



# Safety Lines

Issue 1

Spring 2025

## *Students of New York High School Honored With* **Coast Guard Auxiliary Certificate of Excellence**

By Betty Jean Downing, Assistant District Staff Officer for Marine Safety, District 1 South



**The Coast Guard Auxiliary presented certificates and challenge coins to students from Cambridge Central School in Cambridge, New York who completed the Environmental Science class. Auxiliarist Steve Butz presented the class via Zoom. Photo Courtesy of Cambridge Central School.**

The Coast Guard Auxiliary Marine Safety departments of Districts 1 North and South presented Zoom training

classes to promote the Marine Safety program and introduce what we consider the backbone of Recreational

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Newsletter of the  
Prevention Directorate  
USCG Auxiliary



**Sea Partners and Kids:** Keep It Relatable, Keep It Relevant. Introducing elementary students to environmental issues. - page 8



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# Safety Lines

Newsletter of the Prevention Directorate USCG Auxiliary

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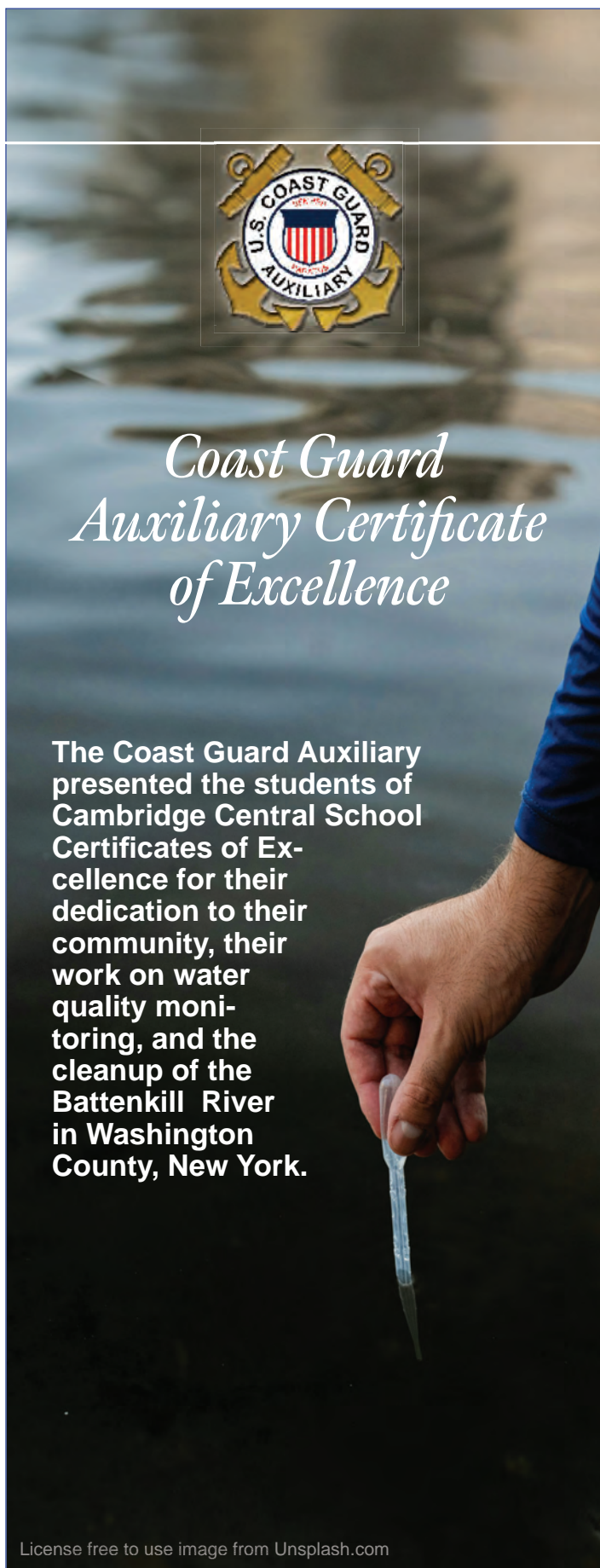


*(Continued from cover)*

Boating Safety (RBS). This six-week, five-part self-directed class aimed to prepare candidates for the extensive practical section of the course.

The Prevention Outreach Specialist (MEES) teaching program involves a final written exam followed by an oral exam. Candidates receive extensive practical training under the tutelage of team members. The class included producing lesson plans and presenting original content for teaching marine safety. One presentation, led by an Environmental Science teacher, Auxiliarist Steve Butz, effectively promoted marine cleanup programs.

The Auxiliary presented certificates and challenge coins to students in Steve Butz's Environmental Science class at Cambridge Central School in Cambridge, New York, for their dedication to their community as a result of their work on water quality monitoring and cleanup of the Battenkill River, in Washington County, New York. Throughout the school year, students performed water quality testing of the river and removed riverbank debris that threatened the health of our Nation's waters. Betty Jean Downing, Assistant District Staff Officer for Marine Safety, District 1 recognized their support of the United States Coast Guard's Environmental Protection Program. Each student received a signed certificate of excellence and a Coast Guard Auxiliary challenge coin. Ω



## *Coast Guard Auxiliary Certificate of Excellence*

**The Coast Guard Auxiliary presented the students of Cambridge Central School Certificates of Excellence for their dedication to their community, their work on water quality monitoring, and the cleanup of the Battenkill River in Washington County, New York.**

## *In her own Words:*

### **Kim Cole, Director of the Prevention Directorate**

***Unless they are involved in Marine Safety, commercial or port vessel inspections, or aids to navigation, most Auxiliarists might not recognize the name Kim Cole, the Prevention Directorate director responsible for these areas. In her own words, Kim tells us about her years in the Auxiliary.***



**Kim Cole**

I joined the Auxiliary in 2000 and became Flotilla Staff Officer-Marine Safety six months after joining. Through the years I also became the Flotilla Staff Officer – Career Counselor and eventually moved into the Academy Partners Program.

I worked with the Coast Guard Academy to assist young people interested in attending the Academy. I also worked for 16 years at AIM (Academy Introductory Mission). Eventually, I became the District Staff Officer-Marine Safety in District 9 Central. I have held this position on three different occasions, as I do now in conjunction with the position of Director of Prevention on our National Staff.

My duties as director include mentoring, guiding, and answering questions for those who contact me. I work directly with active duty and Coast Guard Reserves and perform my position's responsibilities. While being director, I also work with our Prevention staff to develop new materials for Auxiliary use, update existing materials, and promote new ideas and materials. The Prevention Directorate is responsible for providing the best updated training materials available for the Auxiliary. The director's most important job is to work directly with the Prevention staff. Without the staff, we would not be able to accomplish everything we do. We constantly review existing materials, looking for updates that may be needed, broken links, and ways to work with other Directorates in many different missions throughout the Auxiliary.

I received many awards within the Auxiliary and three Presidential Volunteer Awards. My work in the Auxiliary included many years working with various environmental agencies to provide water festivals to fourth and fifth graders in the Detroit area, as well as with my work in the Marine Safety fields in District 9 Central. I strive to provide the best possible support for all members in all districts in the Auxiliary. Watching others succeed is the best award possible.

Ω

*Help Keep America's Waterways Safe and Secure*

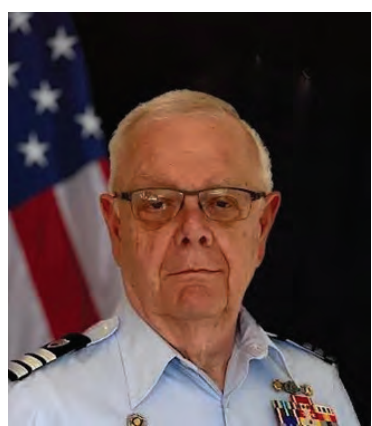
**AMERICA'S WATERWAY WATCH**





# Thinking About Communications and Marine Safety

By: Rick Young, Division Chief, Communications and Education  
Prevention Directorate



**Rick Young**

Communication is the foundation of any organization, and the Auxiliary is hardly an exception. Not only is it the foundation, but it is also a critical success factor that bears recognition far beyond Marine Safety. In 2023, the revised Marine Safety Administration and Management Specialist (MSAM) qualification introduced an Auxiliary on-line course to supplement the Performance Qualification Standard (PQS) and Study Guide. While the course was successful overall, much to our surprise came a request from District 13 to turn the Communications Section of lesson 4 into a D-Train offering that would benefit a much wider Auxiliary audience than just Marine Safety. The message was clear: communications, specifically effective communications, are critical success factors for all parts of the Auxiliary in achieving our goals and objectives.

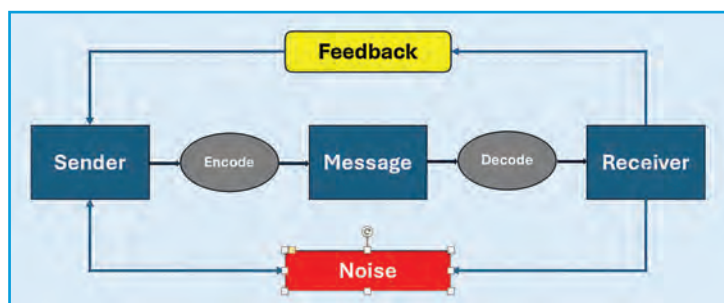
## The Course Takes Shape

The challenge of discussing communications is that the topic can be much larger than life. Colleges and universities offer an entire major in the topic, yet we endeavored to reduce it to a one-to-two-hour workshop. Perhaps most importantly, that workshop would need to provide valuable takeaways in the form of increased awareness if not actionable behaviors. The heart of the course was the concept that the information sent does not necessarily equate to that which is received. As a former university professor, I often encountered this problem with faculty members who would complain that their students did not learn what they believed they were teaching. Any short course would, therefore, need to attempt to do several things: 1) define communications in layperson's terms, 2) discuss the various types of communications (e.g., written, verbal, by symbols or icons, or even behaviors), 3) describe modes of communication (in person or virtually, synchronous or asynchronous),

4) emphasize why the importance of accuracy, and finally, 5) explain how and why all this is vitally important to the Auxiliary.

**This Is Simple! Right?**

Webster defines communication as "A process by which information is exchanged between individuals through a common system of symbols, signs or behaviors." So, we could say that communication is simple, but all sorts of problems and concerns are



**Figure 1: Communications Processes**

couched within that simple definition. If the old cliché about a picture being worth a thousand words, then the diagram in Figure 1 contains myriad tripwires that we need to be constantly aware of. For one, there is the problem of encoding and decoding the message because the process entails the issue of interpretation. Was the language sufficiently precise? Were the terminologies used by the sender the same as those understood by the receiver? That could be a significant issue that could even result in disaster in the extreme.

At the bottom of Figure 1, note "noise" because this additional input or preconceived notions affect how the receiver interprets the information sent. It might be what others have stated previously or even concurrently, but either way, being able to filter out these signals is only part of the human condition. Still, it remains an issue that communicators need to be cognizant of.

The second term in Figure 1 that requires our focus is "feedback" because this provides the sender with an understanding or confirmation of what the recipient received AND interpreted, but also will reveal what noise has potentially affected the signal.

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Feedback is not just a nicety; it is also why aircrews and ground controllers repeat the last message for aviation.

### What It Means for the Auxiliary

Consider our chain of leadership and management, as shown in Figure 2, and how the passing of information up and down may be unduly affected by the lack of clarity, the addition of noise, and even misinterpretation as messages are passed up and down the chain. Considering the myriad regulations

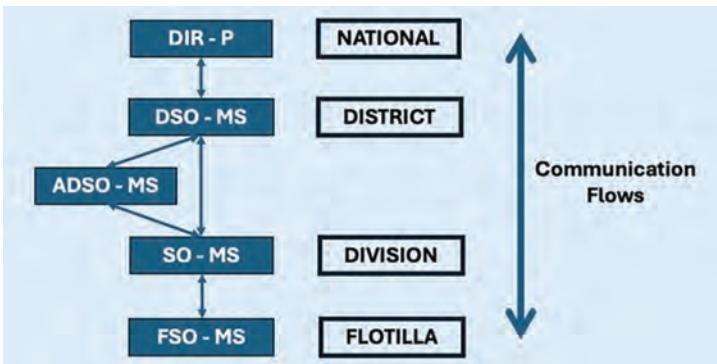


Figure 2: The Prevention Communications Chain

that govern the Coast Guard, precision and timeliness are crucial. Often, we find ourselves inundated with information that can sometimes seem contradictory. Deviations from these regulations can lead to accidents and unintended outcomes, and in some cases, missteps may even have legal ramifications.

### What It Means for MSAM

It is not a coincidence that the topic of communication is found in the MSAM qualification. Once the terms “administration” and “management” are used, communication becomes a critical component that may determine whether or not Auxiliarists will succeed in such undertakings. The problem is that communications will nearly always be a challenge as it puts one in the position of frequently striking a balance in pursuing multiple worthwhile objectives, as illustrated in Figure 3.

### Does This Topic Hold Further Interest?

For those who might not be familiar with MSAM, it is a valuable qualification for many reasons. First, if you are pursuing the Marine Safety Training Ribbon, then it is a good choice for the required additional qualification. Second, it provides an excellent

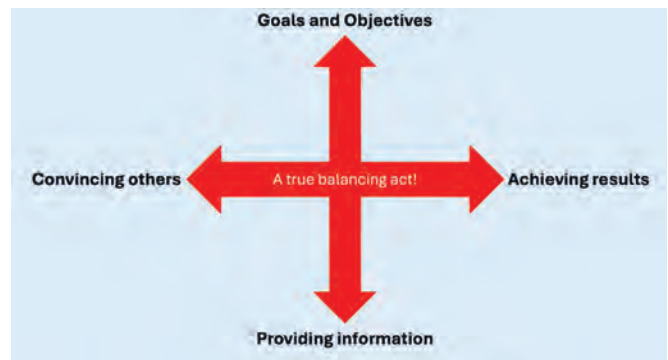
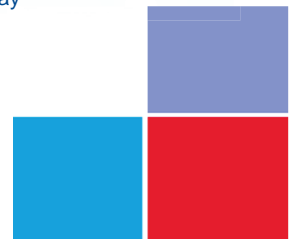


Figure 3: A Balancing Act

grounding for the overall topic of Marine Safety and Environmental Protection and is, therefore, a helpful prerequisite if you intend to obtain any of the other qualifications, such as Auxiliary Assistant Container Inspector, Auxiliary Facility Inspector, or Auxiliary Assistant Pollution Responder to name just a few. Finally, MSAM will be a valuable primer to anyone seeking or appointed to a staff officer position at the flotilla, division, district or national staff levels. More information can be found on the Prevention Directorate webpage at <https://www.uscgaux.info/content.php?unit=p-dept> Ω



Royalty-free image from Pixabay





## Detroit Beach Cleanup

By Gregg Bollinger, BC-PWS,  
Sea Partners Liaison

If you are a fan of IndyCar racing like me, you know the name Belle Isle as synonymous with exciting closed-course open-wheel racing. The course is on an island just off the shore of the city of Detroit. Racing on Belle Isle has ended, with a street course through downtown Detroit replacing it as the racing venue.

The island was recently the focus of Flotilla 18-7, Detroit, to respond to an online trash report on the beach. Recognizing an excellent opportunity to make the Sea Partners/Environmental program goals a reality, Auxiliarists Christian Sandvig, Austin Koleszar, and Stephen Fletcher tackled the beach cleanup.

On Nov. 09, 2024, from 8 to 10 a.m., the team collected 41 pounds of trash placed into four trash bags; testimony that a dedicated, energetic team, though small in number, can accomplish a great deal of good.

As noted above, the IndyCars are gone, but people still go to the island and its beach and, unfortunately, leave trash behind. This cleanup by Flotilla 18-7, Detroit demonstrates one of the key aspects of our Sea Partners program—public, high-visibility action by the Auxiliary to raise awareness of the need for keeping our waterways clean. It will make a lasting impression on visitors to Belle Isle to do the same.

Hats off to Auxiliarists Sandvig, Fletcher, and Koleszar for living up to the motto “Semper Paratus.” They are always prepared to do the job of protecting our marine environment. Ω

Aerial view of Belle Isle. Free-to-use image from Unsplash



# Sea Partners and Kids: Keep It Relatable - Keep It Relevant

By Kathryn Clingan, ADSO-MS D8W

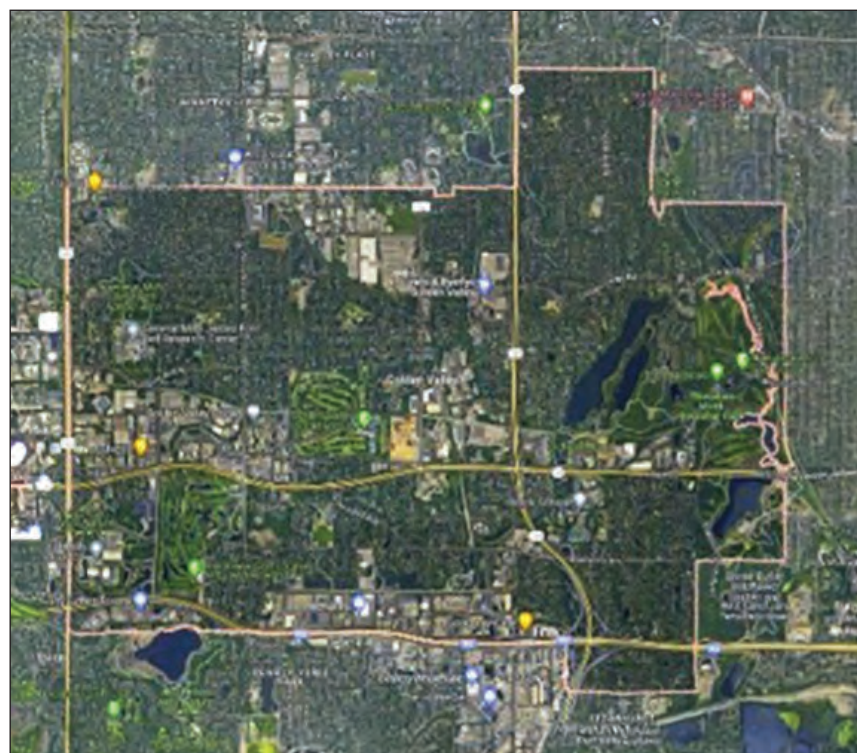
For many elementary-aged children, environmental issues are just news stories or something they read about in school: rainforest deforestation, microplastics in the ocean, melting sea ice.

One of the most vital aspects of our Sea Partners' work is to empower youth with the understanding to help them recognize environmental issues close to home and, for older students, visualize the connection to regional and global ecological concerns. Through this understanding, we can provide them (or they can design) age-appropriate action steps to begin their journey as environmental stewards.

For most kids, seeing is believing. Whether discussing aquatic nuisance species, water quality, watershed management, or recycling, you can increase engagement and understanding by developing curated resources that illustrate issues and concepts close to home.

**Keep It Relatable** by keeping it local. Use satellite maps and photos of local areas that illustrate common geographical and artificial structures. The maps should feature places kids readily recognize, such as lakes, streams, schools, and parks. This gives kids a local frame of reference and is a great starting place to begin concept development for any age child. For young children, keep it local. Older kids can start here and then follow the concept to broader regions. Establishing a local frame of reference helps kids feel connected to concepts and creates a tangible platform for environmental protection discussions and local action opportunities.

Once you have established the critical frame of reference, reinforce concepts with objective evidence or photos from locations children know.



**Concept Development Image 1: Google Maps satellite image illustrating part of a watershed around a local school hosting a Sea Partners program.**

**Concept Development Image 2: Google Maps extended image depicting local area with familiar landmarks, including schools, lakes, and parks, to further illustrate the expanding watershed. (Images: Google Maps)**

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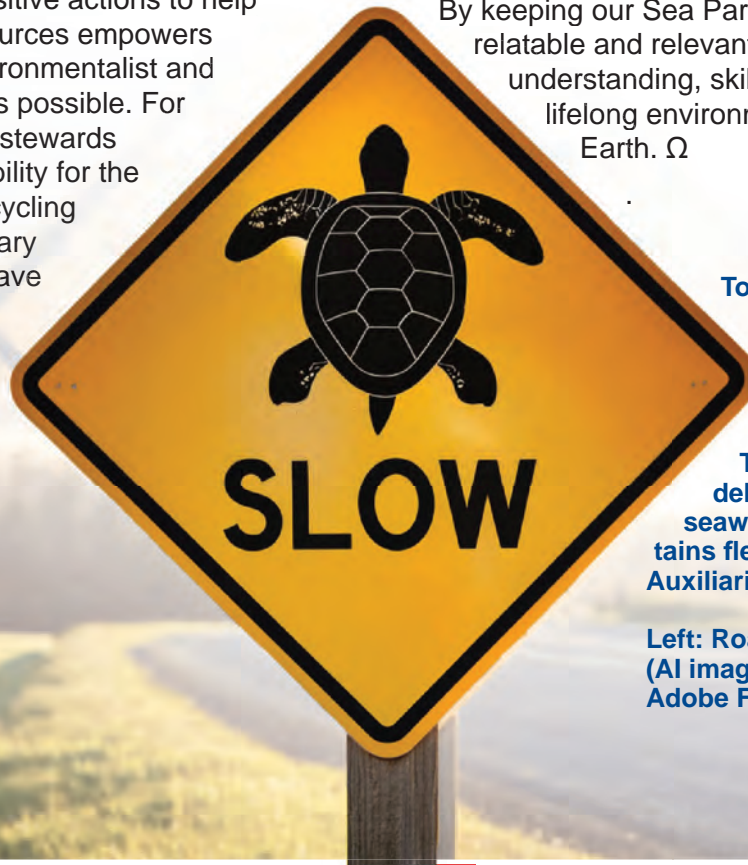
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**Keep It Relevant** by providing or having kids design age-appropriate action steps toward environmental stewardship that can be accomplished in the locality. As adults, we often feel powerless to influence global environmental issues. Kids will feel the same way about their local environmental problems. However, giving kids ideas for positive actions to help improve their local resources empowers even our youngest environmentalist and illustrates that change is possible. For example, our youngest stewards take personal responsibility for the proper disposal and recycling of their own trash. Primary school-aged kids can have an environmentally powerful voice advocating for compliance with recycling programs

in their homes and at school. Older children can begin organizing poster campaigns that passionately address area concerns and influence families, Scout groups, and youth groups into “calls to action” for things such as neighborhood cleanups, slow down turtles signs, and improving local water quality.

By keeping our Sea Partners messages to kids relatable and relevant, we help them develop the understanding, skills, and voice to become lifelong environmental stewards of planet Earth. Ω



**Top left: Hockey net encrusted with zebra mussels pulled from a lake during spring cleanup. (Photo by Thane Tande.)**

**Top right: Beach with shoreline debris embedded in sargassum seaweed. Sargassum seaweed contains flesh-eating bacteria. (Photo by Auxiliarist Kathryn Clingan)**

**Left: Roadside turtle crossing sign. (AI image created by Adobe Firefly)**







## AV Assistant – Identify and Verify Aids to Navigation

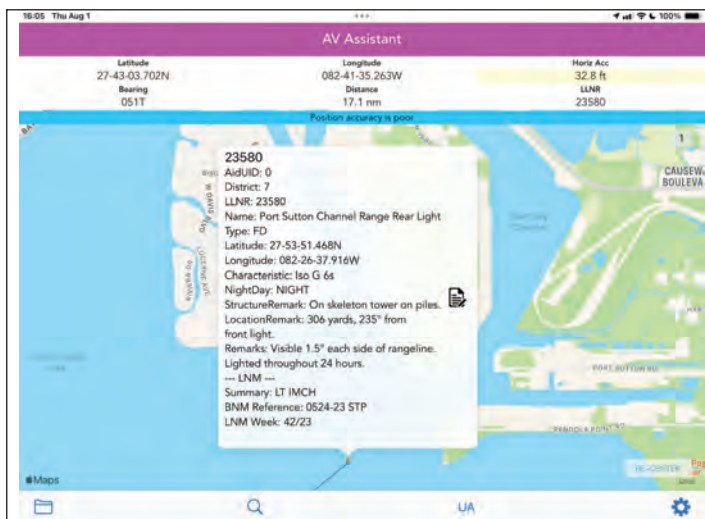
By Anthony Hooper, ADSO-NS, Sector St. Petersburg

The *AV Assistant* app for iPhone and iPad is a powerful tool for Auxiliarists to identify and report on aids to navigation. Created initially by Auxiliarist Clint O'Connor of Flotilla 9-10, Ft. Myers/Cape Coral, District 7, the app was developed to its present state and supported by Coast Guard research funding.

*AV Assistant* provides two data sets useful to anyone who wants to identify a navigation aid. The app automatically downloads the latest National Oceanic and Atmospheric Administration electronic navigation charts (ENC) for the user's location. Each time the app is opened, it prompts users to download the latest information on federal and private aids to navigation in the vicinity of the user. This data comes from the USCG Navigation Center (NAVCEN), which maintains the Light List, the U.S. Aids to Navigation Information Management System (USAIMS), and the Integrated Aids to Navigation Information System (Legacy IATONIS).

The app graphically displays the location, classification (federal or private), and status (Watching properly or reporting discrepant).

Tapping on any aid creates a pop-up box containing the information on the aid.



Screenshot of AV Assistant app.

In this case, we can see that the Port Sutton Channel Range Rear Light, LLNR 23580, has been displaying improper characteristics (wrong light color and pattern) since week 42 of 2023. The full details of the aid, including its assigned position, are included.

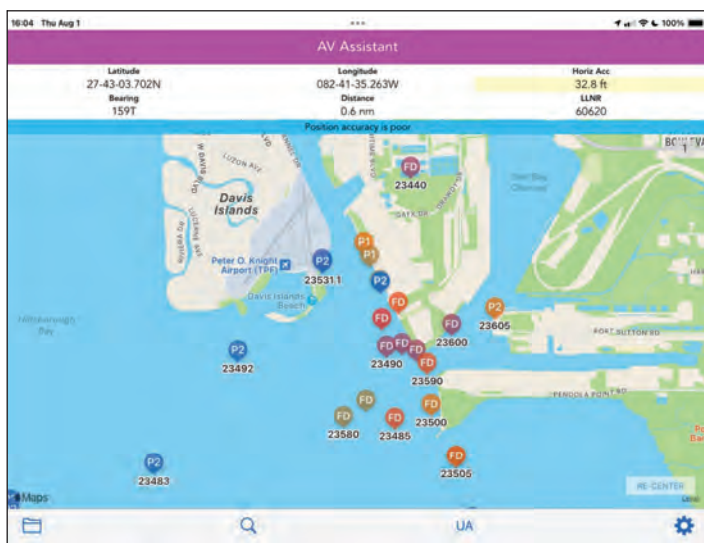
With this app, there need be no doubt about the identity of an aid to navigation. Knowing which aid we are looking at is critical for navigation and verifying aids.

This functionality is available and valuable to any mariner, not just Auxiliarists. For Auxiliary members, especially Aid Verifiers, the app goes beyond providing information - it helps create a full report on an observed aid.

To access the report function, an Auxiliarist must first enter their Auxiliary information and select the area of responsibility. When done, clicking on any aid reveals the pop-up details and the option to start a report. The first entry is whether the aid is watching correctly (and is therefore verified) or has a discrepancy.

Because the Auxiliarist has already entered their information, that report portion is completed automatically. The aid information from the Light List is also entered automatically.

The member must undertake three steps to complete the report.



Screenshot of AV Assistant app.

Federal aids are labeled "FD" and are red if appropriately watching. A discrepant Federal aid is shown in brown. Private aids are labeled "P2" and are blue if watching properly and brown if discrepant. The Light List Number (LLNR) is displayed under each aid.



In this case, the aid is MISSING, which is entered in the DISCREPANCIES OBSERVED SECTION.

Next, the Auxiliarist takes one or more photographs of the aid. The app automatically places key information

| Type of Report  | Verification | Discrepancy |
|---|--------------|-------------|
| Coast Guard Reporting                                   |              |             |
| Urgency of Report                                       | Critical     | Urgent      |
| CG Unit Notified  |              |             |
| Date Observed   |              |             |
| Method of Report  | Email        | Radio       |
| Date Reported   |              | Telephone   |
| Time Reported   |              |             |
| Light List Data   |              |             |
| Aid UID 200100769496                                    |              |             |
| LLNR 23492  |              |             |
| Aid Name Davis Island Yacht Club Special Purpose Buoy A |              |             |
| Aid Class II  |              |             |
| Type PA   |              |             |
| SubType FL  |              |             |
| Description Type ULB                                    |              |             |
| Marking System NLAT                                     |              |             |
| Marking Color Y   |              |             |
| AP Latitude 27-54-13.000N                               |              |             |
| AP Longitude 082-27-17.000W                             |              |             |
| Position Fix  |              |             |
| Camera  |              |             |

| SECTION VI - DISCREPANCIES OBSERVED ON AID TO NAVIGATION |                        |                            |
|--|------------------------|----------------------------|
| LOCATION DISCREPANCIES                                   | LIGHTING DISCREPANCIES | OTHER DISCREPANCIES        |
| Aid missing (Explain method used)                        |                        |                            |
| CONDITION DISCREPANCIES                                  | DAYBOARD DISCREPANCIES | PILE / STRUCTURE CONDITION |
|  |                        |                            |
| DOCUMENTATION AND SPECIFICATION CHECKS                   |                        |                            |
|  |                        |                            |

on the photo – including the report number and date, the aid name and number, and the photograph's time, date, and location.

Finally, a position fix is taken, preferably with a GPS or antenna placed on the aid. The app records and analyzes this data to create a report, as shown in the photo at right.

The image is an example of a position fix report. The app calculates the GPS error from whatever data the GPS provides. It records the CA (closest approach to the aid) and the vessel speed (SE). Taking the fix with the GPS not on the aid (CA=0) or with the vessel moving (SE>0) greatly decreases the accuracy and utility of the fix, so it may not meet Coast Guard standards.

Auxiliarists who have started using the AV Assistant app have found it a great asset to collect and record data during an aid check. Boaters to whom we have shown the app find it extremely helpful in navigation – it provides quick and accurate identification of aids to navigation. It tells them if the aid is missing or has an error. Ω

\*The app is available for iPhone and iPad only. No development is anticipated for Android and Microsoft at this time.



Example of photograph with automatically generated data. Images from AV Assistant app provided by Anthony Hooper

# Russian Icebreakers and the Northern Sea Route

## *A First in a Series on Polar Missions*

By Gregg R. Bollinger, DSO-MS, District 5 North

Once fall begins, ice becomes a concern for navigation in the extreme northern hemisphere. Russia is currently embarking upon an ambitious program of icebreaker construction to maximize access to the Northern Sea Route, or NSR, throughout the winter months. Going back to Czar Peter the Great, Russia has incorporated acquiring access to ice-free ports and year-round navigation into what has sometimes been an “aggressive” foreign policy.

Construction documentation has been contracted to be developed by Russia’s Central Design Bureau, Department “Iceberg,” for the next series of modern Russian icebreakers. Krylov State Research Center is developing Project 10510 “Leader” class vessels assisted by other design bureaus in Russia.

The design of these nuclear-powered vessels calls for them to be 685.5 feet by 156.5 feet with a full load hull displacement of 69,000 tons, which will permit year-round operations along the NSR. Both Russia and China are primarily utilizing this route to transport products such as coal, oil, and liquified natural gas, or LNG, to and from Europe in what has been dubbed the “Polar Silk Road” reminiscent of the “Silk Road” that once commercially linked Europe with Asia. In 2018, China became the world’s second-largest importer of LNG, with Japan being the largest. To aid in this, last year, the Chinese Development Bank provided \$9.5 billion in funding to Russia’s Vnesheconombank to create a Sino-Russian partnership.

Russian icebreakers significantly aid U.S. shipping, mainly through the Northern Sea Route (NSR). The NSR offers a shorter and more cost-effective route for transporting goods between Europe and Asia than traditional routes like the Suez Canal. Exploiting the NSR shipping route has eliminated 221 days of sailing time compared to the Suez Canal route, with savings on canal fees that average more than \$450,000 per vessel.



The “Arktika” in drydock in Kronstadt, Russia. Photo by Kuzmixon on Wikimedia.

While some LNG and oil tankers are capable, on their own, of breaking through the ice at thicknesses of nearly five feet at a speed of five knots, not all freighters, especially containers, can do this, thus prompting Russia’s investment in building new icebreakers.

The “Leader” class icebreakers will break through 6.5 feet of ice at

12 knots and through 13 feet of ice at two to three knots. Zvezda Shipyard in the Russian Far East will build the new ship class. Three Project 22220 “Arktika” class icebreakers are being completed by United Shipbuilding Corporation in western Russia. These are 33,540-ton, full-load displacement vessels anticipated to be able to break through up to 9.8 feet of ice at a top speed of 22 knots.

The first of these vessels, the 568.5-foot-long “Arktika,” entered service in late 2020. This ensures that even during the harsh winter months, the NSR remains navigable for various types of vessels, including those from the U.S. Ω



# International Coastal Cleanup Day

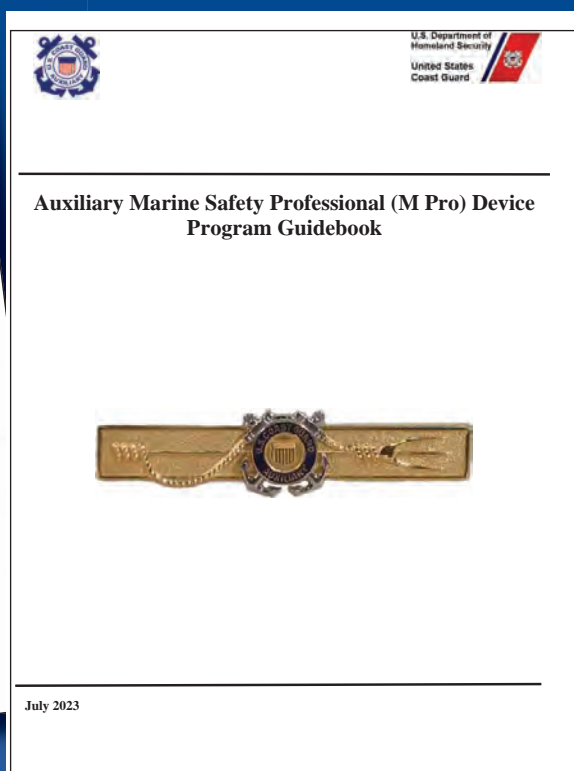
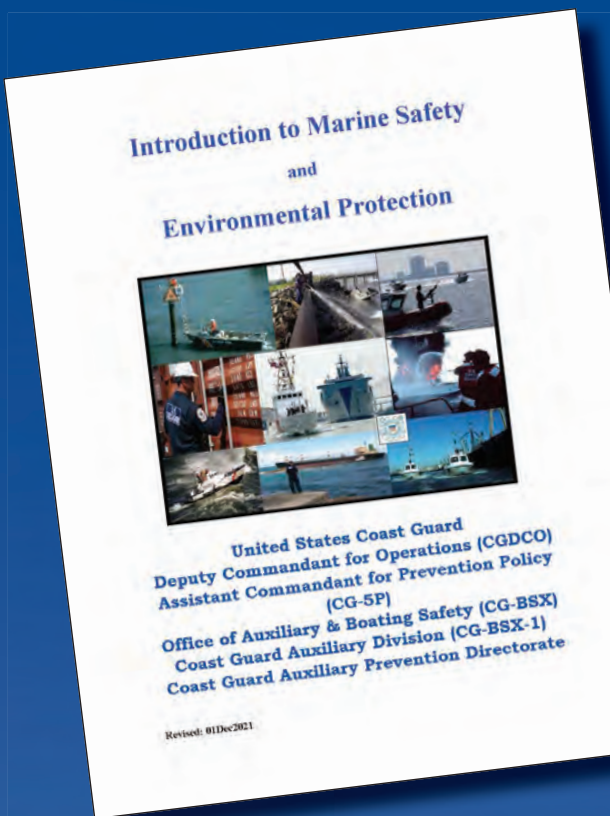
## Saturday, September 20, 2025.

Cleaning up our beaches helps protect our marine environment. Before you volunteer, please read our “Beach Cleanup Guide.” We want you to be safe while you help save our beaches and coastal regions. Download the guide at:

[https://wow.uscgaux.info/Uploads\\_wowII/P-DEPT/Cleanup\\_4page\\_v5.pdf](https://wow.uscgaux.info/Uploads_wowII/P-DEPT/Cleanup_4page_v5.pdf)



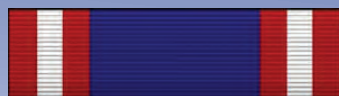




## Marine Safety Training Program



Like the three-pronged Marine Safety M-Pro Pin shown above, the Marine Safety Training Program, formerly known as the Trident Training Program, is a three-pronged training, consisting of education, qualifications, and service. Courses required include Introduction to Marine Safety and Environmental Protection (a two-point AUXOP course), Good Mate, ICS 100, 200, 210, 700 and 800. Members must earn four qualifications from a list of those found on the Prevention Directorate website and then provide a minimum of 96 hours of service each year for five years as recorded in AUXDATA II. This pin indicates a high degree of knowledge, proficiency and dedication, as well as professionalism on the part of the wearer. Ω



The Marine Safety Training Ribbon was created in recognition of the considerable and long-term, sustained effort that Auxiliarists must put forward in order to earn the Auxiliary Marine Safety M-Pro Pin. The ribbon recognizes achievement in the marine safety, security, and environmental protection mission area as a precursor to achievement of the Auxiliary Marine Safety M-Pro Pin.