APA VIEWS ON AUTONOMOUS SHIPS

The APA has been very active the last few years in the discussions of so-called autonomous ships. We have devoted considerable time and resources both in this country and abroad participating in the examination of the prospects and challenges involved in unmanned ships.

Much of what is publicized today about autonomous ships is over-hyped. For a host of reasons, including technological, cybersecurity, operational, and economic challenges, it will be many years, if at all, before unmanned ships, whether remotely controlled or fully autonomous, are crossing the ocean and moving in U.S. pilotage waters. It is telling that the push for unmanned ships does not come from existing ship operators, but rather from technology vendors, academics, and a handful of coastal government authorities from northern Europe. The well-touted projects that are currently being planned are all short-voyage operations with small vessels on internal, controlled-access waters.

Despite the unlikely prospects for ocean-going unmanned ships moving in U.S. pilotage waters in the near— or even mid-term, the current pursuit of such operations raises three major concerns for APA-member pilots.

First, the underlying communication and navigation technologies that are believed to make unmanned ships possible have been evolving for many years. They are already on many manned ships, and pilots have had to adjust their practices to take advantage of the new technologies that are beneficial and to deal with those that are not. Today's ships are heavily automated and increasingly connected to shore. Pilots have stayed ahead of this trend, but it requires considerable continuing education and training as well as a professional commitment to staying current with navigation technology and practices.

Second, if the future development of shipboard equipment and systems will be driven by the ultimate goal of unmanned operation, pilots will need to be engaged in the development process to ensure that tomorrow's navigation technology and practices will nevertheless facilitate, rather than frustrate, the work of pilots, as is required under SOLAS Chapter V, Regulation 15.

Third, even if we never see an unmanned ship in U.S. pilotage waters, current efforts to change international maritime regulation to accommodate autonomous shipping could have profound effects on the navigation -- and pilotage -- of manned ships. The International Maritime Organization (IMO) is currently engaged in a "Regulatory Scoping Exercise" (RSE) for "Maritime Autonomous Surface Ships" (MASS). This is the first step in a process of identifying and amending all IMO instruments (e.g., COLREGS, SOLAS, STCW, Load Line Convention, etc.) that might prevent or impede in some way the introduction of MASS.

Pilots are understandably concerned about any effort to construct a new international regulatory regime for ship operations, even one ostensibly limited to autonomous or unmanned ships. The existing collection of IMO instruments work together to establish a well-known, well-understood safety system that has been developed over many years. Tampering with a large number of selected provisions in the different instruments is bound to have unintended consequences – at best. APA’s efforts at the IMO are directed at ensuring that the RSE and follow-on projects do minimal damage to the regulatory environment in which pilots operate.

The piloting profession has a special reason to be concerned about the RSE and what will follow it. Several countries and autonomous shipping enthusiasts have already complained that compulsory pilotage requirements will hamper unmanned or remotely controlled vessel operations. They have proposed that the IMO exert control over pilotage, through an international system of pilotage exemptions and other measures, to prevent port state interference with unmanned ship operations. We are confident that this will not happen. Such an intervention would be contrary to the longstanding IMO policy, currently stated in Resolution A.960, of not becoming involved in the pilotage systems maintained by member countries.

APA will continue to closely monitor and participate in the IMO’s RSE and other relevant international and domestic efforts related to autonomous shipping and other automation-related technology.
APA PARTICIPATES IN NCSR SUBCOMMITTEE

The IMO’s Sub-Committee on Navigation, Communications, and Search & Rescue (NCSR 6) held a meeting from January 16-25 in London. Paul Kirchner, APA Executive Director – General Counsel, and Bill Cairns, APA Navigation Technology Director, participated as members of the US delegation.

The NCSR 6 issues most relevant to pilots continue to be the Guidelines for the standardization of user interface design for navigation equipment (i.e., S-Mode) and the Maritime Service Portfolios (MSP).

The S-Mode guidelines were agreed by NCSR 6 and will go to the Maritime Safety Committee (MSC) for approval. The guidelines apply to Integrated Navigation Systems, Electronic Chart Display & Information Systems and radars. The intent of the guidelines is to improve standardization of the user interface (e.g., icons, hot keys, symbols, etc.) and information used to monitor, manage and perform navigational tasks.

NCSR 6 also agreed on guidance on the format and structure of MSPs. This guidance, which must be approved by MSC, lists the details of the previously approved 16 maritime services, of which pilotage service is one. Known as MS6, the guidance on pilotage service (i.e., the communication needs of pilotage services) remains under control of IMPA as its “coordinating body.” IMPA “ownership” of the details in this service has been a goal of APA and IMPA from the outset as the MSP took shape. Pending the likely approval by MSC in June, IMPA’s coordinating role for MS6 will be cemented.

The IMO issued a news release announcing that World Maritime Day 2019 will be celebrated at IMO Headquarters on September 26th. The theme for this year’s events is “Empowering Women in the Maritime Community.” According to the IMO news release, this year’s event and its theme, “provides an opportunity to raise awareness of the importance of gender equality, in line with the United Nations' Sustainable Development Goals, and to highlight the important - yet under-utilized - contribution of women within the maritime sector.”

The release goes on to say that the theme gives IMO the opportunity to work with various maritime stakeholders towards achieving the goal of “fostering an environment in which women are identified and selected for career development opportunities in maritime administrations, ports and maritime training institutes and to encourage more conversation for gender equality in the maritime space.”

IALA CHOOSES THEME FOR FIRST WORLD AIDS TO NAVIGATION DAY

At its 13th session, held in May 2018, the IALA General Assembly decided to establish and celebrate “World Marine Aids to Navigation Day” on July 1st each year. IALA was founded on July 1, 1957.

The principal objective of this day of recognition is to promote greater awareness of IALA and its work by bringing to the attention of the wider public the role of Marine Aids to Navigation and the significance of IALA’s technical work in enhancing the safety of navigation worldwide.

IALA solicited proposals for a theme for the inaugural World Marine Aids to Navigation Day. APA proposed “Emphasizing the Human in the Future of Marine Aids to Navigation” as a theme, to stress the importance of the interaction between technology-based shipping and more traditional human-based shipping.

The various proposals that were submitted to IALA were introduced to the IALA Council at its 68th session in December 2018. During this meeting, the IALA Councilors unanimously approved “Marine Aids to Navigation – Successful Voyages, Sustainable Planet” as the theme for the first World Marine Aids to Navigation Day.
The Democrats winning control of the House of Representatives following the November 2018 elections has led to big changes for the upcoming 116th Congress, including changes to a subcommittee of significant importance to pilots. See the chart below.

The new chairman of the Coast Guard and Maritime Transportation (CG&MT) Subcommittee is Rep. Sean Patrick Maloney of New York. Chairman Maloney represents New York’s 18th Congressional District, which is near the Hudson River.

There is also a new Ranking Member of CG&MT, Rep. Robert Gibbs of Ohio. Mr. Gibbs’s District (Ohio’s 7th District) borders Lake Erie.

Both Mr. Maloney’s and Mr. Gibbs’ Congressional Districts have a maritime connection, and both Congressmen have had dealings and interactions with APA-member pilot groups.

CG&MT, a subcommittee of the House Transportation and Infrastructure Committee, has oversight of the Coast Guard, shipping and merchant mariner issues.

### 116th Congress - House Subcommittee on Coast Guard and Maritime Transportation

**Democrats**
- Sean P. Maloney (Chairman), New York
- Elijah E. Cummings, Maryland
- Rick Larsen, Washington
- Stacey E. Plaskett, Virgin Islands
- John Garamendi, California
- Alan S. Lowenthal, California
- Anthony G. Brown, Maryland
- Chris Pappas, New Hampshire

**Republicans**
- Robert P. Gibbs (Ranking Member), Ohio
- Don Young, Alaska
- Randy K. Weber, Sr., Texas
- Brian J. Mast, Florida
- Mike Gallagher, Wisconsin
- Carol D. Miller, West Virginia

### GOP MAKES BIG CHANGES TO SENATE COAST GUARD OVERSIGHT SUBCOMMITTEE

While the 2018 elections saw the Republicans increase their majority in the Senate, the GOP leadership has made significant organizational changes to how maritime and Coast Guard issues will be overseen.

In January, Senator Roger Wicker (R-Miss.), Chairman of the Senate Committee on Commerce, Science, and Transportation (CS&T), announced major modifications to the CS&T subcommittee structure. Wicker said, “In an effort to exercise oversight more effectively, the six subcommittees have been reconfigured.”

The six reconfigured subcommittees include a new Subcommittee on Security (see chart below), which will have oversight and legislative responsibility for the Coast Guard, Maritime Administration, Federal Maritime Commission and other navigation, shipping, and merchant mariner issues.

The leadership of the Security Subcommittee both hail from maritime States. The Chairman is Senator Dan Sullivan of Alaska and the Ranking Member is Senator Edward Markey of Massachusetts.

### 116th Congress - Senate Subcommittee on Security

**Republicans**
- Sen. Dan Sullivan (Chairman), Alaska
- Sen. Marsha Blackburn, Tennessee
- Sen. Roy Blunt, Missouri
- Sen. Ted Cruz, Texas
- Sen. Deb Fischer, Nebraska
- Sen. Ron Johnson, Wisconsin
- Sen. Mike Lee, Utah
- Sen. Rick Scott, Florida
- Sen. Todd Young, Indiana

**Democrats**
- Sen. Edward Markey (Ranking Member), Mass
- Sen. Richard Blumenthal, Connecticut
- Sen. Tammy Duckworth, Illinois
- Sen. Amy Klobuchar, Minnesota
- Sen. Jacky Rosen, Nevada
- Sen. Brian Schatz, Hawaii
- Sen. Kyrsten Sinema, Arizona
- Sen. Tom Udall, New Mexico
CHRISTMAN ASSISTS NAVY AT RADAR WORKSHOP

In January, Captain Beth Christman, Association of Maryland Pilots, attended the U.S. Navy’s Next Generation Surface Search Radar (NGSSR) Display Working Group (DWG) at the Ultra Electronics Facility in Chantilly, Va.

The intent of the workshop was to discuss “buttonology” for the NGSSR ARPA/ECDIS display. In addition to Captain Christman, attendees included representatives from the shipping industry, as well as operational and research Navy personnel.

The participants were given an overview presentation on the display in its present form and went through mockups and screen captures of the ARPA/ECDIS display in a lab. Presently, the Navy intends to have menus and features controlled by a mouse with right and left click functionality and a keyboard. The attendees provided feedback, which generated a “punch list” for the software engineers.

The Navy is still in the process of firming up their display requirements and is expected to have that complete in the next few months, then move into the next phase of testing.

The coordinator for the Navy offered the following to the APA, “Captain Christman was invaluable in the Navy ARPA discussion. Having the commercial experience with her level of expertise was a fantastic contribution in the development process.” The APA adds our thanks to Captain Christman for her efforts with our U.S. Navy colleagues.

NOAA MAKES IT EASIER TO REPORT CHART ERRORS

NOAA has released a program called “ASSIST,” a new system for submitting questions and reporting nautical chart errors to NOAA’s Office of Coast Survey. ASSIST has a mobile-friendly design and improved user interface that allows customers to access the system conveniently from any device. This new tool replaces Coast Survey’s Inquiry and Discrepancy Management System (IDMS), a database that collected nearly 20,000 comments, inquiries, and discrepancy reports since 2008.

ASSIST offers new features including the ability to: “tag” a submission on a NOAA chart, enter reports from a mobile device, and report an error using a single form. These improvements should allow allowing more efficient responses to customers.

ASSIST is available from: www.nauticalcharts.noaa.gov/customer-service/assist/

NTSB ISSUES 2019-2020 “MOST WANTED LIST”

On February 4, the National Transportation Safety Board (NTSB) announced its 2019–2020 “Most Wanted List” of Transportation Safety Improvements, during an event held at the National Press Club.

According to an NTSB press notice, the NTSB Most Wanted List of Transportation Safety Improvements was first issued in 1990 and “serves as the agency’s primary advocacy tool to help save lives, prevent injuries, and reduce property damage resulting from transportation accidents.”

The 10 items on the NTSB’s 2019 – 2020 Most Wanted List of Transportation Safety Improvements are:

- Eliminate Distractions
- End Alcohol and Other Drug Impairment
- Ensure the Safe Shipment of Hazardous Materials
- Fully Implement Positive Train Control
- Implement a Comprehensive Strategy to Reduce Speeding-Related Crashes
- Improve the Safety of Part 135 Aircraft Flight Operations
- Increase Implementation of Collision Avoidance Systems in All New Highway Vehicles
- Reduce Fatigue-Related Accidents
- Require Medical Fitness – Screen for and Treat Obstructive Sleep Apnea
- Strengthen Occupant Protection

“The 2019 – 2020 Most Wanted List advocates for 46 specific safety recommendations that can and should be implemented during these next two years,” said NTSB Chairman Robert Sumwalt. “It also features broad, longstanding safety issues that still threaten the traveling public.”

Sumwalt issued a call to action during the press conference saying, “We at the NTSB can speak on these issues. We board members can testify by invitation to legislatures and to Congress, but we have no power of our own to act. We are counting on industry, advocates, and government to act on our recommendations. We are counting on the help of the broader safety community to implement these recommendations.”

The complete Most Wanted List is available at: www.ntsb.gov/safety/mwl/Pages/default.aspx
APA SUBMITS COMMENTS ON PROPOSED MERCHANT MARINER MEDICAL MANUAL

On February 13, APA submitted detailed comments on the Coast Guard’s Draft Merchant Mariner Medical Manual. The APA comments made clear that while we generally support the Coast Guard in its effort to consolidate into a single document the agency’s current information and guidance on merchant mariner medical evaluations and certification, we have serious concerns over the proposed “Procedures for Cancellation of a Medical Certificate” that are included in the Draft Medical Manual.

The APA comments stress that it is not appropriate to establish a Medical Certificate cancellation process simply by issuing a policy document, stressing, “there is simply too much at stake for the mariner – his or her career and livelihood – for the Coast Guard to use an informally established process that is not “legally binding.”

APA’s comments made several points regarding a process for Medical Certificate cancellation. First, APA argued that the Coast Guard already has authority to take action against a Medical Certificate through the existing Suspension and Revocation (S&R) process. Under the Coast Guard’s S&R regulations, the Coast Guard can suspend or revoke a merchant mariner document for “incompetence,” which includes “physical disability” and “mental incapacity.” This could certainly address medical fitness. Using the existing S&R statutory and regulatory system – a system that includes formally established due process protections and with which the Coast Guard and mariners are familiar – would appear to be more fair and practical for all parties.

Second, if the Coast Guard concludes that the well-established S&R process should not be applied to Medical Certificates, at a minimum a process that would permit the Coast Guard to cancel a Medical Certificate should be established in the Code of Federal Regulations through public and transparent “notice and comment” rulemaking.

Finally, APA argued that if the Coast Guard chooses not to apply the S&R process to Medical Certificates, nor establish a Medical Certificate cancellation process though notice and comment rulemaking, the agency should at least accept APA’s recommended amendments to the Medical Certificate cancellation process proposed in the Draft Merchant Marine Medical Manual.


COAST GUARD ANNOUNCES INCREASE IN RANDOM DRUG TESTING RATE

On December 28, the Coast Guard announced in the Federal Register that it has set the calendar year 2019 minimum random drug testing rate at 50%. The random testing rate had been 25% for the past several years. The 50% minimum random drug testing rate is effective January 1, 2019 through December 31, 2020.

Each year, the Coast Guard publishes a notice setting the minimum annual percentage rate for random drug testing for the next calendar year. The purpose of setting a minimum random drug testing rate is to deter and detect illegal drug misuse in the maritime industry.

The Coast Guard has increased the minimum random drug testing rate for 2019 as a result of Drug and Alcohol Management Information System (MIS) data for the most recent reporting year indicating that the positive test rate is greater than one percent. 46 CFR § 16.230(f)(2) requires the Coast Guard to set the minimum random drug testing rate at 50 percent when the positivity rate for drug use is greater than 1 percent. If the annual positive test rate falls below one percent in subsequent years, the Coast Guard can again reduce the minimum drug testing rate.

As the APA has long strongly recommended, most, if not all APA-Member pilot groups use outside third-party contractors to administer their drug and alcohol testing programs, including random drug testing. These third-party contractors should be aware of this Coast Guard Notice, but member pilot associations should consider reaching out to their respective drug testing contractors to discuss and confirm.

The full Coast Guard Federal Register Notice covering the random drug testing rate is available at: www.federalregister.gov/documents/2018/12/28/2018-28231/random-drug-testing-rate-for-covered-crewmembers-for-2019

DON’T FORGET THE APA PAC FUND

Send your voluntary contribution to:
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ROBERTS INDUCTED IN DELAWARE MARITIME HALL OF FAME

Captain Steve Roberts, Pilots’ Association for the Bay and River Delaware (B&RD), was inducted into the Delaware Maritime Hall of Fame on October 13, 2018.

Captain Roberts has been a B&RD Pilot for 34 years. His induction certificate said he was known by his fellow pilots as a “pilot’s pilot,” and that he serves as a role model and mentor to junior pilots, a steward of the pilots’ vital mission and a champion for those who make their livelihoods on the Bay and River Delaware.

Roberts has served on various boards and committees in the areas of navigation safety, technology, port security and development. He redesigned the buoy system at the entrance to Delaware Bay to avoid close vessel encounters. He authored and managed a federal grant to expand radar coverage from Cape Henlopen to Philadelphia.

A vessel transit protocol he created now enables deeper-draft ships to safely transit the river, increasing revenue to the region’s ports. A highlight of Roberts’ career is his tenure as chairman of the Port of Philadelphia’s Mariner’s Advisory Committee, where he helped set navigation safety policy and improve communication on port navigation hazards. For these and other efforts he received a 2013 USCG Meritorious Public Service award.

The Delaware Maritime Hall of Fame honors exceptional individuals who have contributed uniquely and generously with their skill, talents, energy, heart, and time in building on Delaware’s rich maritime heritage.

BRAZOS PILOTS TO GET NEW DISPATCH SERVICE

In February, the Port Freeport (Texas) Commission approved a contract for pilot dispatch services with Fort Velasco Signal Station for monitoring and managing the ship traffic in and out of the Freeport Harbor as the port continues to grow and flourish.

“Port Freeport has reached a growth level where the users of the channel must truly share the waterway,” said Captain Billy Burns, president of the Brazos Pilots.

The Brazos Pilots Association, along with Port Freeport and industry leaders are jointly sharing in the cost to operate the dispatch center.

“The Pilots are a strong asset for the entire Freeport Harbor community, and the addition of the new dispatch service will support the growth in the port and ensure safe, efficient navigation along the channel,” said Port Commission Chairman Paul Kresta.

ELECTIONS, SELECTIONS, APPOINTMENTS, ETC.

The following pilots’ associations announced new officers:

♦ Pascagoula Bar Pilots: Captain Darryl E. Langley (President), Captain Michael C. Torjusen (Vice President), and Captain E. Daniel Whyte (Secretary/Treasurer).

♦ New York Sandy Hook Pilots: Captain John J. DeCruz (President), Captain Robert T. Miller (Vice President), Captain Brian R. O’Leary (Secretary), and Captain Timothy M. Murray (Finance Chairman).

♦ New Jersey Sandy Hook Pilots: Captain Brendan L. Foley (President), Captain William A. Speiser, Jr. (Vice President), Captain Mark Wanderer (Secretary), and Captain Paul A. Klein (Finance Chairman).

♦ Brazos Santiago Pilots: Captain Jonathan P. Willett (President), Captain Grant S. Wilson (Vice President), Captain Christopher R. Urbanovsky (Secretary), and Captain Gene R. Tuttle (Boat Keeper).

♦ Houston Pilots: Captain Mark W. Mitchem (Presiding Officer), Captain Greg J. Brown (Executive Committee Member), and Captain Robert C. Roberts (Executive Committee Member).

♦ Sabine Pilots: Captain Charles Tweedel (President), Captain Wesley Moore (Vice President), Captain Todd Reeder (Secretary-Treasurer), and Captain Leslie Hurd (Boat Superintendent).