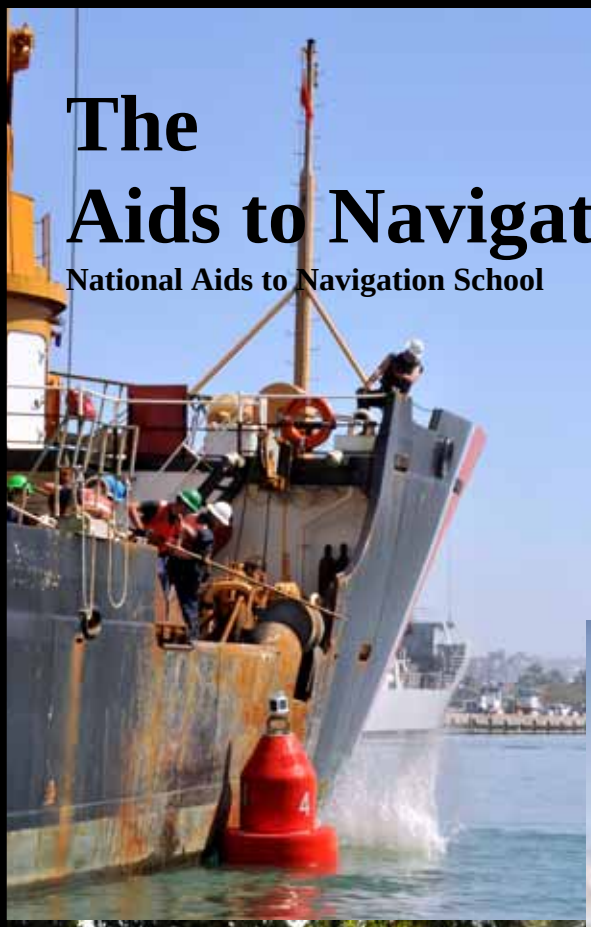
The Aids to Navigation Bulletin

National Aids to Navigation School

Spring/Summer 2010



National Aids to Navigation School
US Coast Guard Training Center, Yorktown, Virginia

ATON systems of the United States and its territories are established, operated, and maintained by the Coast Guard to assist mariners in locating their position and to warn of nearby dangers and obstructions. This is done for the benefit of commercial vessels, recreational boaters, and to support the operations of the Armed Forces. Title 14 of the US Code makes this a responsibility of the Coast Guard.

The Bulletin is published to support the individuals and units involved in providing a reliable ATON system for the mariner. The Bulletin seeks to meet the following objectives:

- To provide a means of circulating job skill information among ATON technicians,
- To increase the professionalism and knowledge of all ATON personnel,
- To act as a channel for information flow amidst the ATON servicing units, Sector Office staffs, District Office staffs, Headquarters staffs, and units, and
- To publish articles and photographs about people, units, or events which may be of general interest to the ATON community.

To satisfy these objectives, it's necessary for all who read the Bulletin to take an active part in determining its contents. If you have found a "better way" or performed a unique evolution, share it with other people in the ATON field. Submissions are welcome in any form. Articles and images may be submitted electronically to the editor via email at tracy.m.speelhoffer@uscg.mil or mailed to:

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Electronic submissions are preferred. Please keep photographs in original electronic form, and send them as separate files; do not imbed or copy them into word documents.

The articles contained herein are non-directive and non-record material. They are published for informational purposes only.

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On the Cover: Photos from USCGC OAK's (WLB 211) recovery efforts following the earthquake in Port au Prince, Haiti. Details on page 2.

IN THIS ISSUE . . .

USCGC OAK (WLB 211) alongside USNS COMFORT off of Port au Prince, Haiti

Photo by PA3 Brandyn Hill

USCGC OAK Plays Major Role in Haiti Relief Efforts

by ENS Jason Radcliffe, USCGC OAK (WLB 211)

Note from the Editor: The photos on the cover of this issue were provided by ENS Jason Radcliffe of Coast Guard Cutter OAK. Most photos were taken by PA3 Brandyn Hill. The following is a brief synopsis of OAK's recovery efforts in Haiti. Look for a more detailed article in the next issue!

On Tuesday January 12th, 2010 a 7.0 magnitude earthquake crippled Haiti's capital city of Port au Prince; proving to be the most destructive natural disaster in the country's recent history. Devastation to local infrastructure rendered hundreds of thousands of people dead, injured, or homeless.

The following day, OAK rapidly mobilized and departed Charleston in a matter of hours; while steaming south, tons of supplies were coordinated for pickup along the way. The first stop on Thursday January 14th was in Jacksonville, Florida for ATON supplies. OAK continued south and arrived in Miami, Florida on Friday January 15th, on loading 62,880 bottles of clean drinking water donated by the Pepsi Cola Company, as well as medical and humanitarian aid supplies.

OAK cautiously anchored in Port au Prince Harbor the evening of Sunday January 17th. At daybreak the following morning, OAK became the first military vessel to moor in Port au Prince using the only remaining portion of the collapsed south main APN terminal pier. The first task was slow and challenging; the tons of offloaded water could only be distributed by small trucks making multiple trips.

Well trained and knowledgeable crewmembers comprised OAK's medical response team and every bit of training came in handy as they rushed to the makeshift triage and treatment area at Killick, the Haitian Coast Guard base. Multitudes of suffering earthquake victims were treated on the spot while the most critical were medevaced by small boat or helicopter to awaiting surgical teams onboard nearby ships or local hospitals.

OAK and the Port Au Prince Pilot's Association collaborated to establish new buoys to ensure the harbor was properly marked. OAK verified locations and serviced the harbor's existing buoys to ensure the safest waterway environment possible.

In addition to servicing and establishing ATON, providing relief supplies, and enhancing the medical response efforts, OAK hosted the U.S. Coast Guard Maritime Transportation System Recovery Unit (MTSRU) onboard and provided Vessel Traffic Service (VTS) for the port.

Once OAK's nearly month-long initial response and support work was complete, the ship and her crew left Port au Prince in the capable hands of the MTSRU and multi-agency multinational task forces.

From the Editor

by LT Tracy Speelhoffer, NATON School

Hello everybody! It's nice to be circulated around the ATON community once again. First off, let me apologize for the erratic nature of the Bulletin lately—we've had some issues with the company that was publishing it. Specifically, it came to our attention that most of you didn't receive your 2010 ATON Calendar, which really upset me considering that making the calendar is pretty much the highlight of my year. I really apologize for this; once again, it was an issue at the publisher and we are working to get it resolved. Hopefully we can still send them to you, albeit six months late. It's really unfortunate that this happened because we got a lot of GREAT photos from the fleet this year—thanks so much for your submissions! Please continue to send me your photos and articles; they really make the Bulletin what it is.

If you haven't checked it out, the Bulletin is also available online, as it has been for a long time, at this link: http://www.uscg.mil/tcyorktown/Ops/NATON/bulletin.asp
What you may not know is that you can sign up to be e-mailed when the latest Bulletin has been posted online. You can sign up for notifications by clicking on the "Subscribe Now!" button at the above link. This is a good opportunity to see the Bulletin as soon as it's ready instead of waiting for the print version!

I hope you liked the cover of this issue—thanks to ENS Jason Radcliffe of OAK for sending me those great shots during their response to the earthquake in Haiti. And yes, it has been that long since I started writing this issue of the Bulletin! I know we were proud to see OAK representing the Coast Guard and the ATON mission in particular during such a crisis. It looked like a crazy trip, but it also looked like their help was critical in getting other ships into the port.

In other news, it is an eventful transfer season here at NATON. We are in the process of saying goodbye to many of our staff and welcoming their replacements. Those who have either already transferred or are scheduled to transfer are: LCDR Brian Huff (CGC WALNUT), CWO Colin Langeslay (CGC BERTHOLF), ETC Noel Stakes (retirement), BMC Jason Wyglendowski (RFO, Sector Columbia River), BMC Kristin Epperson (CGC HOLLYHOCK), BM1 John Bagley (ANT Fort Lauderdale), and EM1 Carlos Negron (CGC BERNARD C. WEBBER). We will miss all of our shipmates and wish them the best of luck! We're also looking forward to the arrival of all of our new members, and are prepared to indoctrinate them into all things NATONIA! Our inbound shipmates are: LT Mark Crysler, School Chief; LTJG Nick Monacelli, Operations Section; BMC Ronald Johnson and BMC David Hansen, Buoy Deck Training Team, BMC Kenneth Roberts and BM1 Stephen Leadbetter, Minor Aids; ETC Wesley Richie, Major Aids; and YN2 Edward Ramos.

Well, that's all from me for now. Thanks for your continued support of the Bulletin, and I hope you're all enjoying your transfer season. Good luck to those of you who are just arriving at ATON units, and to those of you departing ATON units, good luck getting back to ATON!

The Buoy Deck Supervisor Course—Have You Heard?

by BM1 Stacy Thomas, NATON School

It has been about a year since the National Aids to Navigation School launched its exportable Buoy Deck Supervisor course. That said, we here at the Buoy Deck Training Team want to make sure everybody is aware of this excellent training opportunity.

The course is five days long, and is held onboard a host cutter. The host cutter can be any WLB or WLM in the fleet. It is a busy five days, as students will learn the intricacies of wire rope inspections, the use and inspection of rigging hardware and slings, inspection of deck equipment, safety, conducting deck evolutions and much, much more. Besides classroom instruction, you will have the opportunity to get 'hands-on' and apply both an epoxy poured spelter socket and a fiege fitting to wire rope, wield an oxy-fuel torch to cut steel, and conduct a buoy deck evolution.

The requirements to attend are that you must be a Warrant Officer, Chief Petty Officer, or Petty Officer assigned to an Aids to Navigation unit, with six months experience and a deck rigger qualification. The course is geared towards the WLB, WLM, and WLBB platforms, but personnel at other buoy tenders or ANT's are encouraged to submit ETR's as well.

The course is held four times a year. Please check TQC's website for course convening information. In addition to students, we are always looking for cutters to host the course. If your unit is interested in hosting, please let us know! Hope to see you there!

ANT Hampton Roads Receives Kimball Award

by BMCS Anthony Sciullo, ANT Hampton Roads

On Friday January 08, 2010 Rear Admiral Wayne E. Justice presented the crew of ANT Hampton Roads with the Sumner T. Kimball Readiness Award.

The award recognizes excellence in crew proficiency, boat and personal protective equipment condition and compliance with established training documentation requirements as well as essential readiness components. ANT Hampton Roads received an overall readiness score of 48 out of 50 possible standardization and readiness assessment points.

Congratulations, ANT Hampton Roads!

USCGC VISE Plays a Major Role in Tampa Bay Project

by CWO Mike Popelars, USCGC VISE (WLIC 75305)

USCGC VISE recently completed installation of a 5-pile tower off the entrance of Tampa Bay shipping channel for the Tampa Bay Physical Oceanographic Real-Time System (TB-PORTS). This structure replaced an earlier one that was destroyed by an allision with an unknown vessel. The structure supports electronic instruments that measure wind speed/direction, visibility (fog), waves, and currents. Measurements from this site and from others around the bay are transmitted to shore by radio every six minutes and are provided to the maritime community via the internet (http://ompl.marine.usf.edu/PORTS/) and by an automated telephone response system (1-866-TB-PORTS).

TB-PORTS is an information acquisition and dissemination technology developed by the National Oceanic and Atmospheric Administration (NOAA) and National Ocean Service (NOS) in order to increase navigational safety by providing more accurate wind, water level, and current data for Tampa Bay. A not-for-profit organization, TB-PORTS is funded by local and state agencies and supported through a cooperative agreement with technical assistance from NOS. Through a cooperative agreement between TB-PORTS and the University of South Florida, PORTS is located in USF's College of Marine Science. TB-PORTS integrates real-time current, water level, temperature, wave, visibility, and wind measurements collected every six minutes at multiple locations in Tampa Bay. Because the bay's tides and currents are influenced strongly by nontidal forces such as winds and river flow, TB-PORTS provides important real-time information to both recreational boaters and professional pilots navigating in Tampa Bay. TB-PORTS has been in con-

The newly constructed tower

tinuous operation since 1992. Statistics on ship groundings in US harbors show that the number of groundings has decreased by 60% since TB-PORTS became operational. TB-PORTS was the first of its kind in the US. There are now 20 PORTS installations in the US (http://tidesandcurrents.noaa.gov/ports.html).

In addition to improving the safety and efficiency of navigation within Tampa Bay, TB-PORTS also provides oceanographic and meteorological data to aid rapid response to hazardous material spills. In this capacity, TB-PORTS is an initial responder to hazardous spills as part of Tampa Bay's Contingency Plan for Oil and Hazardous Substance Pollution Response and participates in USCG MSU oil spill drills for Tampa Bay. TB-PORTS also assists in search-and-rescue missions and with environmental management of the bay.

PORTS data are archived at NOS and at USF and represent a significant source of oceanographic and meteorological information for Tampa Bay. The archive, which is within the public domain, contains PORTS data from June 1992 through the present and can be accessed via the Internet. The PORTS internet site (http://ompl.marine.usf.edu/PORTS) contains additional information about PORTS and its associated facilities and projects.

A great shot of the mighty VISE herself

USCGC KUKUI's Dry Dock Experience

by LTJG Matthew A. Romano, USCGC KUKUI (WLB 203)

KUKUI arriving at dry dock, in need of some attention

On Thanksgiving Day, while most Americans were home enjoying turkey, football, a cold beer, and a late-afternoon nap, USCGC KUKUI was making its trans-Pacific journey to homeport after a five-month dry dock availability in San Francisco, CA. KUKUI's original dry dock availability was slated for $1.65M and 69 days of maintenance, but due to significant growth and extension, resulted in $5.4M and 161 days away from homeport. Although KUKUI's crew was away from homeport for such an extended period of time, they truly made the most of the dry docking experience, utilizing all available resources to conduct significant ship's force projects, participate in numerous local community service and morale events throughout California and receive vital training from local Coast Guard units.

In June of 2009, KUKUI and her crew of 49 departed Honolulu on the 2,200 mile trip to San Francisco, beginning the 161-day effort to complete vital maintenance to the cutter and restore her operational readiness to patrol the Pacific. This maintenance involved over 130 contracted work items, as well as 30 projects completed by the stern tube. Major maintenance completed included removal and re-alignment of the cutter's shaft, repairs to the shaft seal, renewal of corroded hull plating, overhaul of all weight-handling equipment, including the main buoy handling crane, and preservation of the underwater body, freeboard, superstructure and decks. During the arduous period, crewmembers lived aboard the ship, frequently working long shifts and providing 24/7 oversight of contract work, even during weekends and holidays; all without the slightest sense of pessimism or discontent.

KUKUI post-dry dock, looking good as new

Although KUKUI's dry dock availability experienced substantial growth and extension, many lessons learned and improvement areas were highlighted and will serve as an excellent case study for all future 225 dry dock availabilities and maintenance periods. The primary factor for availability growth and extension was that KUKUI's scheduled 2006 dry dock was deferred three years past the standard four-year cycle. Failure to properly implement the condition-based maintenance program/ prototype, combined with the significant

KUKUI's crew poses under a newly renovated cutter

deferred maintenance, resulted in increased unscheduled maintenance, loss of operational capabilities, increased remediation costs, and an increased burden on ship's force. Condition -Based Dry Docking (CBD) is a potentially valid and efficient way to maximize value of maintenance funding in a budget-constrained environment. In order for it to be effective, however, Surface Forces Logistics Center's Ice Breaker, Buoy and Construction Tender should apply CBD across the entire cutter class or product line (to recognize economies of scale), and the process must be followed as designed, to include a decision board, regarding necessary maintenance actions. The process will only work if the organization is willing to commit to the entire process, including carrying out required maintenance when drivers indicate it is necessary. Non-dry dock critical work should be regularly scheduled outside of dry dock to allow sufficient funding and time to focus on unique work required when the ship is out of the water. Conducting non-dry dock critical work creates interferences and delays to dry dock-related work, adding significant and costly time in dry dock. In KUKUI's case, the overhaul of the ship's weight-handling hydraulic equipment, particularly the main buoy handling crane, was the detrimental factor creating considerable delays and costly growth.

While in San Francisco, members of KUKUI's crew fully integrated themselves with the San Francisco and Northern California community. Crewmembers participated in three major community service events: clean-up of San Francisco area beaches, volunteer work at the San Francisco Zoo, and service at the San Francisco Food Bank. Additionally, crew members participated in over a dozen local activities, including half marathons, concerts, tours and numerous other local events. These activities provided a valuable outlet away from the daily grind of dry dock.

KUKUI's presence in dry dock attracted much attention throughout the Coast Guard, receiving visits from the District 14 Commander, Pacific Area Deputy Commander, USCG Chief of Staff, and the Speaker of the House.

At the conclusion of dry dock, KUKUI wasted no time returning to Coast Guard operations. On the first day of her journey home, while passing beneath the Golden Gate Bridge, KUKUI received a distress call from a disabled vessel in danger of grounding on rocks in heavy seas and immediately responded. All in a day's work for the crew of KUKUI.

KUKUI passing under the Golden Gate Bridge on her way home

Locating Submerged, Neutrally Buoyant Sabik Buoys in Port Moller, AK: Sonar is the Key

by LTJG Daniel Seymour and LTJG Jared Cherni, USCGC HICKORY (WLB 212)

If you've ever tried finding a submerged buoy you know how difficult it can be, but imagine if the buoy wasn't resting on the bottom but was neutrally buoyant, floating somewhere in the water column. Last fall, HICKORY traveled to Port Moller in southern Bristol Bay to locate six submerged, neutrally buoyant, Sabik ice spar buoys and remove them from service, and HICKORY's sonar was the key.

A Sabik ice spar when first commissioned

In the fall of 2008, HICKORY replaced six of the eight 2NR and 2CR seasonal buoys in Port Moller with "year round" prototype Sabik SVV-500 ice spars. The buoys developed by the Finnish company Sabik are designed to survive in heavy seasonal ice due to several characteristics. The 28-foot long buoys are constructed with polyethylene plastic hulls filled with polystyrene foam, a design Sabik advertises capable of withstanding static ice pressure, extended submersion below an icepack, and the vibrations of grinding ice. At the top, like an eraser on a 20-inch diameter pencil, sits a waterproof LED lantern. A massive alkaline battery capable of powering the lantern continuously for five years acts as ballast at the base of the buoy. A tilt switch turns the lantern off when ice pushes the buoy over. Inlaid retro, internal radar reflectors, and a three inch diameter lifting tube for use with synthetic slings are additional attributes the manufacturer boasts alongside its 30-year history of weathering ice on the Baltic Sea.

Port Moller is on the north side of the Alaskan Peninsula, opening to Bristol Bay about 240 miles northeast of Dutch Harbor. The waterway experiences 3-knot tidal currents as the 11-foot tidal range empties or fills the roughly 185 square miles of its bays and channels four times each day. Strong winds sweeping off the Bering Sea pound the entrance from the northwest and ice packs into it beginning as early as mid-November. However, once within the entrance there is a great deal of shelter to be found for vessels transiting Bristol Bay and the Bering in the waning days of fall before freeze-up.

Port Moller was a prime candidate to try out the Finnish year-round ice spars. For years, Alaskan buoy tenders had to journey over 800 nautical miles from homeports in Homer or Kodiak to visit it both in the spring for commissioning and then again in the fall for decommissioning. Furthermore, the Kuskokwim, another waterway 250 miles to the north, demanded seasonal attention as well; however, there the buoys are decommissioned nearly a month earlier than the Port Moller buoys in the fall, and a month later in the spring due to the greater concentrations of ice at the higher latitude. Effectively marking both waterways for maximum usage by the mariner meant burning colossal buoy tender resource hours. With nine feet of freeboard providing nominal and radar ranges of four nautical miles year-round, the ice spars seemed like a good solution to the seasonal dilemma. All indications pointed towards fair winds and following seas for the new buoys when they were set in fall 2008.

In May 2009, HICKORY returned to Port Moller to observe how the buoys had survived the icy winter. At first, a couple of the buoys appeared to be missing and the ones that remained appeared to be riding low in the water with only two or three feet of freeboard. At slack tide the missing buoys resurfaced but began sinking again as soon as the additional force of the current began pushing on them. All six Sabik buoys were picked up and examined. All six were found water-logged and with significant hull cracking in and around the lifting tube. Two of the buoy lanterns still functioned but the others had been penetrated by water. Without enough replacement buoys on hand or even in inventory at homeport, HICKORY's best option was to leave the water-logged ice spars in place until the fall decommissioning trip. When HICKORY returned in October, marking the one year anniversary of the prototype buoys, the aids' buoyancy had deteriorated further. Two of the buoys were found permanently submerged regardless of the tidal and current states; three buoys were submerged most of the time but resurfaced with about one foot of freeboard during slack current; and one lone buoy maintained at least a few inches of freeboard at all states of tide.

In order to recover the failed Sabik buoys, HICKORY devised a safe and special way to hook each buoy through the lifting tube and haul them aboard. Using a lifting pennant with a standard buoy reeving device was not an option, even if the buoys were floating at their designed waterline, because neither could fit through the lifting tube that passed through the entire buoy. In the spring, a special Sabik reeving device was used, which was both flexible enough to deform but stiff enough to support and guide an endless sling through the lifting tube like a big coat hanger. However, in the fall with even further diminished buoyancy, the lifting tubes were too far beneath the buoy deck sill to safely reach. To overcome this ob-

A failed lifting tube on a Sabik ice spar

stacle, HICKORY launched the UTL small boat to aid with the mission. The boat crew located the buoys during periods of slack current and a crewmember reeved endless slings and tethered orange fender floats to the buoys, allowing them to be located even when submerged at other stages of tide. This technique allowed HICKORY to approach all but two of the buoys so that a deck rigger could snag the sling with a boat hook and then transfer it to the crane for lifting.

Recovery of the four partially floating ice spars was difficult because the buoys moved erratically in the swift current, perhaps due to instability as a result of being water-logged. They would move approximately ten feet, rapidly swirling side to side as well as submerging and resurfacing repeatedly in a matter of seconds. Comparatively, a 2CR in the same conditions would only deviate by a few feet from its location at max excursion. Once the lifting sling could be fetched up with a boat hook and transferred to the crane whip, vertical control of the unstable buoy was gained. As the buoy was pulled out of the water, a second sling rigged to a cross-deck and passed back through itself to choke around the buoy body was used to establish horizontal control. After the four buoys prepped by the small boat were recovered, attention turned to finding the two missing hulls.

Both of HICKORY's small boats had made exhaustive sweeps of the assigned positions (AP) of both aids during slack water at low tide with no hint of a buoy sighting. Due to the polystyrene buoy filling, HICKORY believed that the hulls were not completely sunk but instead neutrally buoyant and suspended in the middle of the water column. A traditional grapnel drag was too risky. The uncertainty of depth and location of the buoys and mooring chain posed a major threat to fouling the cutter's propeller during a grapnel drag.

HICKORY turned to one of its highly technical but seldom used tools, the side scan sonar, to unlock the problem of determining the submerged buoys' locations. Port Moller's muddy bottom had proven to be good holding ground for the four recovered buoys' concrete sinkers. Assuming that the two missing buoys were also holding on station, HICKORY began by predicting the location of the buoy based on AP, the direction of chain excursion due to current, and the mooring length. Then HICKORY slowly approached this estimated position continuously pinging the water column with sonar until the buoy hull was detected. The difficult part was interpreting the sonar picture and fine tuning the controls to achieve meaningful information. Luckily, LTJG Seymour had spent time learning the finer details of the side scan sonar's operation and had devised sonar interpretation tables prior to the Port Moller trip. The tables were created by looking at the underwater portion of the pier pilings at HICKORY's home berth where the distance away from the sonar sensor and depths were already known. Once a submerged object was found by systematically adjusting the tilt angle of the sonar head, the tables enabled HICKORY's sonar operator to determine the object's depth in the water column and the distance from the ship.

A Sabik ice spar being recovered in Port Moller

Depth and distance to the submerged buoy hull were key data points to recovery with a modified grapnel drag. HICKORY maneuvered so that AP was near the bow and the sonar-pinpointed buoy hull was parallel to the ship and even with the cutter's pilot house. Then the grapnel hook was rigged to three shots of half-inch chain with the bitter end linked to a cross deck. The grapnel was transferred to the small boat, which drove approximately 50 yards away from the cutter at 060 degrees relative. On the ship's command, the small boat released the grapnel with the intent of it sinking to the bottom and laying its attached chain across the submerged buoy's mooring chain. The slack was then taken by the cross deck winch until the grapnel fetched up on the mooring and was drug up along the buoy deck sill. The inhaul winch was then hooked into the section of mooring chain leading to the sinker, which allowed additional mooring chain to be pulled onto the deck and then secured in the hydraulic chain stopper. The section of mooring chain leading to the buoy was hooked into with a second cross deck and hauled across the deck until it could be secured with a pelican hook located on the opposite side of the buoy deck. If necessary, the cross deck could then be moved back to the sill to get another pick of the mooring chain and drag the buoy up onto the deck.

HICKORY demonstrated a true team effort employing a key piece of technology and some really creative rigging solutions to clean up a test of buoy technology that failed to meet the "Alaska Tough" standard.

HICKORY's buoy deck team celebrating mission complete

International Relations: Buoy Tender Style

by ENS Lelea Littlefield, USCGC SYCAMORE (WLB 209)

SYCAMORE makes its way through the unforgiving waters of the North Pacific

The "trip of a lifetime" is what many of SYCAMORE's crew use to describe our 46-day trip across the Pacific Ocean from our small homeport of Cordova, Alaska to Vladivostok, Russia.

In late August, SYCAMORE departed the comfort of our home in Prince William Sound and headed Southwest in support of a conference being held in Asia about international cooperation in the Arctic. While VADM Breckenridge and RADM Colvin were traveling to numerous Russian cities, SYCAMORE and her crew crossed the Pacific preparing for an uncommon mission for a buoy tender: international relations.

The deep waters and strong storms of the North Pacific proved to be quite the opposite of the sheltered waters of Prince William Sound, but SYCAMORE's crew made it through the 40-foot seas and 48 degree rolls unharmed and with some highly trained sea legs. Eventually we began to approach Japanese waters and enjoyed watching the barometer and sea temperature rise. The crew was even lucky enough to enjoy a swim call, a rare treat for a cutter based in Alaska.

SYCAMORE first moored in Yokosuka, Japan in early September, where the crew enjoyed some time at the US Navy base in preparation for the upcoming visit to Vladivostok. Between loading stores and refueling, the crew managed to enjoy some R&R on a Navy base considerably larger than our entire homeport.

SYCAMORE moored up with its international counterparts

The SYCAMORE and Russian soccer teams pose for a photo after the match

After a short transit up the eastern coast of Japan, SYCAMORE crossed the Sea of Japan and made the approach through Russian waters to Vladivostok, the homeport of the Russian Pacific Fleet. While in Vladivostok, SYCAMORE's crew was invited to visit the Pacific Fleet's museum, as well as other monuments in the city which were only recently opened to foreign visitors. During the three-day visit, SYCAMORE offered tours to Russian Border Guard members (the U.S. Coast Guard's equivalent), local and national media, and the public. SYCAMORE also participated in a soccer game against the Border Guard team, managing to lose the game by only seven goals—pretty impressive considering the last time they played a U.S. cutter's soccer team, the final score was zero to 15. On the final night of our short stay in Russia, SYCAMORE hosted a reception for U.S. and Russian dignitaries.

After the very successful visit, SYCAMORE traveled down the western coast of Japan and through the Kanmon Strait to dodge a typhoon. Eventually we returned to Yokosuka to refuel and restock for the return trip. Our second port call in Yokosuka coincided with the Fall Grand Sumo Tournament. Many crewmembers made the one hour trip to Tokyo to attend the tournament and explore the Japanese capital.

After encountering another handful of storms, SYCAMORE arrived on the Aleutian island of Adak, where the crew successfully hunted caribou and explored the abandoned Navy base. The crew worked two buoys in Adak's Kuluk Bay, and then SYCAMORE headed out to work a series of NOAA buoys around the Aleutians. While transiting towards the first of the buoys, the late September weather took a turn for the worse as two low pressure systems converged. SYCAMORE had to abandon the NOAA mission due to the unsafe working conditions, and made a run for the Sound as the weather continued to deteriorate.

SYCAMORE entered the familiar Montague Strait in early October and returned to Cordova on October 12th to flashing headlights, honking horns, and a huge "welcome home" sign that the spouses had lovingly put together. Over the 46 days SYCAMORE spent away from home, 44 pollywogs were inducted into the Realm of the Golden Dragon, many crewmembers visited Asia for the first time, and SYCAMORE had the amazing opportunity to proudly represent the U.S. Coast Guard and support our organization's international relations efforts.

WAMS in Alaska's Frontier

by LT Maureen Johnson, LTJG Kelly Hansen, and BM1 Robert McCormick, District 17

The Waterway Analysis and Management System—whether on a buoy tender or at a Sector or District Waterways Management office, you have probably taken part in (or at least heard of) a WAMS study. District Seventeen has 74 different WAMS study areas; conducting these surveys is exceptionally challenging as the study areas span Alaska's 6,640 miles of coastline (not including islands), or more than three times the entire length of the East Coast's coastline. We often cannot rely on regular means of obtaining user input, such as Local Notice to Mariners entries or press releases, as many waterway users in the remote Arctic region would not be reached by those methods. In 2009, it was decided that in addition to yearly buoy tender patrols, personal visits by LTJG Hansen and BM1 McCormick to several villages would provide the opportunity to truly determine what the aids to navigation needs and navigational concerns are for the waterway users in the Arctic. The visits enlightened us on both current navigation practices and the realities of life and survival in the harshest environment in the United States.

In the quest to light the waterways of a region that experiences several months of darkness (even batteries freeze here!), LTJG Hansen and BM1 McCormick spent two days in Kaktovik on Alaska's North Slope. After long flights on both a regular jet and a tiny prop plane, they arrived in Kaktovik, a small Inupiat village of approximately 300 people in the Alaska National Wildlife Refuge (ANWR) just 60 miles from the Canadian border. Geared up and excited, they set out to survey the local waterway from shore but were promptly stopped dead in their tracks by three words—"polar bear watch." Employing careful risk mitigation decision-making as Coasties to the core, they set to interviewing every customer and employee from the safety of four walls; the education was extensive.

The village of Kaktovik has and will continue to adapt with the climate. The summer of 2009 was the second year with no summer sea ice near shore, resulting in increased vessel traffic despite the rougher sea conditions. Notable increases in sea level and no ice to tame the waves contributed to accelerated erosion rates. This necessitated urgent planning for the relocation of Kaktovik's airport to the middle of Barter Island due to the autumn flooding of the runway. Erosion control projects have been undertaken in the past to

LTJG Kelly Hansen gets input from the local users of one of the waterways in the remote Arctic region

BM1 Robert McCormick works to ensure he gets all the relevant info into his latest WAMS

prevent large sections of the village's 40-foot high oceanfront bluff from collapsing due to wave action; all have failed. While climate change is a topic of discussion around the world, villages such as Kaktovik are feeling the impacts of it first-hand.

After the polar bears moved on, it was time to see the coastline. Again, Kaktovik did not disappoint; documenting an uncharted shipwreck would be the first order of business upon return to Juneau. In fact, the nautical charts in most of western and northern Alaska (with a few exceptions) are outdated and incomplete. In many places, printed soundings are based on leadline data from the late 1800's and early 1900's, that is, if there are any soundings at all. At least twice per year, the village receives barge deliveries of fuel and cargo. Cruise ships and recreational extreme tourist vessels have been making transits through the region with increasing frequency as the summer sea ice retreats. While inaccurate charts are certainly worrisome for maritime visitors to the area, they are not a concern to the local boaters. Residents of these villages have an intuitive connection to their environment and a highly accurate local knowledge of the waterways. The hazards are great for outsiders, however, and multiple hazards to navigation were identified to add as chart corrections upon the team's return home. Limited SAR capability and scarcity of fuel, supplies, and medical care in the region make preventing a boating accident even more critical, as any significant emergency has the potential to overwhelm the capabilities of the village to respond. Our own Coast Guard response resources, primarily based out of Air Station Kodiak, are many hours away even in the best of circumstances. Nonetheless, the people of Kaktovik were excited and yet slightly apprehensive about the Coast Guard; excited that our interest and concern has extended to the far north but apprehensive that rules and regulations incompatible with their way of life would soon follow.

Kaktovik was not the only village we visited on our expedition; we also experienced Prudhoe Bay, Barrow, Point Hope, Kivalina, Kotzebue, Nome, and Bethel. Upon returning to Juneau and the District Seventeen Waterways Management Office, we were faced with numerous new challenges as we began to analyze the information we had gathered. Establishing a new light at Point Hope has been discussed for some time, and the need for an aid was validated by the residents of Point Hope during our team's visit. In addition to typical maritime navigation uses, a fixed light would also provide land navigation assistance to residents who operate snowmachines during the winter darkness.

"Polar Bear Watch!"

Building a tower in the Arctic region presents unique construction difficulties. Typical tower structures can conduct heat into the ground, causing the permafrost under the aid to melt over time. This can lead to instability, leaning, and eventual destruction of the aid. The lack of daylight and extremely cold temperatures in the winter make solar calculations and battery selection extremely problematic. Recent advancements in LED technology have improved our lighting equipment's efficiency enough to make them a viable option for year-round operation despite months of total darkness. Additionally, as many areas may have significant historical or cultural value, we must have any potential building site surveyed by an archeologist to ensure there are no artifacts present. We are also challenged by the sheer distances that operating in this region involves; all equipment will likely be flown to Kotzebue and sling-loaded by CG helicopter to the remote site.

We will face similar challenges for every aid that we establish in this remote and harsh environment. We will continue to test our equipment and refine our processes as we expand our aid constellation in the Arctic. Outreach and communication with local mariners will continue to be essential in order for us to remain connected with our northernmost customers' navigational needs. Villages were universally concerned about the shifting climate, increasing outside interest in the region and what it may mean for their future while rapidly adapting to the immediate problems facing them today. Our greatest accomplishment was developing relationships with expert local mariners. Knowledge gleaned from them will undoubtedly pay dividends as we continue to engage in the Arctic region.

Deception Pass

by BMCS Richard Keefauver, ANT Puget Sound, WA

Deception Pass. The name alone demands respect. The narrow, turbulent channel connects Saratoga Passage Bay with the straits of Juan De Fuca. Heavy weather blows from the west directly into the entrance where Light "1" is located on a cliff some 60' above the water line. Swift currents in excess of 9 knots, coupled with tides that range from +10 feet to -2 feet, make transiting the area challenging, and ATON operations very interesting. Deception Pass has various paths and trails that campers and local transients find alluring, and the bright green dayboards have been targets for vandalism. Last spring, after a discrepancy response visit and finding more vandalism, the ANT called in the experts at the Tongue Point facility to design a new aid that would be less appealing to vandals. Doug Cameron and his crew designed an aid that looks more like a booth that Superman would change inside of. As an added bonus, the tops were made with extremely sharp edges, ensuring that anyone who attempted to climb it would be most likely leaving more DNA than damage.

Preparing to hoist the new aid

This winter after construction, and hours of reconnaissance by Petty Officer Joshua Reeve, the ANT launched out of Deception Pass to rebuild Light "1." Break-in Coxswain Petty Officer Derek Day made some stellar approaches to the sheer rock face and offloaded a crew and around 600 pounds of cargo, including; a generator, a gas powered chop saw, new lighting gear, and a wide range of other ATON supplies. The boat then rendezvoused with an HH60 Jayhawk from Air Station Astoria in a nearby parking lot, and the ANT crew assisted in the hoist ops. From there, the new aid was flown to the location of Light "1," and ANT's DC2 Jared Waring stood by to set the aid into the existing foundation. He and his crew reset the aid and left Light "1" watching properly high above the treacherous waters of Deception Pass.

This new aid assures the future crews of ANT Puget Sound they will have a greater servicing interval, and less to worry about when dealing with this challenging aid. This also serves as an example of the ingenuity, hard work and collaboration involved in the finest mission in the Coast Guard—Aids to Navigation.

Setting the new aid down in the location of Light 1

USCGC ELM Conducts Recovery of Beached Buoy

by ENS James Hollifield, USCGC ELM (WLB 204)

The buoy is pushed to the surf line by a front-end loader to make it easier to tow

Although the crew of CGC ELM often operates just a stone's throw away from shoal water and other dangers while servicing buoys, it is rare to recover buoys from the beach. On Tuesday, January 26, 2010, ELM faced up to the Delaware shoreline 1 nautical mile north of Indian River in an attempt to recover Brigantine Inlet Wreck Lighted Buoy WR2, an aid normally stationed forty miles to the north that went adrift following a nor'easter.

The buoy recovery was initially attempted with shoreside personnel and the cutter's small boats. With the help of Coast Guard Station Indian River and Delaware Department of Natural Resources, a front-end loader pushed the 8X26 into the surf line. ELM's surface swimmer brought a towline from one of the small boats and it was hooked to the buoy. It became apparent the small boat was not powerful enough for the job, and the cutter commenced an approach on the buoy, using the other small boat as a guide for soundings along the route toward the beach. A 15 knot breeze from the west compensated for an along-shore current, allowing the ship to approach on a heading roughly perpendicular to the beach. Once the small boat had connected a line from ELM to the towline already connected to the buoy, a precisely controlled strain was taken on the tow line by using the DPS system offsets. Slowly the buoy was

ELM's small boats conduct soundings and prepare the buoy to be towed

pulled through the surf and out to sea where it and both small boats were recovered.

Lessons learned from this evolution will come in handy…ELM has two other buoys on beaches that will require a repeat of this performance.

A view of the towline from ELM's bow

The deck force watches from the bow as the buoy is towed off the beach

Carolina Beach Sea Buoy Removal

By FN John R. Creighton, USCGC BAYBERRY (WLI 65400)

The crew of BAYBERRY makes the buoy ready for towing

During the month of January 2010, a 12,100 pound 8x26 LWR broke free of its mooring and washed ashore on Carolina Beach, North Carolina. Removal of the aid was achieved through a joint effort between CGC ELM (WLB 204), the unit with primary responsibility for the buoy, and CGC BAYBERRY (WLI 65400). The ELM is homeported at CG Sector North Carolina, Atlantic Beach, North Carolina. The BAYBERRY is homeported at CG Station Oak Island, Caswell Beach, North Carolina. The BAYBERRY serves as a secondary unit for the ELM.

The sea buoy had become an issue of concern for the residents of Carolina Beach. Some considered the 26-foot aid an eyesore. Safety had also become a concern. Local children had discovered the buoy and took pleasure in playing on and around the aid. The buoy sat on the beach for upwards of two months as the ELM had spent most of January and February conducting LE missions off the coast of New England.

Plans were made between the two units to remove the aid on March 10, 2010. The beached aid garnered much media attention. Two local news crews were on hand for the evolution. The BAYBERRY crew arrived on scene shortly after 1300 and began prepping the buoy for removal. As soon as the crew arrived, many residents came down to the beach to observe the progress. Bridles were removed by hand. Chain was cut to remove the swivel. During the buoy prep the ELM deployed two small boats, ELM1 and ELM2. They took soundings of the area approximately 300 feet from the shoreline. Once the area was deemed safe for the evolution, the 225-foot CGC ELM maneuvered within 600 feet of shore. ELM2 positioned itself and fired a shoulder line throwing gun onto the beach. ELM then passed a towline to ELM1, which was attached to the heaving line on ELM2. The crew of the BAYBERRY subsequently heaved the towline onto the beach. The crew rigged the line to a split-key shackle on the buoy's tower, secured the area, and notified the ELM she was free to commence towing operations. The ELM pulled the towline to a heavy strain. The aid slowly tilted upright and came about, splashing into the ocean. The buoy showed no signs of flooding as it smoothly made its way into the wa-

ter. The mission was deemed a success by all who observed and took part in the evolution. Great coordination and teamwork was displayed between the two units.

BMC Christopher Groom, OIC CGC BAYBERRY, and BOSN2 Ryan Taylor of the ELM were in contact via radio for the duration of the evolution, ensuring the safety of all members involved.

The crew of BAYBERRY complete preps before ELM tows the buoy

The BAYBERRY is a unique ATON unit. The cutter, built in 1954, is a 65-foot WLI, but also has a 26-foot TANB and an 18-foot shallow water skiff. BAYBERRY's AOR stretches from Bogue Sound to Little River, and has primary responsibility for 534 aids to navigation. This is the highest number of aids for any cutter in the Coast Guard with the exception of the District 9 WLR class river tenders. Both the BAYBERRY and the ELM appreciate the concern and patience of the residents of Carolina Beach.

ELM tows the buoy safely back into water

USCGC TACKLE Breaks Out Vessels in Need

photos contributed by BMC Jesse Deery, USCGC TACKLE (WYTL 65604)

Below are photographs of USCGC TACKLE (WYTL 65604) conducting a recent direct ice-breaking assist for the tug Alton A. II on the Penobscot River. Alton A. II was halted by the ice on their way to Bangor, ME to meet their barge. TACKLE broke a path and escorted both the tug and barge out of the river the following week. Thanks very much to TACKLE's OIC, BMC Jesse Deery, for submitting these great shots!

Programming Covers for Carmanah Lanterns

by Jon Grasson, CG-432A

Prompted by local Coast Guard units, a company in Rhode Island has designed and is marketing a novel cover for use with Carmanah self-contained LED lanterns. As you know, to successfully program the lantern it must be transitioned from day to night or vice-versa. Once transitioned from a well lit room or outside to night by fitting the cover over the lantern, a Velcro flap is opened, allowing you to program the lantern via the remote control.

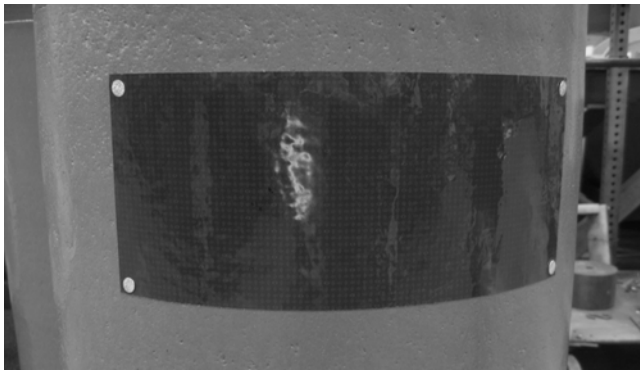
There are currently two sizes; small for the 701 and 701-5 lanterns, and large for the 702, 702-5, and 704-5. They are designing a cover for the 708 which will be even larger. Current pricing is $65 for the small and $68 for the large. They do take credit card orders. Covers are available from:

Fit 'N' Stitch, Inc
3666 Quaker Lane
North Kingstown, RI 02852
401-294-3492

Nail Down that Retro

by CWO4 Scott Dawes, CG-432

Ever since ionomer foam buoys have been used by the Coast Guard, there have been difficulties with retro reflective tape adhering to the buoy's surface. While the surface of a foam buoy is relatively smooth, minor inconsistencies and fluctuations in the foam caused by temperature are enough to make retro application a recurring problem. Over the years, numerous types of reflective tape and adhesives from several different companies have been tried. None have quite held up to the rigors of buoy life.

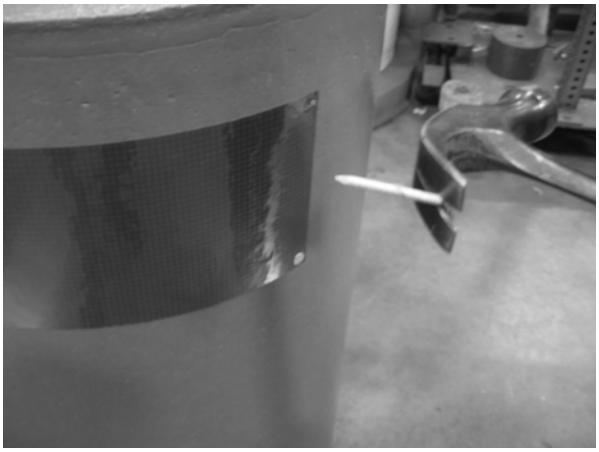


The Gilman Corporation (the sole provider of foam buoys to the Coast Guard since 1979) has fought this battle tooth and now nail. For the past few years, the company has been using aluminum roofing nails to hold down the corners of retro panels on the buoys that they sell to the commercial market. They have received outstanding feedback from their customers regarding the "nail method" of retro application.

The idea is basically the same as using a big push pin in a bulletin board. The nails that Gilman uses are 1.75" x .145" Ring Grip. These aluminum nails are easy to put in and remove and take much less time to install compared to using adhesives. A standard claw hammer can be used for installation and removal, and a flathead screwdriver also works well for removal. Nails can be used over again, either in the same hole or a new one. Since the nails are aluminum, they are lightweight and will not rust and discolor the retro panel.

New buoys from Gilman will start being delivered to the Coast Guard using this method of securing the retro. In addition, field units are authorized to use this method for retro application on existing buoys (color panels and numbers/letters).

For questions or comments, please contact CWO3 Scott Dawes at 202-475-5620, or scott.t.dawes@uscg.mil.



Managing Waterway Risk and Performance: The Navigation Risk Matrix

by CDR John Kennedy, USCGC ELM (WLB 204)

Managing and facilitating navigational safety and efficiency are interrelated functions spanning numerous Coast Guard and interagency missions. A risk assessment matrix provides a systematic means of defining and balancing performance objectives and implementing effective controls to guard against threats. It also forms a management lexicon for engaging waterway stakeholders. The tactical Coast Guard does this regularly for "in-house" evolutions by using the "GAR" (green-amber-red) risk assessment model. Applying this strategy to waterway management can help Captains of the Port and other waterway managers best focus their efforts to enhance safety and efficiency goals and partnerships with waterway stakeholders.

Identifying the best categories or variables to assess is central to any matrix. The seven variables listed below are intended to capture the typical risk areas to navigation safety and efficiency that occur in most waterways. A means of scoring the risk is also provided. For those with a statistical interest, the scores are ordinal, i.e. a "ten" is not ten times the value of a "one."

Risk Factor Variables and Scoring

ATON Links the ability of the Aids to Navigation system to reduce the risk of collisions, allisions, and groundings and facilitate the efficient flow of commerce. ATON discrepancies increase risk to these goals, and are scored relative to their Discrepancy Response Factors (DRF) as follows:

- "Deferred" discrepancies receive **one point** each
- "Routine" discrepancies receive **two points** each
- "Priority" discrepancies receive **three points** each
- "Immediate" discrepancies receive **four points** each

Hazardous Vessel Movements Used to ascertain the risk of petro-chemical, explosive, or similar cargoes that pose significant health or environmental damage from a collision, allision, or grounding. Scores reflect the size and handling characteristics of the vessels involved and the number of transits per day.

- **Two points** for each hazardous vessel movement.
- **Additional five points** for each "yes":
  - Vessel does not have a harbor pilot during all points of the transit
  - Vessel 25% or more greater in draft, beam, or length than the average merchant vessel using the waterway
  - Vessel not double-hulled

Navigation Restrictions Used to ascertain risk of events that limit using the entire channel for navigation.

- **One to five points** for each event
  - Permitted parades and related events generally afforded a safety BNM or inclusion in the LNM
  - Dredge, underwater survey, or construction activity in or directly adjacent to the channel
  - Shoaling encroaching into the channel
  - Other events that can hamper navigational safety

Security Op Neptune Shield or MSRAM (Maritime Security Risk Assessment Matrix)-related events that pose a particular risk to navigation safety, or loss of mobility efficiency. **One to ten points.**

Traffic Density Large vessel two-way traffic evolutions: **one to ten points.** A two-way traffic evolution is when vessels meet in the channel. This is a holistic assessment factoring in aggregate vessel meetings and weighing them against risk factors (i.e. a channel with many turns and no ranges would likely have a higher risk than one with mostly straight-aways with ranges showing the centerline and/or sides of the channel).

Weather and Environmentals **One to ten points** for each of the following.

- High predicted current velocities, flooding run-off, or other water releases (i.e. dam outflows, spring tides) that pose unplanned changes to current velocities
- Low (or high) water levels that impact navigation (relative to user vessel drafts)
- High winds
- Ice
- Fog/restricted visibility

VTS (Vessel Traffic System) (If equipped).

- System degraded (watchstander experience or manpower shortage, equipment inoperative, policy/doctrine deficiencies): **one to ten points.**

Is the Waterway Green, Amber, or Red?

Given the unique nature of each waterway, and the variances in control measures available to them, it is envisioned that each waterway manager determines their respective "Green," "Amber," and "Red" thresholds. Similar to the Coast Guard's Operational Risk Management doctrine, "Green" signifies continuing with operations as planned; "Amber" requires the consideration of adopting procedures to minimize risk; "Red" denotes the need to implement risk reduction measures prior to operations proceeding. Many risk mitigation strategies are available to waterway managers including restricting traffic flow (i.e. one-way traffic only), requiring additional pilotage or tug escort, closing the channel to traffic for certain size vessels, and providing additional temporary aids to navigation.

Waterway Risk Matrix Example

Situation: It is the July 4th weekend and Norfolk Harbor and the lower Chesapeake Bay are humming with activity. In addition to the normally scheduled twelve deep-draft movements through these channels (including two tankers, one of which is not double-hulled), additional events include a fireworks show bordering the main ship channel, the dead-ship movement of an unmanned Military Sealift Command vessel, and an aircraft carrier deployment just before sunset.

High humidity and above-normal temperatures make morning fog a 60 percent probability. Evening thunderstorm activity is predicted at 50 percent, with visibility restricted to 1NM in thunderstorm squalls. There are three ATON discrepancies: an extinguished range light with a "Priority" DRF, an extinguished light on a buoy that is "Deferred," and a destroyed steel-pile structure that is "Immediate."

The channels in the waterway are generally straight and very well-marked. Special hazards include bridge tunnels underneath the main ship channels. Although there is no CG VTS service in these channels, the MD/VA Pilot Authority operates a radar-equipped control center that monitors traffic; pilotage from the Bay entrance on in is compulsory.

A notional Green/Amber/Red threshold for the main ship channels in the Norfolk/Hampton Roads/Lower Chesapeake Bay is:

0-30: Green
31-40: Amber
41+: Red

The following is a sample scoring of this scenario and proposed mitigation actions:

****_EXAMPLE_** LOWER CHES BAY MAIN NAVIGATION CHANNELS**
DAILY RISK ASSESSMENT FOR 4 JULY **_EXAMPLE_**

Risk Factor	Scoring Parameters	Score	Notes
ATON	*Deferred* = 1 pt *Routine* = 2 pt *Priority* = 3 pt *Immediate* = 4 pt	**8**	**ANT coordinating with divers to remove downed structure & mark with temp buoy. ANT relighting range. Revised score will be lower once these ATON corrections are completed.**
Hazardous Vessel Movements	*2 pts ea vsl movement. 5 add'l pts if*: -No harbor pilot -draft/beam/length > 25% waterway avg. -No double hull	**7**	**Tug will be standing by single-hulled tanker during its transit up Thimble Shoal Channel/Elizabeth River to Craney Island.**
Navigation Restrictions	*1- 5 points for*: -Permitted events -Dredge & u/w work -Shoaling -Related nav events	**7**	**Fireworks show restricted to area 100 yds outside marked channel; enforced by STA Portsmouth. Dead ship movement to occur in morning during scheduled deep-draft traffic lull.**
Security	*1-10 pts* for ONS or MSRAM events hampering nav safety or efficiency	**7**	**USN CGN afforded full ONS force laydown (aircraft carrier will be escorted by CG assets supporting Op Neptune Shield).**
Weather and Environmentals	*1-10 Points for:* -Elevated current vel. -Water levels -Ice -Low Visibility -High winds	**5**	**MD/VA Pilot radar and observation tower fully operational and briefed on the weather & overall traffic and cargoes for the day.**
Traffic Density	*1-10 points*	**3**	
VTS (if equipped)	*1-10 points*	**N/A**	
TOTAL		**37**	**AMBER**

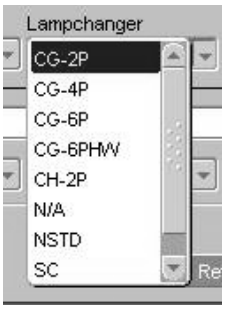
Conclusion

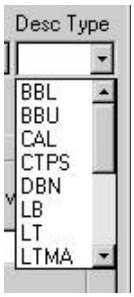
A matrix is no substitute for good judgment and a thorough understanding of the performance and risk drivers for a waterway. However, it can improve decision-making transparency and repeatability, and enhance management synergy among Coast Guard and interagency stakeholders.

I-ATONIS and AAPS "LOV's/Pick Lists/Drop Downs"

by Marie Sudik, NAVCEN

You have heard them called many things, "pull down menus," "pick lists," "drop downs," "LOV's" (abbreviation for List of Values)—they look like this in I-ATONIS and AAPS:





We know you'd like them updated more often. It's relatively easy to update these values in I-ATONIS. However, updating AAPS is not as straightforward. If the values in I-ATONIS and AAPS do not match, this can create a problem. Your daily import/export of data will result in ATONIX errors and data corruption.

When we release a new version of AAPS, we try to roll any LOV changes to I-ATONIS at the same time. It is up to the ATON unit to update their LOV's in AAPS.

LOV Processing

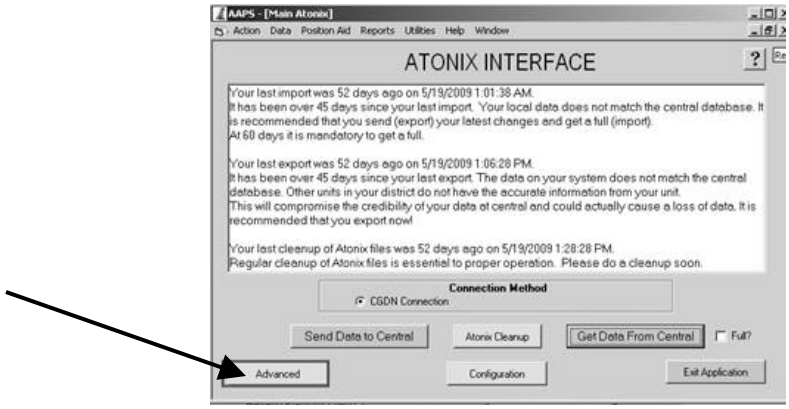
When your ESU updates your AAPS version (AAPS 5.4 to AAPS 5.5), you are notified (in the CGMS message) to "import a new LOV file." Here is a sample from a recent message:

> 10. OSC-MARTINSBURG HAS CREATED AN UPDATED FILE FOR THE LIST OF VALUES (LOVS) LOCATED WITHIN AAPS. LOVS ARE USED TO POPULATE PULL-DOWN MENU CHOICES WITHIN VARIOUS DATA ENTRY FIELDS. THE LOV FILE CAN NOT BE IMPORTED UNTIL AAPS 5.5 IS INSTALLED.
>
> 11. TO IMPORT THE NEW LOV FILE: START AAPS 5.5, CLICK THE ADVANCED BUTTON, CLICK GET AND PROCESS LOVS. THE PROCESS WILL TAKE A FEW MINUTES TO COMPLETE.
>
> 12. ALL UNITS ARE REQUIRED TO IMPORT A NEW LOV FILE AFTER ANY AAPS 5.5 INSTALL AND/OR FULL IMPORTS FROM THE CENTRAL DATABASE.

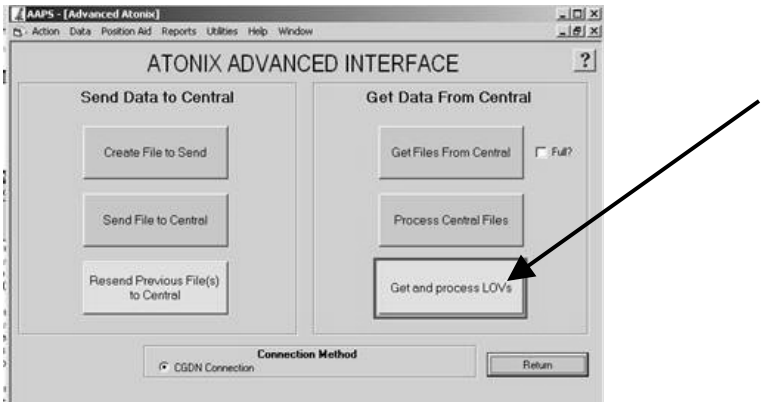
Get in the habit of importing new LOV's once per month. If ATON units perform this process on a regular basis, then we can update the LOV's more regularly. Make it a point to import LOV's as close to the first of the month as possible; when you are importing or exporting data, take the time to "process the LOV's".

Follow These Steps

To access the LOV update tool, CLICK the ADVANCED button on the ATONIX interface page:



Next, CLICK "Get and Process LOVs." The LOV updates will be automatically applied. CLICK RETURN to go back to the main ATONIX page to exit the application.



This will ensure that the LOV's in I-ATONIS and AAPS match, and thus will minimize ATONIX import/export errors.

Other LOV FAQs

How do I get a new value added to the list?

Headquarters staff (CG-5531) approves new values. Coordinate through your chain of command to determine the reasonableness of your new LOV suggestion. There are two methods to seek approval for a new value. First, request a new value via CG-5531. Their current POC is ENS Christina Neiss. A second way is to enter a suggestion via an OSC Customer Support ticket HTTP://CSD.OSC.USCG.MIL. These will be forwarded to HQ staff.

Where do LOV choices come from?

Unfortunately, the answer is "It depends." Some are derived from guidance in the ATON Admin Manual. Others are determined by areas outside the ATON community; for example, CEU staffs developed the structure choices. Others are derived from approved equipment lists from CG-432's products website, http://www.uscg.mil/hq/cg4/cg432/products.asp.

Why do we have to keep old values around?
I-ATONIS maintains some historical data. Batteries and discrepancies are examples of data that are kept in the database as long as the related aid exists. If at some point the battery type changed, the old battery type must still be maintained in the database for historical purposes. Or, if we decided to remove a certain "malfunction or cause" reason from the discrepancy records, corrected discrepancies may still exist in the database with the removed cause or malfunction. We must leave those values in the drop down choices. In this latest round of LOV updates, we tried something new to help the user. We added the word "OBSOLETE" to battery models that are no longer in use, but must remain in the drop down because of historical purposes. Hopefully, this will remind the user that a value that includes the word "OBSOLETE" is no longer in use and should not be chosen.

Full AAPS Imports vs. Partial Imports

by Mark Hiet, OSC Martinsburg

The basis for your AAPS program starts with importing a full database. When this process takes place, users will start with no ATON data and List of Values choices that were available when the AAPS program was first certified by TISCOM (most likely outdated). A Full database import is a snapshot in time from the Central I-ATONIS database broken down to your specific ATU. After completing a Full import, units are required to keep up-to-date with partial imports. A partial import is a daily snapshot of time; although a partial import can contain data that has been updated at any date previously. An example of this would be a cutter who was underway for the last 30 days making data changes. Upon transmitting their data to the central database, the partial export created the very next day would contain all the updated records up until the last time the unit exported. A full database import does take some time; the length of time varies by district and computer. There is a system-imposed time limit of 60 days that a unit can go without performing partial updates. If a unit's database goes 60 days without updating data, it will need a full import.

There are many reasons why you must import a full database more often than once. First, OSC often performs mass data updates. For example, OSC has changed all outdated group names in a district to sector names.

A second reason involves a new computer, a new image, or an update to the AAPS program. Before making any of these changes, you should export data from all of your existing computers, before any updates are applied, and perform a full import on all new computers/newly imaged computers/upgraded computers the very next day. This will guarantee that all computers have the same set of starting data.

A third reason to import a full database is when something is not right with your data. Perhaps a change was made that for some reason did not get into your system. Anytime you suspect data integrity issues, export from all computers and conduct a full import the next day.

Whatever the reason you perform full imports, always make sure you immediately perform a List of Values update through the AAPS ATONIX Advance menu option.

Fixing a Jumpy Mouse

by BM1 R.C. Patten, NATON School

The dreaded Jumpy Mouse—this is a problem that you may encounter on your Toughbook when using AAPS. Suddenly your mouse isn't controlling the cursor, which is running all over your screen for no apparent reason. Many of you have experienced it; some of you have managed to avoid it, but you may find yourself faced with it one of these days. Unfortunately, since the upgrade to Image 6, the fix that follows must be done by someone with **Administrator** privileges.

First, do the following **before** the jumping commences. This will help you once the JM hits.

- Click "Start" – "Control Panel"
- Double-click "Mouse"
- Choose the "Hardware" tab
- Make a note of the mouse or mice listed. You may want to p-touch this information somewhere on your Toughbook.

Take the following steps once the cursor is running and you think you might lose your mind:

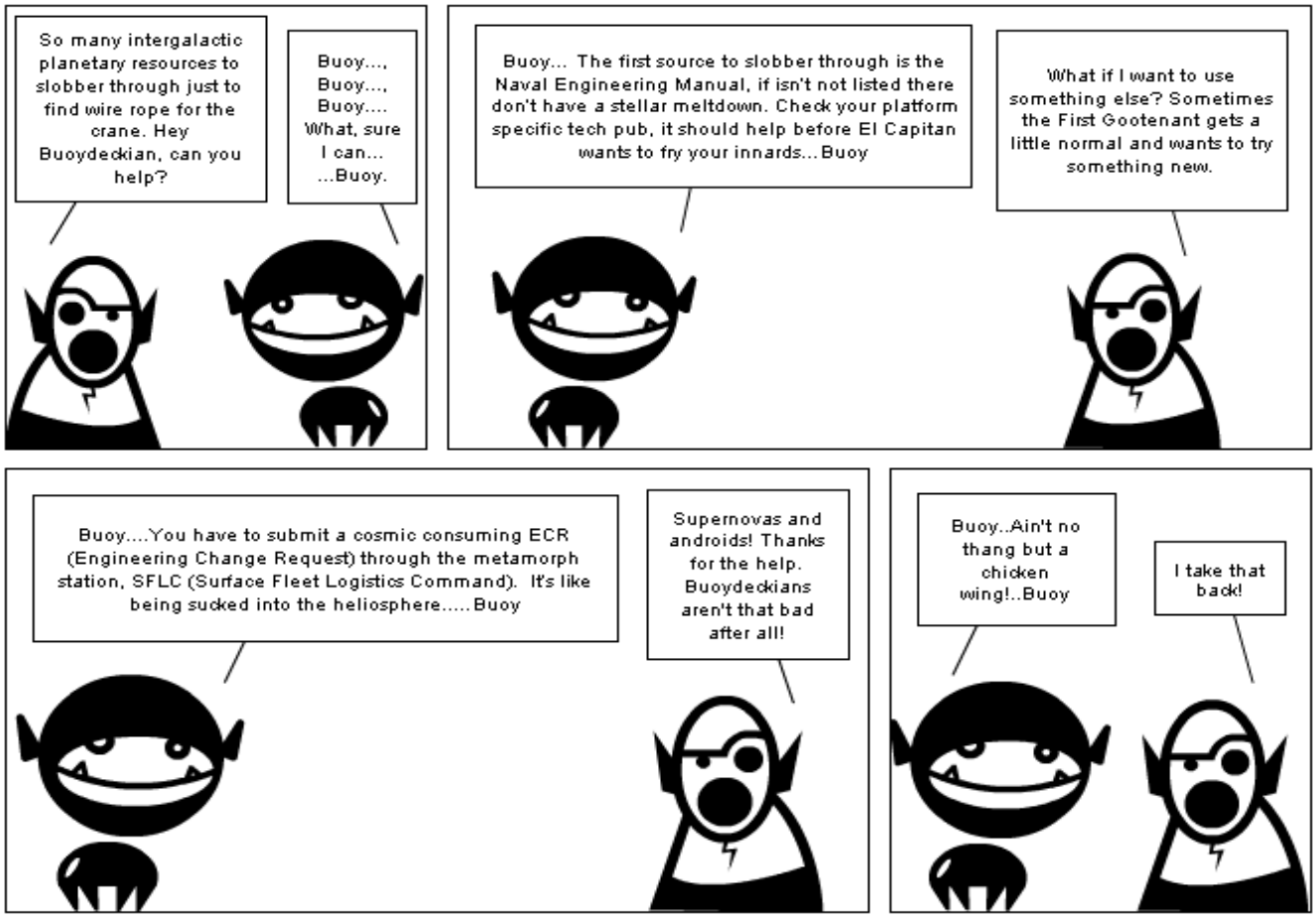
- Disconnect the feed from the DGPS. The jumping should cease.
- Perform the first three steps of the previous section.
- There will be a mouse listed that is not supposed to be there.
- Double-click on the offender.
- Under the "General" tab, you will see a "Change Settings" button.
- Now someone with Administrator privileges has to log in and disable the mouse that is not supposed to be there.
- Click "OK" and/or "Apply" until you are out of the "Mouse" menu.
- Close the "Control Panel" window.
- Reconnect your DGPS feed.

Once you've gone through this process, you should be good to go. If you don't have someone with Administrator access handy, sometimes if you disconnect the DGPS feed, reboot the computer, reopen AAPS, and reconnect the DGPS feed you will be able to kick the Jumpy Mouse.

A brief note: Generally, JM will only set in if you turn on your DGPS receiver BEFORE you open AAPS. If you keep your receiver off until after you open AAPS, you should be safe from the Jumpy Mouse. This, however, is more of a rule of thumb as opposed to a hard and fast rule.

THE CHRONICLES OF NATONIA!

by BM1 Jennifer Zercher, NATON School



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