



# MIDWEST MARINER



**DIVISION 3, SWR**

**Issue 2 May 2016**

**DEPARTMENT OF HOMELAND SECURITY  
UNITED STATES COAST GUARD  
UNITED STATES COAST GUARD AUXILIARY**



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## - -INSIDE THIS ISSUE - -

DCDR.....	Page 03
SO-DV	
DSO-MA.....	Page 04
SO-MS.....	Page 05
SO-MT.....	Page 06
SO-OP.....	Page 08
SO-PB.....	Page 09
SO-PE.....	Page 10
SO-VE	
FC 34.....	Page 12
FC 3-13	
Request.....	Page 13
Division 3 Awards.....	Page 14
Drones.....	Page 15
Used Uniforms	
Crossing the Bar.....	Page 18
Retired Pilot.....	Page 19
Retirement.....	Page 21
Division 3 Photos.....	Page 23
Change of Watch.....	Page 24

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**EDITOR'S NOTE:** The Table of Contents is "live linked" even though it doesn't show as the normal blue color with an underline.

The MIDWEST MARINER welcomes all articles on Coast Guard and Coast Guard Auxiliary customs, traditions, heritage, history and current events. The right to decline any submission will be based on content. Articles and photos may be sent via email to the editor, Barbara Rhoades at: [bcrhoades@centurytel.net](mailto:bcrhoades@centurytel.net).

## ON THE COVER

Rescue in New York Harbor by Tom Picard (ID# 200926)

A Coast Guard HH-65 Dolphin helicopter whirs by the Statue of Liberty as it carries the victim of a boating accident in its rescue basket to a nearby hospital. Daily, the Coast Guard saves 14 lives, assists 98 people in distress and conducts 74 search and rescue cases.



## **DIVISION COMMANDER - 3**

**Diana Arisman**

### **The Commander's Porthole**

The purpose of the United States Coast Guard Auxiliary, as you may guess from our name, is to assist the Coast Guard in performing all of its various missions (with the exception of Law Enforcement and direct military action.) Traditionally, the Active Duty has requested that the Auxiliary primarily focus on Recreational Boating Safety (RBS). There are four basic mission categories under this rather broad heading: Public Education, Program Visitor, Vessel Examiner and Public Affairs.



Public Education (PE) includes teaching not only basic boating safety classes but also a variety of other related courses such as Navigation, Advanced Coastal Navigation, Suddenly in Command, Waypoints, Paddlecraft, etc. To teach any of these classes, an Auxiliarist must be qualified as an instructor (IT) and must have passed the course he or she wishes to teach.

A Program Visitor (PV) will visit various marine related businesses and distribute free boating safety literature. A business must agree to be a "Partner" in order to have a literature rack placed at its location. The Program Visitor will then check the rack periodically to re-stock pamphlets or replace any which are not being taken (low turnover). The goal is to maintain a supply of pamphlets which are of interest to the clientele of that business. Often, an RBS Partner will request one or more PE classes for its clients or customers.



Vessel Examiners (VE) perform vessel safety checks (VSC) on boats of all sizes and shapes as well as PWCs, canoes and kayaks which belong to individuals or, in some cases, businesses which have a fleet of rental boats. Vessels are checked for basic seaworthiness and for the safety items required by federal, state and local laws. If they meet all the requirements, the owner is given the VSC decal which is then affixed to the vessel.



Public Affairs (PA) involves many types of activities from staffing RBS exhibits at boat shows, safety fairs and similar events to writing articles for local publications, doing interviews for radio and TV and supporting nationwide initiatives such as National Safe Boating Week and the former Fit to Float program through Bass Pro Shop.

While these four RBS public outreach missions remain our primary focus, recently there has been a nationwide push to identify where Auxiliarists can also be used to assist the Active Duty Coast Guard in other administrative, logistical and operational roles. In the coming months, there will be many more opportunities for Auxiliarists who have the availability and capability to assist the Coast Guard in all sorts of ways. And that is what the Auxiliary is all about.

Semper Paratus!

# STAFF OFFICER REPORTS



## DIVISION STAFF OFFICER - DV

**Katey Bernstein**

### Kaleidoscope

"America is not like a blanket - one piece of unbroken cloth. America is more like a quilt - many patches, many pieces, many colors, many sizes, all woven together by a common thread."

Words of wisdom by Rev. Jesse Jackson



## DISTRICT STAFF OFFICER - MA

**MaryLou Minnis**

Now with summer coming everyone needs to get their gear and clothes for operations ready. Remember some of your shirts are looking tired and need freshening.

Have you lost your hat? You can get a new one or an extra one at the district store.



CDR Kristina Dell'Orco with Commodore David Starr, holding a copy of the Congressional Record she received for her retirement. Photo courtesy of Troy Stocker





## **DIVISION STAFF OFFICER - MS**

**Sigrid Miller**

### **MISSISSIPPI RIVER**

American Indians referred to the river as "mee-see-see-bee", meaning "Father of Waters". A similar expression in the Ojibwe language, "misi-ziibi", was used, meaning, "Great River" as well as "gichi-ziibi" which described the river as "Big River".

Today, one often refers to the Mississippi River as the MIGHTY MISSISSIPPI. Indeed, it is a mighty river: in volume, length and, unfortunately, mighty also in reference to pollution. One author, Brian Merchant, even labels the river as a "massive toxic cesspool". What happened over the centuries to turn the once pure waters into the second most polluted river in the nation (number one is the Ohio River)?

The 2,300 mile long Mississippi River is one of the most engineered waterways in the country; 27 locks and dams have been constructed in the upper river section. The middle river usually refers to the downriver part from the confluence with the Missouri River to the Ohio River. The lower Mississippi River is the section from the Ohio River to the Gulf of Mexico. This section of the river is primarily contained to a set channel. The above mentioned diversions of course, had a major influence on commerce up and down the river. Larger barges were able to operate on the river and settlements along the river were developed. However, a price came with all the changes, corrections and "improvements" to the riverbed; wetlands and floodplain forests (Riparian Zones) were lost. The once balanced ecosystems along the river were destroyed. Wetlands that not only supported plants and wildlife but also served as a natural water purifier through its bacterial activity are not there anymore. The same is largely true to the loss of Riparian Zones where fungi and bacteria "treated" contaminants as well as prevented soil erosion. – The result of "modernizing" the river through removal of natural barriers to accommodate transportation made it easier for non-native species (Zebra mussels, Asian carp,...) to spread which had a further detrimental effect on the river.

Modern development along the river causes a major problem to the quality of the water in the Mississippi River. An oil spill on the river makes it to the front page of newspapers. Why? One can easily see the oil floating on top of the water! I am not minimizing an oil spill; it is toxic and poisonous to marine life. The point I wish to make is that over 12.7 million pounds of toxic chemicals such as mercury, arsenic, nitrates, etc. are put into the river each year. These are chemicals one cannot see with the naked eye; they cannot readily be detected. Further, fertilizer runoffs from farms have created dead zones (hypoxic zones) in the river. Excessive amounts of phosphates and nitrates result in growth of algae that reduces the oxygen supply in the water which aquatic life so badly needs.

The Federal Water Pollution Act of 1972, also known as the Clean Water Act (CWA), makes grants available to local and state governments to solve water problems on the river. Some improvements were made since; however, a lot more work has to be done to make the Mississippi River the mighty clean one again.



## **DIVISION STAFF OFFICER - MT**

**Marilyn Aten**

### **Division 3 Shines at D-Train**

It's nice to know that all your hard work as a Coast Guard Auxiliarist shines through when awards are handed out at a district meeting. And so it was for Division 3 at the Eighth Western Rivers D-Train in Peoria in April.

The division always brings back a lot of certificates to hand out to members for their Activities. These are non-competitive individual awards for Coast Guard Operational Support, Radio Watchstanding, Vessel Exams, Verifying Navigation Systems, Public Education and Member Training Instructors, Program Visits, Reported SAR Cases, Marine Safety, Marine Environmental Protection, Government Support, Health Services, Public Affairs Membership Growth and Lifetime Achievement.

All these are given out at the Chief of Staff luncheon on Saturday. The District Awards Chair, Tracy DeLaughter, presented the awards in PowerPoint recognizing everyone that has received an award in each category.

The top honors are competitive individual awards presented individually at the Commodore's Banquet on Saturday evening. These 34 awards were presented by Commodore David Starr, DNACO Larry King, Rear Admiral David Callahan and CDR Kristina Dell'Orco.

There is an excitement in the air as each category is presented a plaque honoring their achievement starting with the Commodore's Award for the outstanding flotilla in each division. This honor went to Flotilla 13 Black Cat in Division 3. The top division received the EXCOM Award of Excellence which went to Division 2.

Members of Division 3 receiving top honors include Betty Zoellner, Publicist of the Year for achieving the highest number of Public Affairs hours for 2015. Operational Auxiliarist of the Year runner-up went to Marylou Minnis from Flotilla 3-16 for achieving the second highest total patrol and Coast Guard operational support hours. Patrols includes hours logged in as coxswain, crew, pilot or air observer for all reported safety and security patrols, regatta patrols and chart updating/aids to navigation patrols.

The Navigational Aids Verifier of the Year went to Michael Yerion from Flotilla 3-10 for his outstanding performance as the leading aid verifier for 2015.

The new Red Nun Award was presented to Flotilla 3-10 as the flotilla ranking first in Navigation Systems work. The Navigator's Award was presented to Division 3 as the division ranking first in Navigation systems work.

The highest honor an Auxiliarist can achieve in the Eighth Western Rivers is Auxiliarist of the Year. This is presented to the member achieving the highest total weighted points within the award parameters. This includes having weighted points from at least three of the six categories for which individual competitive awards are given. No single defined activity may account for more than 60% of total points. Plus, five years must elapse before one is eligible to win the award again.

Continued from 6

Division 3 is proud of its own Bill Key for being the Eighth Western Rivers Auxiliarist of the Year for 2015. Congratulations to Bill Key who is a member of Flotilla 3-10.

Congratulations!!!! to all our members for their great achievements.

## **District 085 gets a new Chief of Staff, Bob Tippett**



Left to right: Commodore David Starr, and Rear Admiral David Callahan standing with Chief of Staff Bob Tippett. Photo courtesy of Troy Stocker.



## DIVISION STAFF OFFICER - OP

Gary Smith

### New Operations Information for 2016

The Auxiliary Order Management System (AOM) is a great improvement over the old POMS system we used to have but there are still a few growing pains with the procedures. One change made this year is the feature of "Crew Override" on the Request for Orders, CG5132. If your order request is not properly completed in AOM, you will have difficulty completing the CG5132 claim form and being reimbursed for your expenses.

There are two situations where this is applicable. One is for when you are trailering with only one crewperson and the other is where your vessel may require three or more crew onboard but you have a waiver from DIRAUX in writing allowing you to operate with one less crew and/ or other restrictions. I will address the trailering issue first.



**Trailering with one person only** - When you request the order, you need to indicate in the remarks that you need a crew override for trailering with one person. Then, you send an email to the SO-OP telling him/her that the order has been requested and you need a crew override for trailering. The SO-OP, when sending the recommendation for order approval, shall tell the OIA (order issuing authority) that a crew override is required for trailering.

**Trailering with your full crew** - When requesting the order, indicate in the remarks that your crewpersons are accompanying you on trailering and fill out the crew section on the CG5132 request with their names as non-lead.

#### **Operating your vessel with less crew than standard requirement**

– Example: your crew requirement is three but you have a waiver from DIRAUX for operation with two crew. When you request your orders indicate in the remarks that you need a crew override. You should send an email to the SO-OP advising of the order request and that you need a crew override. The SO-OP shall recommend to the OIA that the order be approved and a crew override is needed.



If there are any questions on the above procedures, please contact your SO-OP. Here is hoping we all have a very safe and productive season on the waters, serve the public and above all be safe.

#### **Interesting Facts**

A comet's tail always points away from the sun





**DIVISION STAFF OFFICER - PB**

**Barbara Rhoades**

It has been said that I pay way too much attention to commas and other grammar. I will have to agree that I pay attention to commas and grammar but too much? Here is an example of why I do. After you read the first sentence, think about what it says. Then take a moment to think about anything else. Now read the second sentence. What? Wait! The same words but the comma makes it an altogether different meaning.

“Most of the time, travelers worry about their luggage.”

“Most of the time travelers worry about their luggage”

OK, so which are you? Are you a traveler who worries about whether or not your luggage will arrive on the same plane as you are on? Or are you a person who travels through time? If you are the second, I want to know you secret. I can always use a few more hours in my day.

And the women reading this will love this sentence:

A woman without her man is nothing.

A woman, without her, man is nothing.



All kidding aside, I think you get the idea of what I am trying to tell you. If we all learn to really read what we are writing, we might just find out that we are not writing what we mean. While the words are right, the meaning has become skewed. As you can see, a comma creates a pause in a sentence.

Then we get into the hyphen. Try this sentence and see how the hyphen changes the meaning.

You will be required to work twenty four-hour shifts.

You will be required to work twenty-four hour shifts.

You will be required to work twenty-four-hour shifts.



In reading the above, you find you could be working 20 shifts of four hours or 24 shifts lasting one hour or shifts lasting 24 hours.

I would certainly want to know what I was signing up for in my work schedule.

When you write your next article or even a note to a friend, be sure you are putting hyphens in where they are meant to be and pausing at the right places.



# DIVISION STAFF OFFICER - PE

**Larry Miller**

As your So-PE, I am here to support you in your efforts to educate the public in boating safety. Please, if I may be of any assistance, don't hesitate to contact me.



In February, an emphasis was placed on two somewhat new e-Courses; Modern Marine Navigation (MMN) and Basic Boat Handling (BBH). Visit the E-Directorate web page at <http://wow.uscgaux.info/content.php?unit=E-DEPT> and follow the link to the ELIB Resource Center. There you will find a link to Elec PE Courses. You will need to log in using your member login information and read more about these two electronic courses. There you will also find information on how to promote the two courses and incentives available to the flotilla for "signing up" course participants. Please take a look.

We mostly are aware of the course About Boating Safely. Don't forget, there are other multi lesson courses available in the library: Boating Skills & Seamanship (BS&S) and Sailing Skills & Seamanship (SS&E). And there are two single lessons courses available; Float Plan and Navigational Rules Lite.

Several short duration seminars are available. GPS For Mariners (GPSFM), Weekend Navigator (WN), Suddenly in Command (SIC), Paddle Sports America and Personal Watercraft Course (PWC). Additionally, a Seamanship Seminar Series (SSS) are available to be taught. These generally are chapter excerpts from the Boating Skills & Seamanship course but presented as single modules.

The SSS courses are a bit different in that the flotilla purchases book credits and as students sign up and pay for the course, you release information to them on how to download the eBook from Book Shout, an online vendor. Your flotilla could choose to offer the course and charge students \$20 for the course. Each book credit costs the flotilla \$4.95. In that scenario, the flotilla will realize a \$15.05 revenue for each student.

From experience, finding venues for training can become troublesome. When thinking about offering courses for the public, don't forget about scouting organizations. They generally have regular meetings and have a place to meet already. For the Boy Scouts, contact your local scout troop(s) or scouting commissioner. They may be found on the internet.



For the Greater St Louis Area Council, visit <http://stlbsa.org/>. Follow the links to the districts in the council. Tell them about the opportunity to present some boating safety program to their scouts. In the Belleville area, Lewis and Clark Council would be your contact. (<http://www.lewisandclarkbsa.org/districts/stclair> ).

Continued from 10

Girl Scouts of Eastern Missouri are at <http://www.girlscoutsem.org/>. The USCG Boating Safety website is a reference for the Girl Scout Canoeing program in Eastern Missouri. Contact the organization to explain what you can do for them and get contact information for the troops. In Illinois, Girl Scouts of Southern Illinois have a web site at <http://www.gsosfi.org/>.



Don't forget, you have schools in your areas. There are programs for different age groups, starting at Kindergarten through 6th Grade, that all can take less than an hour each. Get them thinking boating safety early in their lives.

National Safe Boating Week is May 21-27, 2016. Plan some activity during this time to get information out to the public. The Auxiliary course I referenced earlier "Suddenly in Command," may be a good short course to present at various venues. It can be completed in an hour. There is a PowerPoint available for this program but no printed guides.



Please work with your flotilla Program Visitors to get information out to the boating public regarding courses the Auxiliary offers. When you get your classes scheduled, at least 30 days in advance, prepare and forward to me a copy of the ANSC Form 7023, Intent to Teach Public Education Course, so we can get the class offerings online. Don't forget to ask your Public Affairs Staff Officer to get a news release on the offering. Again, the more time before the class you can get the word out, the better the chance to get more students. Don't make it a best kept secret about boating safety courses your flotilla plans to hold.

Thank you to those who sent in a report of your flotillas activities in public education. For those of you who have not, please let me know what you have done so far this year or what you have planned. I need to submit a report to the district on PE early in April so your input is helpful.



Please keep in mind our division goal this calendar year is a 5% increase in number of Public Education graduates and an additional two qualified instructors.

The State of The United States Coast Guard  
Two-Thousand and Fifteen  
Admiral Paul F. Zukunft Commandant

<https://www.uscg.mil/seniorleadership/DOCS/State%20of%20Coast%20Guard%20Address%202015%20SLP%20Script.pdf>



## **DIVISION STAFF OFFICER - VE**

**Dan Rhoades**

It's spring! The division has reported 32 VE's this year. We are off to a good start.

The 1<sup>st</sup> of May has found the rivers are straying in their banks and with warm weekends flotillas are starting to setup VE Stations. Flotillas are holding VE Stations at Grafton Harbor, Alton Marina, Northshore and Woodland Marina. Check a chart or map for various locations not listed here or locate launch ramps where you could hold one.



Remember: checking paddle craft is good way help out at smaller bodies of water. Call other members in the division for help or advice if you need ideas or suggestions.

If you need more stickers or forms, ask your flotilla materials office to order them for you.

# **FLOTILLA COMMANDER REPORTS**



## **FLOTILLA COMMANDER - 34**

**Marilyn Aten**

### **Flotilla 34 Gears Up for Summer**

Flotilla 34 is gearing up for their summer activities. To start things off they are holding an About Boating Safely class at the West Access Visitors Center on Lake Carlyle in Illinois. The class will be held in two sessions beginning the morning of May 14. The second session will be held May 21.

The flotilla will also take the opportunity to have a VE Station, Public Affairs Exhibit and Waterways Watch program. These activities are being held in conjunction with National Safe Boating Week which runs from May 21 -27.

This will also give the flotilla a chance to complete training for new Vessel Examiners and Instructors. Information on our new e-courses will also be available for the boating public.

The flotilla is happy to say that three of our members passed SECCEN after 21 months. To celebrate, we had cake and ice cream at our April dinner meeting at Cannolli's in Florissant. We thank them for sticking with us.



## **FLOTILLA COMMANDER - 3-13**

**Betty Zoellner**

Flotilla 3-13 has a very positive outlook for the New Year. 96% of the flotilla has its mandatory training in the books, highest percentage of the division.



By year's end, we will have three new AUXOP's, two new instructors who will be finishing up their qualifications and one new PV doing the same. The flotilla has shown a strong resilience in the face of adversity with a few members' health issues and the others in the flotilla who have stepped up to the plate so the flotilla does do not miss a beat.

The flotilla members are preparing for National Safe Boating Week at Grafton Harbor, the Towboat Festival in July at Grafton Harbor and Boating St. Louis Boat Show in September, again at Grafton Harbor. We will be providing Boating Safety Information and Vessel Safety Examinations at all events. There are several other events planned through the end of the year that have yet to be finalized.

We await the return of Cindy and Larry Kreissler from their yearly cruise from Grafton Harbor to Florida and back.



### **Gary Smith sends this request out to all members of Division 3**

Our Sector Upper Mississippi River (SUMR) Commander has asked if there is an Auxiliarist that could perform the duties of an ombudsman for them. This person would be like a "Welcome Wagon" person to assist Coast Guard family personnel transferring into the local St Louis area helping them to get acquainted with the area and solving family adjustments.

There is a formal one-week training program which the Coast Guard will fund plus some online training. An Auxiliarist would provide stability to the program as, previously, this task was performed by a CG family spouse which would also rotate out every two to three years.

I would appreciate this request be forwarded down the chain to all members to see if anyone would like to perform these duties. The Coast Guard needs this support from us in Division 3.

Please have anyone get back to me if interested and I can get them with SUMR to gain more information. Thanks

# OTHER ITEMS OF INTEREST

## DIVISION 3 AWARDS TOP AUXILIARISTS

By Marilyn Aten

Congratulations to our top Auxiliarist of the Year, Mark Zoellner! Mark excelled in several categories and had the most overall numbers of anyone in Division 3 for the year 2015.

Coast Guard Auxiliarists are a hearty bunch that offer their time, talent and treasure to make sure the boating public stays safe. Through the Auxiliary's many programs including Public Education courses, Vessel Examinees, Surface and Air Operations, Program Visitors and more, our members don't receive a lot of recognition.

So to thank our members, Division 3 gives out awards each year at their annual Change of Watch held in January. This year awards were presented to all members with over 50 hours of service. In special categories, awards were presented to the top members in PE, OPS, VE, PA, Admin, MT and PV.

To recognize all members, even those with just a few hours, we had a 2015 Safety Award that said:

"Just a little poem to let you know

Your gift of service to the public gave us all a lift.

You helped keep Newbee boaters from becoming sorry floaters.

You mentored members old and new about the proper things to do.

For the hours and the money that you gave to us this year

we raise a toast to praise you as a most valuable volunteer."

Written by Debby Howard, Flotilla 34.



Gary Smith receiving his award (left photo) and Marylou Minnis receiving her award (right). Photos courtesy of Troy Stocker.

# Bomb-Sniffing Drones Could Become Nightmare for Terrorists

## The Wisconsin State Journal | Apr 23, 2016 | by Rob Schultz

[http://www.military.com/daily-news/2016/04/23/bomb-sniffing-drone-technology-could-become-nightmare-terrorists.html?ESRC=coastguard\\_160427.nl](http://www.military.com/daily-news/2016/04/23/bomb-sniffing-drone-technology-could-become-nightmare-terrorists.html?ESRC=coastguard_160427.nl)



Military drones may soon acquire the capability to “smell” explosives and nuclear weapons. (DoD photo)

Drones may soon have the capability to save thousands of lives each year by detecting terrorists’ improvised explosive devices and active land mines from long-ago wars thanks to innovative technology developed at the University of Wisconsin-Madison.

The proven detection technology that also can detect chemical and nuclear weapons and drugs was successfully miniaturized and attached to an unmanned aircraft by Fusion Technology Lab graduate students about five months ago, according to Jerry Kulcinski, an emeritus professor of nuclear engineering and the lab’s director.

“They did something that has never been done before,” Kulcinski said.

The centerpiece of the system is a device that paints a target area with neutrons. Then sensors look for gamma rays with the signatures of specific materials such as explosives or a nuclear device. It’s the same technology used at security checkpoints to scan luggage and shipping containers in airports, but the breakthrough for the UW-Madison scientists was making the radiation source small enough to mount on a drone.

That added mobility makes the technology a potential game-changer: Military convoys could be alerted to roadside bombs. Rescuers could dig directly toward people buried by earthquake rubble. Valuable mineral deposits could be mapped.

Kulcinski, an internationally renowned scientist and longtime adviser for NASA, believes it’ll take about a year to get the system into the field -- if they can find a company to buy it or fund it to completion.

“In a very practical manner, I think this can be a tremendous tool,” said Col. John W. Weidner, who helps manage of the US Department of Energy’s National Nuclear Security Administration. “From what I’ve read, its applications are only limited by the imagination of the user.”

Weidner, who is part of a team that manages the US nuclear weapons stockpile, envisioned scenarios where the United Nations would use the drones in Syria after hostilities end there to verify whether all its chemical weapons were destroyed, or in Iran to determine whether that country is making nuclear weapons.

“I see all sorts of different opportunities if this can be adopted by the appropriate agencies in our government,” he said. “Intelligence agencies could find in a relatively passive, relatively quiet, no-person way what materials are in particular locations. That could be very powerful to them.”

It also is expected to be less expensive than many of the technologies the US military and law enforcement agencies are using to detect explosives, Weidner said.

Instead of spending money for expensive tracked vehicles that roll up to a suspicious package, identify and maybe detonate it, military and police agencies "can fly a drone over it, irradiate it and find out it's full of flour," said Weidner, who has degrees in nuclear engineering and medical physics from UW-Madison.

### **Questions on radiation, capability**

Because the breakthrough was so recent, there has been little time for critical assessment of the technology, but early concerns center on its use of radiation and possible limitations in detecting nuclear materials.

"Unfortunately people have this natural, sometimes irrational fear of radiation that can cause them to prejudge," Weidner said. That could turn off potential buyers, he noted.

Kulcinski said radiation levels will be minimal -- a person spending an hour in a target area would absorb about the same amount of radiation as a traveler who spends 10 minutes on an airliner flying at 30,000 feet. As a precaution, Kulcinski said, all drone operations will need to include efforts to ensure people are not in the irradiated area.

A demonstration of the drones' capabilities is needed before anybody can get excited about it, and their ability to locate nuclear weapons shielded by lead or steel will be the ultimate test of the new technology, said Matthew McKinzie, a nuclear physicist for the National Resources Defense Council, a New York-based environmental group. Like Kulcinski and Weidner, McKinzie worked earlier in his career at Los Alamos National Laboratory.

"Detection of illicit materials is a really difficult problem, especially for the most dangerous nuclear material, which is highly enriched uranium. The radiation signal can be concealed very effectively. And an improvised nuclear device, a terrorist's nuclear weapon, can be made most simply with highly enriched uranium. In my mind that's the toughest case. I think that's the greatest challenge for that system: Can it address that threat?" McKinzie said.

Weidner is hoping a government agency will pay for a demonstration of the technology to help Kulcinski and the graduate students sell it to a private interest like a drone manufacturer.

"If they can get their first customer, I think that's what it will take for it to take off," said Weidner.

There are known limitations to the technology. For one, the neutrons from the miniaturized source can only detect explosives buried less than about six feet below the surface.

"One of the ways to get around the drones is to bury them very deep, but if you bury them very deep they won't create the damage they'd create if they were a foot or so below the ground," Kulcinski said. "So if you can get the bad guys to bury everything six feet down, then you're making some progress."



Continued from 16

The Navy was hoping the drones could locate mines deep in the ocean, but the hydrogen in water slows down the neutrons and neutralizes the technology. "Unless the mine is within three feet of the surface of the water, we can't detect them," Kulcinski said.

The drones need to fly relatively close to the ground, so Kulcinski expects some to be shot down if they are in a combat area. "It'll be like being at a duck hunt. That's going to happen," he said. "But if the bad guys are shooting them down, you know that's an indication that there are problems in that area to worry about, and you act accordingly."

**Exciting possibilities** - The potential applications of the drones are broad and exciting.

Kulcinski says they could be used to help rid the world of the scourge of unexploded landmines in current or former war zones. Nearly 50 million mines lurk in 60 countries, and they kill about 10,000 people per year and leave large portions of land unused, according to the American Nuclear Society.

"Sometimes they lay them out in rectangular arrays, sometimes they put them in triangular arrays, sometimes they throw them out in random. So if you fly across a minefield you can light up the mines and say, 'This is what the field looks like.' Now if you go in there and get this one, you can get the rest of them," Kulcinski said.

Japan is interested in using the technology prior to, and during, the 2020 Summer Olympics in Tokyo, Kulcinski said. One of their focuses is on detecting backpack explosives, which create a unique problem for researchers.

"Now you have a human tied to a backpack, so you have to be careful how much radiation (microwaves) you use," he said.

The drones' non-military applications include mapping mineral deposits near the surface of areas like mountains or deep valleys previously unreachable by humans, according to Kulcinski. Weidner said the drones could also locate people trapped in a coal mine or buried alive under rubble following an explosion or a natural disaster like an earthquake.

Kulcinski said there are also applications for the drones to help prospect on the moon for new energy sources, including the rare fuel needed for fusion power. Aaron Olson, a Madison native and PhD candidate who is part of the drone technology team, received a scholarship from NASA for his work in that area.

The miniaturized neutron source technology will also will work in stationary situations like airports or other public areas that might be attractive targets for terrorists, Kulcinski said. "If we had a low-intensity neutron source in that hall at the Brussels airport, we could have detected those bombs without hurting anybody," he added.

The March 22 attacks in Belgium that killed 35 people and injured more than 300 were a grim reminder to the researchers that they have to stay focused on their project.

"Clearly it's a very important thing, more so as unfortunate things like (the Brussels attacks) continue to happen," said Aaron Fancher, a PhD candidate from Indianapolis.

## UNIFORMS OF THE DAY



## WHERE DO UNIFORMS GO?

After hearing of the Crossing Over the Bar of one of our district members, I thought about his wife and if she knew what to do with his uniforms and other Auxiliary items. Would any of us know what to do at a time like this? What if one retires? What if, for whatever reason, one resigns from the Auxiliary? What do we do with our uniforms and other Auxiliary related items?

These items cannot be donated to Goodwill, Salvation Army etc. You can donate them to the Used Uniform Exchange. These items will be priced fairly and offered for sale to other Auxiliary members all over the United States.

**Please note:** we cannot take shoes or T-shirts for personnel wear. The items must be current. We do not take knit items and or Air Force pants.

Send items to Used Uniform Exchange

% Stella Francis  
9449 Watson Industrial Park  
St. Louis, MO 63126

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**EDITOR'S NOTE:** How many of us have heard Crossing The Bar at district meetings? I know I have for over 10 years. What I never knew or even asked was who wrote it. Do you know? Read the poem again and find the answer on Page 22 of this newsletter.

Sunset and evening star  
And one clear call for me  
And may there be no moaning of the bar  
When I put out to sea

But such a tide as moving seems asleep,  
Too full for sound and foam,  
When that which drew from out the boundless deep  
Turns again home!

Twilight and evening bell  
And after that the dark,  
And may there be no sadness of farewell  
When I embark,

For, though from out our bourn of Time and Place  
The flood may bear me far,  
I hope to see my Pilot face to face  
When I have crossed the bar.

# RETIRED COAST GUARD PILOT SEES HIS HELICOPTER INSTALLED AT SMITHSONIAN

Kerrville Daily Times, Texas | Apr 21, 2016 | by Erin Green

[http://www.military.com/daily-news/2016/04/21/retired-coast-guard-pilot-sees-helicopter-installed-smithsonian.html?ESRC=coastguard\\_160427.nl](http://www.military.com/daily-news/2016/04/21/retired-coast-guard-pilot-sees-helicopter-installed-smithsonian.html?ESRC=coastguard_160427.nl)



Retired Rear Adm. Robert Johanson discusses Project Phoenix in Annapolis, Md., Thursday, Dec. 3, 2015. (Photo: Petty Officer 2nd Class Nate Littlejohn)

It was just after 5 a.m. on Nov. 1, 1979, and Cobb was about to start his last watch as a member of the United States Coast Guard.

Cobb, his co-pilot Chris Kilgore and crew member Tom Wynn Jr., were jolted awake. A call had come in from the Coast Guard station in Galveston, where two ships — one of which was carrying 300,000 gallons of crude oil — were on fire.

The men scrambled awake and took off seven minutes later in Rescue 1426, the Sikorsky HH-52A helicopter named after the aircraft's tail number.

They ultimately saved 22 people from the burning ships.

“What a way to go out,” Cobb said of his memorable last day.

Now, 36 years later, the aircraft Cobb piloted that day and had piloted many days before is a part of aviation history. The helicopter is on display at the Smithsonian Institution Air and Space Museum in Washington, D.C., along with other aircraft of historical significance.

Cobb and his fellow crew members were among the 50 in attendance at the museum for the dedication ceremony April 14.

Cobb's road to the ceremony started on a trip. He and his wife, Vicki, love to travel and were seeing some friends in Florida when J.C. Cobb received a phone call from retired Coast Guard Rear Adm. Bob Johanson of Project Phoenix, the Coast Guard Aviation Association's group finding a suitable aircraft for the Smithsonian display.

At first, he said, Johanson thought he was speaking with Cobb's son — he had heard erroneous information from the other crew members that Cobb had died of a heart attack years ago — but the confusion was soon cleared up.

Once Kilgore and Wynn learned Cobb was, indeed, very much alive and well, catching up and reconnecting was in order.

“As soon as that happened, we just got bombarded,” Cobb said, noting he and Vicki had returned to their Ingram home from Florida and soon went to see Kilgore at his Dallas area home.

But it wasn't until the ceremony itself when all three men were reunited at last.

“It was delightful,” Cobb said of the ceremony. “I'm the luckiest man in the world, you know.”



Retired Rear Adm. Robert Johanson stands before HH-52A Seaguard helicopter, tail number 1426, at Coast Guard Aviation Logistics Center in Elizabeth City, N.C., Friday, Dec. 11, 2015. (Photo: Petty Officer 2nd Class Nate Littlejohn)

Continued from 19

Cobb was born and raised in San Antonio and went to school there, but school held little appeal, so he enlisted in the Coast Guard as soon as he could. Seven years later, he was commissioned and sent to flight training through the U.S. Navy, first learning to fly T-28s, then helicopters, which Cobb said didn't come naturally to him.



A U.S. Coast Guard HH-52A Seaguard helicopter is displayed during its induction ceremony into the Smithsonian's National Air and Space Museum in Chantilly, Va., April 14, 2016. (Photo: Petty Officer 2nd Class David R. Marin)

“Flying a helicopter has been described as like trying to stand on top of a beach ball,” Cobb said. “It has zero inherent stability.”

But just like riding a bike, something clicked during his training, and he passed.

Four air stations and 12 years later, Cobb's time in the military wound down until it was his last watch. On that last day, he and his crew were airborne and could see the glow from the fire from a good 30 miles away.

The rescue mission itself was dangerous, Cobb said. Upon arriving at the ships — the *Mimosa*, and the *Burmah Agate*, loaded with oil, now burning and pouring out of the ship into the water and into the *Mimosa* — Cobb realized many of the people already in the water were “not recoverable.” Still, many men were alive on board.

They needed rescuing. With Cobb and Kilgore at the controls and Wynn in the back threading the rescue basket among the cranes and lines, they began bringing men aboard the helicopter from the ships, amid an explosion from the tanker that momentarily left Cobb fighting to control the craft.

The first load they brought included 12 men — for a total of 15 on board — on a craft designed to hold a total of six or seven people, including the crew. They were overweight, Cobb said, and he kept his eyes on the controls as they carefully maneuvered away from the burning ships and over to a nearby oil rig.

Two times, the crew went back. Twenty-two lives were saved.

Years passed, and the aircraft ended up as a training tool at an aviation maintenance school in California. That's where Johanson found it. He arranged to have the craft refurbished.

The rest, as they say, is history.

## Blind Eye

**In 1801, during the Battle of Copenhagen, Admiral Nelson deliberately held his telescope to his blind eye, in order not to see the flag signal from the commander to stop the bombardment. He won.**

**Turning a blind eye means to ignore intentionally.**



**EDITOR'S NOTE:** 29 May 2016 was the day we celebrated CDR Kristina Dell'Orco's retirement from the United States Coast Guard and as our DIRAUX. The photos on this page and the next are from a PowerPoint that was shown prior to the beginning of the ceremony. Photographer(s) unknown.

They celebrate her life during her career and her family life.

We wish CDR Dell'Orco Fair Winds and Following Seas on the next leg of her journey.





The answer to the question on Page 16

CROSSING THE BAR  
BY  
Alfred Lord Tennyson

# DIVISION 3

## ACTIVITIES IN PHOTOS



Bob Arisman and Brian Harris teaching public education class



Sigrid Miller and Marylou Minnis at TCT Workshop



### OPERATIONS WORKSHOP

Back to front: Marylou Minnis, Sigrid Miller, Pete Harness, Carl Livingston, Lori Cotton and Frank Amato



Division 3 Members attending CDR Dell'Orco's Retirement Party - Bob Arisman, Barbara Rhoades, Charlie Aten, CDR Dell'Orco, Stella Francis, Karen Goulding, and Marilyn Aten

All photos courtesy of Diana Arisman

# DIVISION 3

## CHANGE OF WATCH



Warner Minnis, Marylou Minnis  
And Pete Harness



Debby Howard, Frank Amato,  
and Marilyn Aten



Larry Miller, Betty Zoellner, Mark  
Zoellner, and LCDR Morreti