marking best water.
- ☐ PATON is adrift, missing, or capsized.
- ☐ PATON is sinking. stranded, or submerged.
- ☐ PATON is damaged by vessel collision.
- ☐ PATON has been vandalized.
- ☐ Extensive bird fouling is compromising the color of a lateral PATON.
- ☐ Peeling paint is compromising the color of a lateral PATON.
- ☐ Retro material is missing, peeling, or inadequate.
- ☐ All numbers are missing on a lateral PATON
- ☐ Numbers missing, damaged, or wrong color.

- ☐ Improper light characteristics on a lateral PATON.
- ☐ Light is obscured or extinguished on a lateral PATON.
- ☐ Lantern is damaged.
- ☐ Solar panel is damaged or incorrectly oriented.
- ☐ Battery pack is damaged or missing.
- ☐ Light is burning dim or showing reduced intensity.
- ☐ Missing vent valve on lighted PATON.
- ☐ Light is obscured by dayboard.
- ☐ Dayboards missing or damaged.
- ☐ Dayboards are faded so that they compromise the color of a lateral PATON.
- ☐ Delaminated dayboards.
- ☐ Dayboards are obscured by foliage or other objects.
- ☐ Improper dayboards per data shown on PATON report or the Light List.
- ☐ Sound signal failure. Show details in COMMENTS.
- ☐ Tappers on sounding PATON are missing.
- ☐ Radio Beacon off the air or emitting the wrong signal.
- ☐ RACON is off the air.
- ☐ Structure leaning more than 15 degrees.
- ☐ Extensive deterioration and/or rotting members on a structure.
- ☐ Other, show comments section for details.

SECTION III - COMMENTS

SECTION IV - AUXDATA INPUT (7030)

~~Time Started~~

~~Time Completed~~

~~Was PATON activity part of authorized patrol?~~	☒ YES ☐ NO
Verified by	(Last Name, Initials)
~~Member ID Number~~	
Phone	(Available during business hours)
Email address	
~~Division~~	
~~Flotilla~~	
~~SO/IS Email address~~	

SECTION V - OWNER CONTACT DETAILS

POC:
Address:
Email: Captrich@Beld.Net
Phone: 781-843-8601

SECTION VI - HARBORMASTER CONTACT DETAILS

Harbormaster: Braintree, MA
Email: Captrich@Beld.Net
Phone: 781-843-8601

21. Planning, observing, and transmitting three (3) PATON 7054 Verification Reports on the Web-Based PATON System to the CG.

a. ____ Contact an AVQ to monitor your three PATON Verifications.
   i. Note that PATON verifications must be performed between April 15 and November 15 each year.
   ii. Use the AVQ's log on to make your reports on line.

22. ISC Training Requirements:

a. ____ Complete ICS 100 Training that is available on line on the District 1 NR Web Site.

b. ____ Complete ICS 700 Training that is available on line on the District 1 NR Web Site.

Note: Make sure that the CAPE OFFICE gets a copy of your completion certificate so that your AUXDATA qualification info can be updated to your personnel record**.**

23. Review of the Federal Regulations for Bridges.

a. ____ Download and read the "*NS-BP02 Auxiliary Bridge Program Training Manual.*"

b. ____ Download and read "*NS-BP02 – How to Conduct a Bridge Survey*."

c. ____ Download and read "*NS-BP03 – 33CFR 117 Bridges*."

d. ____ Review the procedure for reporting a bridge using the Bridge Database System.

24. Complete the Open-Book AV Exam.

a. ____ Request a copy of the final AV Exam from your AVQ. A passing grade of 96% is required (24 out of 25). 20 questions are on the PATON System and 5 questions refer to the Bridge Program.

GLOSSARY OF AV TERMINOLOGY

ADSO	**Assistant District Staff Officer.**
ANT	**ATON Team. This name is followed by a location: Boston, Bristol, Portland, Woods Hole and SWH.**
AOR	**Area of Responsibility.**
ATON	**Aid to Navigation.**
AV	**ATON Verifier**
AVC	**ATON Verifier Candidate.**
AVQ	**ATON Verifier Qualifier.**
BM(#)	**Boson Mate. The number suffix indicates the class of Petty Officer. BMs are the Coast Guard's operational personnel for vessels.**
CFR	**Code of Federal Regulations.**
CGD1	**Coast Guard District 1—properly written as "First Coast Guard District."**
Coxswain	**Coast Guard person in charge of a small boat.**
DGPS	**Differential Global Positioning System.**
DSO-NS	**Auxiliary, District Staff Officer - Navigation Systems**
EPE	**Estimated Position Error.**
FSO-NS	**Flotilla Staff Officer – Navigation Systems.**
GPS	**Global Positioning System.**
HDOP	**Horizontal Dissolution of Precision.**
IALA	**International Association of Lighthouse Authorities.**
KNOTS	**Nautical Miles per Hour.**
LNM	**Local Notice to Mariners.**
MPH	**Miles per Hour—normally refers to statute miles.**
NOS	**National Ocean Service**
OINC or OIC	**Officer in Charge.**
OTO	**Assistant Director of Auxiliary, Operations and Training Officer.**
PATON	**Private Aid to Navigation.**
QM (#)	**Quarter Master. The number suffix indicates the class of Petty Officer. QMs are the Coast Guard's navigation and signaling personnel.**
SO-NS	**Division Staff Officer – Navigation Systems.**
USACE	**United States Army – Corps of Engineers.**
USC	**United Stated Code.**
WAAS	**Wide Angle Augmentation System**
XPO	**Executive Petty Officer.**
XTE	**Cross Track Error.**