



AUXAIR District 7

United States Coast Guard Auxiliary

Operations and Flight Safety Newsletter.

April 2016

IN THIS ISSUE

*Exercise
"AUX Eagle"*

• 2 •

*What's On
Your iPad?*

• 3 •

*DSO/DFS0 Messages
Links To Follow*

• 4 •

*2016 Auxiliary Aviation
Safety Workshops*

• 5 •

*Staying In Control
As We Age*

• 10 •

*"DRONES"
a continued series*

• 11 •

Centennial of Coast Guard Aviation

Centennial activities that mark 100 years since LCDR Elmer Stone, USCG-CG Aviator #1, was ordered to Naval flight training. *"The Early Years"*

First of three special newsletter series, pages 6-8.

LCDR Elmer Stone looking at the Congressional Gold medal presented to him by President Herbert Hoover on 23 May 1930 for the NC-4 Transatlantic Flight.



Source: U.S. Coast Guard Aviation Association (Ancient Order of the Pterodactyl) Website (<http://uscgaviationhistory.aptero.org>)

Exercise “AUX Eagle”

A search and rescue training believed to be the first joint USCG, Auxiliary air and surface exercise in District 7.

The exercise was formulated as a result of informal discussions with CWO4 Lodomirak, commanding officer, USCG Station Port Canaveral, Flotilla 17-6, Cocoa, Florida and District 7 Auxiliary aviators. The objectives followed the “KISS” principle with the first objective exercising communication links between air and surface facilities during a practice search and rescue (SAR), and the second objective demonstrating joint SAR capability to the gold side.

Flotilla 17-6 generated 6 surface assets, with one designated as the boat in distress, one as the control facility, and 4 SAR facilities. The Flotilla 17-6 shore based communications facility participated by playing the role of Sector Jacksonville so as to not impose a burden on the active duty and their actual day to day mission execution.

Auxiliary air facilities assigned to Air Station Savannah included a Robinson R-44 helicopter as the primary aircraft and a fixed wing, Grumman Tiger, as the backup aircraft. The exercise scenario, a very realistic operation centered on previous hurricane experience, was a fast moving hurricane through the area of



John Bennett, Flotilla 17-11 tosses a towline to George Peek, coxswain, Flotilla 17-6, the distressed boat during Exercise “AUX Eagle” held January 24, 2016 in Port Canaveral, Florida.

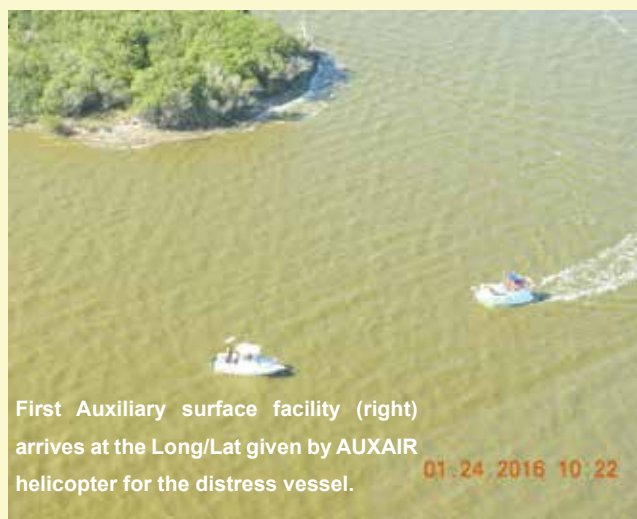
U.S. Coast Guard Auxiliary photo by James E. Emken, Flotilla 17-6

responsibility (AOR). On the previous day and night, air and surface assets were subsequently deployed to assess damage to ATONs, bridges, docks, marinas and boats in the Banana River. Early in the survey assessment period, a “MAYDAY” call from a disoriented boater with injured persons on board was transmitted. At this time, air and surface assets began to search for the distressed boat and the exercise “Sector JAX” posed queries attempting to get indications of the whereabouts of the distressed boater.

The helicopter launched early on the morning of January 24th after a twenty four hour weather delay for high winds, adding realism to the scenario. Landing at Station Port Canaveral, the helicopter, commanded by Tommy Augustsson, picked up active duty participant, BM1 Scott Konrad, as an observer and departed on the initial damage assessment mission. Shortly thereafter, the distressed boater, George Peak, Coxswain, called the exercise “MAYDAY” from a hidden position. Mr. Peak deserves at most an Academy Award for his

outstanding, realistic portrayal of a confused and lost boater in distress!

After some period of time and receiving limited information, the approximate location of the distressed boat was determined, and the helicopter rapidly pinpointed it. Circling the boat, which was hidden behind an island, the helicopter



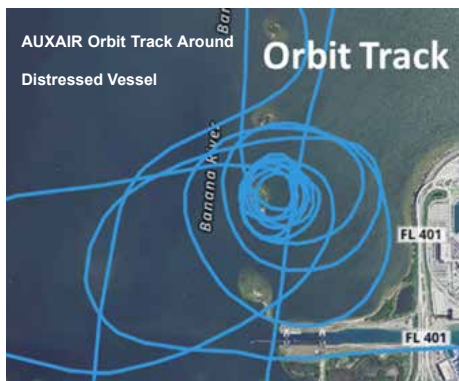
First Auxiliary surface facility (right) arrives at the Long/Lat given by AUXAIR helicopter for the distress vessel.

U.S. Coast Guard Auxiliary photo by Mark E. Cannon.

transmitted the coordinates to the surface facilities and stayed on station as a visible “marker” for the rescue facilities. The first Flotilla facility approached and rendered practice first aid for a broken arm, while a second facility came along side and secured the distressed boat under tow.

At that point, a communications check was initiated from the helicopter with all 6 boats, and the exercise was terminated with a total time of nearly 3 hours. All participants then assembled for debriefing at a local marina. Special thanks to

continued on page 3



EXERCISE "AUX EAGLE"

continued from page 2

CWO4 Lodomirak and the Sector Jacksonville SAR Team, headed by Commander Doug Stark for supporting the exercise planning and execution. Jack Miller, Flotilla 17-6 lead, and Station Port Canaveral AUC was a key originator of the concept, enlisting 6 boats and over fifty Flotilla personnel to participate, a remarkable showing of enthusiasm and professionalism by our boating brethren.

In summary, this exercise provided an invaluable opportunity for the Auxiliary air and surface teams to work together, developing procedures in preparation for real world situations. Follow-up exercises are planned in the coming months in preparation for hurricane season and any other disasters that require joint Coast Guard and Coast Guard Auxiliary support.

Exercise participants included:

USCG Sector Jacksonville

CDR Doug Stark
LT Christopher Svencer, SAR Team
LT Christina Murales, SAR Team
OSC Randy Corbett

USCG Station Port Canaveral

CDR David Lodomirak
BM1 Scott Konrad
CWO4 Bee Perry

USCG Auxiliary Aviation

R-44 Helicopter and AA5B Aircraft
Tommy Augustsson
Mark Cannon

USCG Auxiliary Surface

"Guardian" Jack Miller, "Anchor Management" John Kachenmeister,
"Grendel III" George Peak, "Dream On" Bob Diccio, "Nev & Bev II" Nevin Lantry,
"Nancy M" Jules Moquin



What's on Your iPad?

As you probably know, District 7 is strongly encouraging all flight operations to be conducted using an iPad with ForeFlight as the "Standard" navigation aid, particularly for SAR missions. ForeFlight, a comprehensive electronic flight bag for both VFR and IFR, also incorporates a very quick and easy methodology for planning and executing search patterns including parallel and sector searches. Standardizing this methodology ensures that the taskers and the tasked all are on the same page when it comes to mission execution and coordination, particularly if multiple search assets are employed.

Additionally, we are required to have marine charts on board the aircraft and available to the crew for coordination with the boating community, ATON verification, etc. Conveniently, the iPad can be utilized for that requirement as well, and the dozen or so applications range from less than \$10 to over \$50 in the App Store. My primary experience is with Garmin BlueChart Mobile (\$29.99 with US charts), which is marketed by Garmin as a planning tool for their full-up marine chart plotters and as a backup chart plotter. For our uses, it is fine and allows the operator to search and locate marinas, harbors, ATONs, etc. and incorporates some nice features such as track logging, position, distance and bearing measurements. BlueChart Mobile uses vector based map products that allow a seamless display of the charts with "pinch" pan/zoom over the entire area of interest, and notations that adjust in size as you zoom in and out for constant readability. Additionally, one download will provide seamless coverage over the entire District 7 AOR.

iSailGPS is the low cost winner, providing basic navigation charts and functions. A big difference between BlueChart Mobile and iSailGPS is the charting presentation/methodology. iSailGPS uses "raster charts," which are essentially photographs of the actual NOAA charts. Each chart is a different file, so each chart must be individually loaded for the Area of Interest and one must bring up each

chart individually when needed, a rather cumbersome process as you cross chart boundaries. Zooming changes the size of the map image and text alike (just as you would zooming on a photograph) but it is a far inferior mapping implementation than BlueChart Mobile.

iNavX is a highly rated marine navigation app that is essentially a full featured marine chart plotter. While I have not used this app, it has received great reviews from a number of marine publications (Practical Sailor, Yachtworld and others). Of course, it is one of the more expensive applications at \$49.99. Based on the reviews, this would appear to be a great app to have.

Another application that is useful is "MarineTraffic." This app displays real time marine AIS (Automated Information Service) data on vessel traffic including track history. This is useful to rapidly determine the type of vessel, hailing ports, registration, vessel heading and speed, and confirm photographs of the vessel, all overlaid on a chart. MarineTraffic requires a cellphone data or internet connection to access the real time information. I have used it in-flight within 10 miles of the coast, and of course on the ground with an internet connection, one can continue to follow a vessel of interest. Note, this will not suffice as the sole charting application as the chart information is minimal, and it requires a data connection to function.

With respect to memory usage, the apps discussed above require a fraction of the memory required by ForeFlight. BlueChart, including all of the District 7 AOR charts, uses 440mb of data storage, while ForeFlight consumes 18gb (entire US, VFR/IFR, approach plates, etc.), so memory should not be an issue when adding a marine charting app.

The bottom line is, take a look at what is out there, including tutorials and YouTube "how to" videos, and choose one that works for you. The absolute minimum would be iSailGPS, but for a little more money, there are apps that provide vastly improved functionality and reduced frustration.

Mark Cannon,
ADSO-AV-X is
the author of
"Exercise AUX
Eagle" and
"What's on
Your iPad?"



LINKS TO FOLLOW

In addition to the stimulating articles in this issue, we have links below gathered from our AUXAIR members. Click on these valuable time sensitive resources to read important information that adds to the knowledge base of Auxiliary aviation.

"State of the Coast Guard"

by: ADMIRAL PAUL F. ZUKUNFT

<http://www.uscg.mil/seniorleader-ship/DOCS/2016SOTCG.pdf>

<http://livestream.com/ac-counts/17502834/events/4830700>

<http://maritime-executive.com/features>

"JFK Jr. Accident Analysis"

by: Jason Schappert

<http://www.m0a.com/jfk-jr-accident-analysis/>

"Bedford and the Normalization of Deviance"

by: Ron Rapp

<http://www.rapp.org/archives/2015/12/normalization-of-deviance/>

"Best Glide and Speed Distance"

by: FAA Safety Briefing

http://www.faa.gov/news/safety_briefing/2016/media/SE_Top-ic_16-01.pdf

"Why Do We Still Run Out Of Gas?"

by: John Zimmerman

<http://airfactsjournal.com/2013/02/why-do-we-still-run-out-of-gas/>

Boldmethod - "Digital Aviation Content To Educate, Inspire and Train"

by: Colin Cutler

This site offers the quizzes you see weekly from Marty Rosenberg, ADFSO-AV Miami.

<http://www.boldmethod.com/topics/quiz/>

AUXILIARY AVIATION TRAINING MANUAL <http://www.uscg.mil/auxiliary/publications/comdtinst/M16798.5B.pdf>

USCG Newsroom <http://www.uscgnews.com>

Message from DSO-AV Ken Plesser

D7 AUXAIR Team,

Workshop season is right around the corner, and the DFSO and I look forward to again seeing our many friends at all of our four Air Stations. You have all been doing a splendid job individually and in the context of your Air Station, and I will be talking to you about how we are succeeding as a District as well.



It's never too early to begin planning for D-TRAIN, this year on September 22-25 in Orlando (at the same hotel). At this point, we are still developing the agenda but I can promise this: we will work hard all day and party hard all evening! This is a "don't miss" opportunity for learning, camaraderie, and a chance to make new friends with aviators from across District 7.

2016 will be an exciting and challenging year in Auxiliary aviation. I thank you for your past service to your community and your nation, and I look forward to meeting the challenges going forward.

Fly well and fly safely.

Ken Plesser



ORLANDO, FL - Coast Guard active duty and Auxiliary networking during DTRAIN 2015 held at the Flordia Hotel and Conference Center. DTRAIN 2016 is being held at the same location September 22-25 and is open to all District 7 aviators and Auxiliary members. U.S. Coast Guard Auxiliary photo by Robert A. Fabich, Sr.



Message from DFSO-AV Doug Armstrong

This quarter's newsletter comes out on the heels of some tragic news at Air Station Savannah. As some of you know, Jack Cannon, an aircraft commander from SVN, passed away in flight while returning from an angel flight mission. This is a huge loss for SVN and for the program. As luck would have it, Jack had a second pilot sitting right seat during the flight and the aircraft was able to land safely.

While this was not technically a USCG mission, this has raised the issue of the two pilot rule in D7 again. At this point, we do not know the cause of the incapacitation. It is worth noting that the FAA recently released some information on "Sudden Incapacitation." In the article, they site myocardial infarctions (MI) or heart attacks as the most prevalent threat. According to the FAA: compared to a 30 year old male, a 40-year male is 6 times more likely to suffer a heart attack and a 60 year old is 100 times more likely. These are sobering statistics for most of us.

As the Auxiliary leadership on the gold and silver sides work through the policy issues, I hope that everyone is considering how your crew might handle an incapacitation should something like this happen aboard your aircraft. In Miami the safety team is preparing cheat sheets, customized for each aircraft, which can be used to quickly get familiar with the airspeeds and aircraft configurations for landing. Being sure your crew is as familiar as they can be with the aircraft is good insurance. I do many logistics missions and try, whenever possible, to include crew members in the right seat so they can gain experience flying as a crew. More on this as the discussions progress on a two pilot policy.

Moving on to happier topics, the Annual Air Station Safety Workshops are right around the corner, I am going to be in SVN April 1st, MIA April 8th and CLW April 15th. I am looking forward to seeing everyone there. In the meantime, fly safe.

Doug Armstrong

Annual Auxiliary Aviation Safety Workshops - 2016

SAVANNAH



**April
1 - 2**

Operations Department
Training Room, USCG
Air Station Savannah, GA
Hunter Army Air Field.

Friday April 1, 1100 - 1630

Introduction - [Ron Sain](#)

Welcome - [Ed Chappell](#)

Current Opportunities & Issues
[USCG](#)

District 7 Leadership Overview
[Ken Plesser](#)

Operational Hazards in the
Savannah AOR - [LT Ramos](#)

Ditching & Egress - [Ron Sain](#)

AST Drills and Egress Training

Evening Fellowship Dinner

Saturday April 2, 0830 - 1630

Expense Form Processing

Maintenance Processing
[Mike Renault](#)

EF Johnson-5100 Operations
Refresher - [Mark Cannon](#)

District 7 Flight Safety Officer
[Doug Armstrong](#)

Operational Security
[Cecil Christopher](#)

Photo - Capable Missions
[Ann Graham](#)

FAR Review - [Randy Brennan](#)

WX Planning, Use of iPad WX
Functions - [Randy Brennan](#)

Aero-Medical Factors
Obstructive Sleep Apnea
[Robert Miller](#)

CRM Lessons - [David Lincoln](#)

Understanding Gray's Reef
[Becky Shortland](#)

MIAMI



**April
9 - 10**

Albatross Training Room,
USCG Air Station Miami, FL

Saturday April 9, 0730 - 1630

Introduction - [John Moore](#)

Remarks & Awards - [USCG](#)

District 7 Leadership Overview
[Ken Plesser & Doug Armstrong](#)

Roles/Responsibilities- [J. Moore](#)

Table Top Exercise, SAR/Fore-
flight Inputs" - [Tom Powers](#)

Miami Update, e-Flight Binder,
Key West Patterns & Warning
Area Entry Procedures, Online
Miami Procedures - [Peter Hecht, John Moore and Jorge Sanchez](#)

Air Station Tour - [LT Ryan](#)

Silver Eagles Fellowship Event

Sunday April 10, 0730 - 1600

Where We Have Been, Where
We Are, Where We Are Going
[John Moore](#)

Aeromedical Factor/Aging Pilot

FAR Review - [Randy Brennan](#)

CRM Safety Egress Experi-
ence - [Marty Rosenberg](#)

TOI's/Sector Miami Intel Brief-
ing/HomePort and Handling of
Information

AST Drills and Egress Training

Training Pace and Flow; Se-
curity Clearance, Wearing the
Uniform, Spatial Orientation
LAT LONG, Preflight Activities,
Responsibilities of Observers,
Comms and Logs, Intro to
AOMS, Air Crew Upgrade/Pilot
Certification - [Jorge Sanchez](#)

Policy Changes-[Wilson Riggan](#)

CLEARWATER



**April
15 - 16**

Red Tail Lounge, USCG
Air Station, Clearwater, FL

Friday April 15, 0730 - 1630

Welcome - [Cat Mills](#)

Remarks & Awards - [USCG](#)

District 7 Leadership Overview
[Ken Plesser & Doug Armstrong](#)

Aeromedical Factors - [LTJG Irving and Dr. Perni](#)

Safety - [LCDR Majeska](#)

First Light Search Scenario
Sector SAR Watch/CAS ODO

Sector Comms: "What's Work-
ing, What's Not" - [Sector Com](#)

AST Drills and Egress Training
and Vest Inventory - [Bob Ward](#)

Evening Fellowship Dinner

Saturday April 16, 0830 - 1530

Marine Charts - [J. McClash](#)

MSLE Reports - [Marc Miller](#)

Fit to Fly, Weights & Balances
[Kate Williamson](#)

Preflight Brief/CRM -[Dan Smith](#)

Egress & "The Hulk" parking lot
[Marc Miller, Dan Smith, Bob Ward, B. Simpson](#)

The Price is Right

SAR Experiences - [C-130 and H-60 Crews](#)

EF Johnson Radio Update/
Marine Radio Backup - [Mark Cannon and K. LaPlant](#)

What is working/what isn't
working. - [Panel discussion](#)

Wrap-up forum - [Cat Mills and Ken Plesser](#)

BORINQUEN



**May
13 - 15**

MWR Auditorium, USCG
Air Station Borinquen, PR

Friday May 13, 1000 - 1630

Vest Fest - [Glauco Rivera](#)

Saturday May 14, 0730 - 1645

Welcome - [Carlos Matos](#)

Awards Presentation - [USCG](#)

Air Station BQN Brief

[CDR Larry Gaillard](#)
[LCDR Ryan Lampe,](#)

Year in Review - [Carlos Matos](#)

District 7 Leadership Overview
[Ken Plesser & Doug Armstrong](#)

Aero-Medical Facts for Aviation
[CAPT Doc Lago](#)

CRM and Decision Making
Principles - [LCDR Nick Leiter](#)

Safety Presentation
[Adam Shapiro](#)

D7 Standards - [Ken Plesser](#)

OBSERVER SESSION:
Comms, Crew Training, etc.
[Duane Minton](#)

PILOT SESSION: Missions &
Reporting, etc. -
[Hache Vazquez](#)

Evening Fellowship Dinner

Sunday April 15, 0730 - 1400

AST Drills and Egress Training
[USCG Rescue Swimmers](#)

Tropical Survival and Rescue
Equipment - [USCG Rescue Swimmers](#)

Open Forum - Ward Room
[Carlos Matos](#)

All Workshops are by invitation only. All attendees must confirm their intention to attend with their specific Air Station Auxiliary Aviation Coordinator.

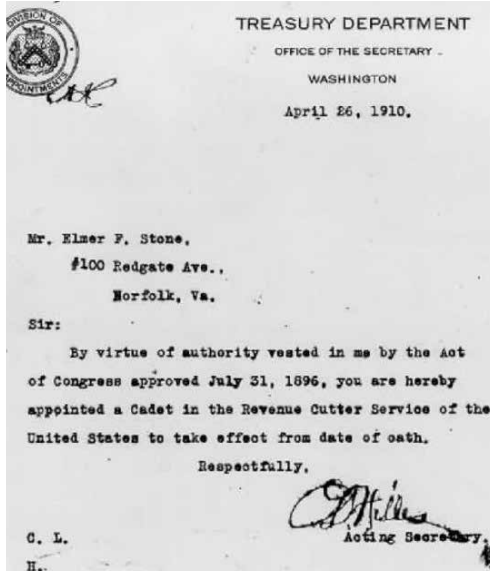
All workshops programs and events are subject to change without notice.

Uniform for the Workshops is the Auxiliary Flight Suit, Operational Dress Uniform (ODU) or Civilian Business Casual.

A History of Coast Guard Aviation

The Early Years (1915-1938) Special Newsletter Series

by Source: U.S. Coast Guard Aviation Association (Ancient Order of the Pterodactyl) Website <http://uscgaviationhistory.aoptero.org>



It could be said the Coast Guard's introduction to aviation took place in 1903 when the surfmen from the Kill Devil Hill Life Boat Station of the US Life saving Service provided the Wright Brothers with additional man power during the pre-launch activities of that epic flight. They helped transport the Wright biplane to its launch site. Surfman J.T. Daniels took the only photograph of the event. By act of Congress, the US Life Saving Service was merged with the Revenue Cutter Service to form the United States Coast Guard.

The Coast Guard came into being when President Woodrow Wilson signed into law the Act to Create the Coast Guard on 28 January 1915. Coast Guard



Aviation owes its beginnings to Second Lieutenant Norman B. Hall, Third Lieutenant Elmer F. Stone and their commanding officer (left photo) **Captain B. M. Chiswell**. All

felt strongly that disabled vessels and derelicts could be located more quickly from an airplane than from a relatively slow moving vessel. They approached the Curtiss Flying School at Newport News Virginia, discussed their concept and made ar-

rangements for a series of flights to evaluate the idea. The flights proved to be successful. Captain Chiswell set about selling headquarters on the idea and requested that consideration be given to sending Coast Guard Officers to Naval Flight School. The **Coast Guard Commandant E. P. Bertholf** (right photo) queried the US Navy Department concerning this possibility. The Navy agreed and on the first day of April 1916 Lieutenant Elmer Stone received orders for flight training. Lt Sudgen and others would follow. Lt. Norman B Hall was ordered to the Curtiss Aeroplane and Motor Company factory to study aircraft engineering.



The United States entered World War I on 6 April 1917 and the Coast Guard was transferred to the US Navy. An additional eight Coast Guardsmen had obtained their wings by this time and all participated. The expansion of Naval Aviation was rapid and the Coast Guard Officers having had previous sea duty were senior in rank. As a result they were assigned as Commanding Officers of major commands and Naval Air Stations. Lt. Sudgen became commanding officer of the Naval Air Station, Ille Tudy, France, LT. Eaton was commanding officer of the Chatham Naval Air Station. LT. Donohue was commanding officer NAS Sydney, Nova Scotia, LT Parker was commanding officer of NAS Key West and Lt. Coffin became commanding officer of the enlisted training school at Pensacola.

After the armistice the Coast Guard was returned to the Treasury Department and opportunities for aviation duties were extremely limited. In the unsettled times following the war Coast Guard Aviation was all but lost. Then an event occurred which brought hope to all. Three Navy flying boats, NC-1, -3, and -4, took off on a flight across the Atlantic to Europe in May 1919 to demonstrate the reliability and usefulness of large flying boats. **Lt. Elmer Stone** (right photo) had continued to work with the Navy after the war at the Navy's request.



He was assigned as pilot of the **NC-4** (above photo); the only one of the three flying boats to successfully complete the journey. The successful crossing of the Atlantic by NC-4 had far reaching effects on the development of naval aviation. Interest in aviation was again renew-



The crew of the NC-4 at Lisbon: From the left Chief Machinist's Mate (Air) E.S. Rhoads, USN, Engineer; Lt. W.K. Hinton, USNRF, Pilot; Lt. J.L. Breese, USNRF, Engineer; Lt. E.F. Stone, USCG, Pilot; Lt. A.C. Read, USN, Commanding Officer and Navigator; Ens. H. C. Rodd, USNRF, Radio Operator does not appear in the picture.

ed within the Coast Guard and the former US Navy Air Station at Morehead City, North Carolina was obtained for the establishment of an air station. It operated with 6 borrowed aircraft and proved successful in locating marine hazards and protecting life and property. The air station was forced to close after a year due to lack of funds.

The manufacture, sale or import of intoxicating beverages was forbidden by the Eighteenth Amendment to the Constitution after 16 January 1920. The Coast Guard found itself enforcing federal anti-smuggling law on an unprecedented scale. During the mid-1920's rum running became so flagrant that surface craft were unable to cope with it. Early in 1925 LCDR C. C. Von Paulsen, with the assistance of the Coast Guard Commandant, obtained the loan of a Navy aircraft [continued on pg. 7](#)

U.S. COAST GUARD AVIATOR #1

CDR Elmer Stone climbing into his Grumman "Duck" to break seaplane speed record on 20 December 1934



CDR Stone had become the commanding officer was assigned as the senior member of the trial board for the flying boat aircraft being built by General Aviation Manufacturing Corporation. He was relieved by Lt. Richard L. Burke. Stone established a world speed record for amphibious planes when he piloted Coast Guard JF-2 #167 at a speed of 191.734 miles per hour over a three-kilometer test course on December 20, 1934. Lt Burke, utilizing the same aircraft set a speed record of 173.945 miles per hour over a 100 kilometer course with a 500 kilogram load on June 25, 1935. Two days later he set an altitude record of 17,877.243 feet with a 500 kilogram load.

In addition to being the Pilot of the NC-4 for the first Transatlantic Flight he lead in the development of ship-board catapults and aircraft carrier



catapults and arresting gear. Commander Stone died when suffering a coronary thrombosis attack while assigned as Commanding Officer of Coast Guard Air Patrol Station San Diego May 26, 1936.

The Early Years *continued from page 6*

for a year. An Air Station was set up on Ten Pound Island in Gloucester Harbor, Massachusetts. A schedule of daily patrols substantially reduced the rum running in that area. Impressed by the activity of the Air Station, Congress appropriated the funds for five aircraft. Three were paced at Ten Pound Island and of two were placed at Cape May, New Jersey establishing a second aviation unit.

In 1928 an aviation section was established at Coast Guard Headquarters under the command of CDR Norman Hall. It drew up specifications for a multi-mission aircraft which could fly hundreds of miles, land in open and frequently uninviting seas and carry out a rescue. These were the General Aviation PJ "flying lifeboats." Henry Morgenthau became Secretary of the Treasury in 1934. He was an aviation enthusiast and supported its expansion within the Coast Guard. In the mid 1930's RD-4 Dolphins were added, Grumman JF-2s were purchased and Hall PH-2 flying boats came on board in 1938. The marriage of aircraft and ship first took place during this period. The 327-foot cutters each embarked a Grumman JF-2 amphibian. In addition the Secretary obtained Public Works Administration funds and by the end of 1938 there were fifty aircraft, eight Air Stations and one Air Detachment.

Search and Rescue

The initial proposal for Coast Guard utilization of aircraft was to assist Coast Guard Cutters in searching for vessels in distress and locating derelicts and hazards to navigation in the open seas. World War I interrupted the development of this concept but in 1920 an air station was established at Morehead City, North Carolina, to evaluation purposes. The aircraft proved effective but the air station closed after a year of operation due to lack of funds. During 1926 two air stations, one at Ten Pound Island at Gloucester Massachusetts and one at Cape May, New Jersey, were established to search for and locate maritime smugglers of alcohol during the Prohibition period. The use of aircraft proved to be very effective for this purpose.

Aircraft also proved to be very effective in rendering assistance to those in distress in the bays, coastal regions and those areas adjacent to the sea. They were able patrol and search vast areas in much less time than a surface vessel could. The fact that these aircraft could operate from the water contributed significantly to the saving of life. This capability to cover vast areas in a limited period of time was also utilized to warn people of impending storms and hurricanes.

Evacuations for medical reasons became part of the mission and in the early 1930s, a series of aircraft, referred to as flying lifeboats, were developed with a capability of landing in the open sea. During the year 1938 there were 1,931 persons warned of impending danger; 335 vessels warned of impending danger; 266 persons in peril assisted; 125 medical cases, 10 off which were facilitated by landings in the open sea; 87 disabled vessels located; and 21 navigation obstructions located. Coast Guard aviation was in the beginning changes of what has become recognized today as its search and rescue mission.

The Early Years Timelines 1915-1938

1915 - 28 January President Woodrow Wilson signed into law the "Act to Create the Coast Guard"

1916 - 21 March The Beginnings of Coast Guard Aviation

1916 - 1 April The Navy Offers Flight Training to the Coast Guard

1917 - 7 April Coast Guard Aviation in World War I

1919 - 27 May NC-4 Transatlantic Flight

1920 - 24 March The First Coast Guard Air Station - Morehead City, NC

1926 - 20 June The First Permanent Coast Guard Air Stations Established

1929 - 13 June Air Traffic Flight Following Established by USCG

1932 - 1 June The Flying Lifeboats

1932 - 1 June Coast Guard Air Station Miami Established

1934 - 9 March Coast Guard Commences Aerial Border Patrol Operations

1934 - 27 October Coast Guard Obtains Grumman JF-2 Ducks

1934 - 5 December Coast Guard Air Station Biloxi Established

1935 - 15 February Coast Guard Air Station Salem Established

1935 - 20 February VIP Executive Transport Purchased

1935 - 1 March Coast Guard Air Station St. Petersburg Established

1935 - 1 June Coast Guard Air Station Port Angeles Established

1936 - 3 June Coast Guard Cutters Designed To Carry Aircraft

1936 - October Coast Guard Purchases Viking Flying Boat OO-1

1937 - March Coast Guard Air Patrol Station Charleston Established

1937 - April Coast Guard Air Station San Diego Established

1938 - April Coast Guard Purchases Hall PH-2/3 Flying Boat

1938 - 23 April Coast Guard Air Station Brooklyn Established

continued on page 8



1903 - First Flight by Wright Brothers. This photo was taken by one of the Coast Guardsmen at the Kill Devil Hills station.



1917 - Flown by USCG aviators during World War I from the cruiser USS Huntington and used by the fledgling air arm of the Coast Guard to develop the concept of search and rescue after the war.



1925 - The first successful Coast Guard Air Station began with the establishment of an air unit at Ten Pound Island, Gloucester, MA with one Vought sea-plane borrowed from the Navy.



1926-1935 - The Loening OL-5 circa was the first aircraft designed and built for the US Coast Guard.

"THE EARLY YEARS"

The Coast Guard Aviation Association commemorates 100 years of saving the lives of those entrusted to us, securing our coastlines and pioneering fixed and rotary wing aviation. For a list of events that have been scheduled throughout 2016 visit this link.

<http://centennial-cgaviation.org/>

A very honored thank you to our friend and colleague of Auxiliary Aviation VADM John Currier, (Retired) Ancient Albatross #23, who serves as the Coast Guard Aviation Association Centennial Coordinator.

All special section history material and photos are reprinted from the Coast Guard Aviation Centennial website which is sponsored by the Coast Guard Aviation Association of Ancient Order of the Pterodactyl. All Rights Reserved and Design by Bold Layout.



Left to right:

C. T. Thrun, CMAA
J. F. Powers, Oiler 1st Cl.
L. C. White, Ship's Writer
C. Griffin, MAA
John Wicks, Surfman
Robert Donohue, 3rd Lt.

C. E. Sugden, 2nd Lt. (Eng)
E. A. Coffin, 2nd Lt.
S. V. Parker, 1st Lt.
P. B. Eaton, 2nd Lt. (Eng)
E. F. Stone, 3rd Lt.
Ora Young, Surfman No. 1

W. R. Malew, Cox'n
J. Myers, Surfman
J. Medusky, Asst. MAA
R. F. Gillis, Signal QM
W. S. Anderson, Surfman
L. M. Meika, Signal Q.M.



1931-1941 - Viking Boat Company OO-1. Six of these aircraft were purchased by the Coast Guard. They were a fine aircraft for landing in the open sea and were used at Miami, Biloxi, Cape May, Charleston and St Petersburg AirSta.



1936 - One of these Admirals Flagship aircraft was purchased for \$65,000. Its range was 850 miles and its service ceiling was 11,450 feet.



The later Dolphins were especially liked by the aviators. The first of a standardized series of aircraft for the Coast Guard. They were still in operation in 1941.



1937 - A USCG RD2 Aircraft escorts the Hindenberg (left) over NAS Lakehurst. prior to May 6, 1937 when she burned.



The first rescue plane designed specifically for Coast Guard use and known as the FLYING LIFEBOAT. Coast Guard contract for \$73,343 each.



1938 - Forty eight of these aircraft were assigned to the Coast Guard ASW patrol of the Gulf and Atlantic coastal waters during World War II.



1935 - The only DELTA ever purchased by the military, it was used as a command transport for the Secretary of Treasury.



1938 - An improved version of the PH-2, seven of this model were purchased by the Coast Guard for \$130,000 each in the development of a coordinated search and rescue organization.

Aeromedical Advisory **JAMES FRASER, M.D. FEDERAL AIR SURGEON**

Staying In Control as We Age

Age is just a number, right? While the passage of time may bode well for wine, it doesn't work out quite as well for humans. The performance of nearly all of our body's systems diminishes with age. If unchecked, that degradation can easily make its way into the cockpit and contribute to the leading cause of accidents — loss of control.

Keeping you in control of your aircraft is one of our highest priorities here in the FAA's Office of Aero-space Medicine. We strive to keep as many pilots in the cockpit as we can safely certificate. In that context, one of our major concerns is incapacitation. Along with impairment, incapacitation greatly contributes to loss of control accidents. There are two varieties that manifest themselves very differently: sudden incapacitation and subtle incapacitation.

Sudden Incapacitation

This threat is somewhat self-evident. It's also the one that makes headlines and drives a lot of decision making regarding which conditions are disqualifying. It's easy to see why; sudden incapacitation represents a clear threat to pilots, passengers, and even people on the ground. The risks are both real and well-documented. One third of all myocardial infarctions (MI), aka heart attacks, present as sudden cardiac death which means that the patient dies within one hour of the onset of symptoms. As if that wasn't bad enough, the odds of an MI increase dramatically with age. When compared with a male at age 30, a male at age 40 is six times more likely to have an MI. At 60 it jumps to 100 times more. That's one reason why our medical certification folks and Aviation Medical Examiners are so careful with cardiac issues.

Subtle Incapacitation

As obvious a danger as sudden incapacitation is, subtle incapacitation can be far more insidious. Subtle incapacitation can occur through a degradation of either physical or mental ability. Mental degradation is probably the biggest challenge for pilots because it tends to come on slowly and we are usually not even aware it's happening. Recent medical literature tells us that anywhere between five and eight percent of people at age 65 have a diagnosable form of dementia. That percentage doubles for every additional five

years of age. Since pilots are a micro-cosm of the general population, there is every reason to believe that these numbers are just as representative within our pilot population. Subtle incapacitation can affect the executive functions of the brain. Things like attention, problem solving, memory, and multi-tasking can all be dramatically impaired, and those are exactly the kind of functions that a pilot really depends on to stay safe and make good decisions.

Because subtle incapacitation can happen so gradually, it is especially hard to self-diagnose. By working with your AME and/or personal physician, you can more easily identify and treat conditions that can lead to it. Your family and fellow aviators are also great resources. Have family members who used to regularly fly with you begged off? Have your hangar buddies asked about your flight review a lot in the last year or two? It's possible they've noticed something you've missed about your flying skills. We regularly receive hot line calls and complaints about a pilot's medical fitness. Sometimes these are from antagonists and without merit. But sometimes they come from worried family members who have good reason for their concern. Although we rarely act on these complaints, the fact that family members feel so strongly should be a wakeup call for all of us. Being a pilot is a big part of who we are, even if it's not what we do to pay the bills. That can make any conversation about curtailing or limiting how much we fly very difficult. Nevertheless, it's important to have these conversations as we age to make sure we hear any concerns they may have.

What can you do to prevent incapacitation issues? In addition to maintaining good health and having regular checkups with your doctor, schedule regular checkups with a flight instructor. The standard flight review is a good place to start but as you age, think about increasing the frequency. This activity provides regular feedback on the condition of your flying skills. In addition, time with a CFI will improve your general proficiency — and is a benefit regardless of your medical condition.

Bottom line: it's important to talk with friends and family and take any steps needed to ensure you maintain the skills necessary to be safe.

James Fraser received a B.A., M.D., and M.P.H. from the University of Oklahoma. He completed a thirty year Navy career and retired as a Captain (O6) in January 2004. He is certified in the specialties of Preventive Medicine (Aerospace Medicine) and Family Practice. He is a Fellow of the Aerospace Medical Association and the American Academy of Family Practice.

Reprinted from the: **FAA Safety Briefing March/April 2016**

http://www.faa.gov/news/safety_briefing/2016/media/MarApr2016.pdf

THE GOOD - Like anything else, there's always good and bad. Drones will be an amazing tool for many different applications. Here are some of the important good applications you may have seen already on TV:

• Future Package Delivery (Amazon, etc.) • Aerial Fire Fighting Spotter Applications • Police Department Use • Pipe Line Patrol • Railroad Track Inspection • TV Station News Reporting • Real Estate Market • Search and Rescue • Storm Damage Assessment • Movie Industry

THE BAD - How easy would it be for a terrorist to go into Best Buy, Frye's Electronics, or on the internet, buy a heavy lifting drone with a 55 pounds gross weight capability, load it up with plastic explosives, biological or chemical weapons, and fly it into a stadium filled with people? I saw several videos on YouTube where a man flying a small drone, mounted a machine gun onto it and "took out" human manikins. Just Google, "*Machine Gun Drone*," but be prepared, the video is very disturbing. Of course, a drone in the hands of someone that doesn't care to follow the rules is just as bad as the terrorist. Delta Air Lines' pilots have spotted drones flying next to their airliners as high as 10,500 feet. Some people just do not follow the rules or care to follow the rules. This is something that the AUXAIR pilots should be briefing as a valid "threat" on the ground before launch, so the entire crew will be aware.

SHANGHAI CHINA - (Photos) **TOP RIGHT:** A salesman at the Shanghai Underground Mall, in the Pudong District, explaining the plethora of drones for sale which come in all shapes, sizes, and price ranges. **BOTTOM RIGHT:** Recreational drone market at the Shanghai Shopping District, the majority of the drone purchasers are from the USA. **BOTTOM LEFT:** For about \$200 USD, you can purchase this sophisticated Quad Copter Drone that will remain aloft for at least 30 minutes.



U.S. Coast Guard Auxiliary photos by David Lincoln.

"DRONES"

A continued series, by David Lincoln, ADSFO-AV Savannah

A drone in the hands of someone that doesn't care to follow the rules is just as bad as the terrorist.

Drones come in all shapes and sizes as most know. During my last trip to Shanghai, China, I observed dozens of stores selling all sorts of different sized drones to fit various budgets. All the drones were under 55 pounds, and were equipped with cameras producing high-definition video and still cameras. They are powered by high-tech electric motors with lithium batteries. These drones are primarily produced in China and Taiwan and many American companies have ordered them for their own commercial applications, such as Amazon and others.

These drones are extremely sophisticated, being able to hover in higher winds and able to fly a flight plan to wherever they are programmed to fly within an exact latitude and longitude. They have GPS technology and have auto-pilot capability as well. They also allow automatic attitude recovery in the event of a flight upset using the controllable gimbals and will fly back to the operator in the event of a low or discharged battery. Drones generally have a useful aloft time of between 20 minutes to about an hour. They also have Wi-Fi capability to send photos on the fly if so equipped.

As far as training to operate one, there is no formal training required, just open up the box, read the manual, and learn at your own pace. Pretty simple!

As far as pricing, in China, I saw prices range from \$50 on up to well over \$500, depending on size. At Frye's Electronics yesterday, the prices ranged from \$25 for a tiny drone to well

over \$800. For sophisticated drones for the movie industry or aerial commercial applications, prices range all the way up to well over \$5000, depending on the camera involved and capability. It is just like anything else... prices will fall with time.

I read that there are roughly 500,000 drones operating in the USA now, with almost a million more being sold this coming year!

Anti-Drone Technology

I've read on numerous sites that the government has contracted companies to find a way to disable the electronic link between the operator and the drone to bring a drone down to earth safely and without harm to anyone. I would imagine this technology would be used for highly sensitive applications, such as the Presidential motorcade, nuclear power stations, and other highly sensitive areas. I've never actually experienced a drone in-flight, but I've spoken to an AUXAIR crew that did have a near collision with one during a normal MOM patrol, so crews beware and look outside! Always remember to report the sighting to the nearest FAA facility, so they can complete their investigation checklist. Try to remember as many details as possible to relay that information to the FAA.

Below is copied word for word from the FAA.gov website on the basic rules for recreational drones:

Know Before You Fly Campaign

The FAA has partnered with several industry

associations to promote, "Know before You Fly," a campaign to educate the public about using unmanned aircraft safely and responsibly. Individuals flying for hobby or recreation are strongly encouraged to follow safety guidelines, which include:

- Fly below 400 feet and remain clear of surrounding obstacles.
- Keep the aircraft within visual line of sight at all times.
- Remain well clear of and do not interfere with manned aircraft operations.
- Don't fly within 5 miles of an airport unless you contact the airport and control tower before flying.
- Don't fly near people or stadiums.
- Don't fly an aircraft that weighs more than 55 pounds.
- Don't be careless or reckless with your unmanned aircraft – you could be fined for endangering people or other aircraft.

FYI....The FAA has an extensive amount of reading on drones for anyone interested.

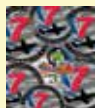
The Future

This is a huge, new multi-billion dollar industry that took the FAA off guard. I believe that as the UAV industry evolves, we'll be seeing more regulation and many more positive applications. I just hope that safety doesn't become an issue with errant drone operators, terrorism, or other malice.

The AUXAIR District 7 U.S. Coast Guard Auxiliary, *Operations and Flight Safety Newsletter* is published quarterly. Direct all question or comments to the EDITOR: Robert A. Fabich, Sr. at AuxBob@Robich.com

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Limited copies of the 2015 AUXAIR yearbook are available for purchase for \$10.00. Contact Jim Nelson at: jimn3244@aol.com



It's Not the Title - It's the Job

Recognizing "Span of Control," the DSO-AV appoints Jon Nicholls as Assistant District Staff Officer to the new AUXAIR program management position. by: Robert A. Fabich, Sr., ADSO-AVP



Jon Nicholls, previously the Auxiliary Aviation Coordinator (AAC), Air Station Clearwater, assumed duties as the Assistant District Staff Officer, Program Manager (ADSO-AV-PM) in the District 7 Auxiliary Aviation chain of leadership on January 1, 2016. Eight other ADSO-AV positions (Training, Standards, Technology, Publications and Personnel, Facility, Materials, Budget Management) will now report directly to Mr. Nicholls.

With the District AUXAIR force being nearly 150 members, flying about 40 aircraft and 31 designated leaders, Ken Plessner, DSO-AV, determined the ideal span of control for the unique character of this organization required modification due to the specialized fields of

subordinates. In doing so, the job functions, activities that must be accomplished, can be managed more effectively and efficiently.

During the first quarter of 2016, Mr. Nicholls has commenced with Directives and Standard Operating Procedures for the consistency of tracking, reporting, accountability, purchasing, storage, inspection and maintenance of Personal Protective Equipment (PPE) at the air station level. He also started standardizing information for NOAA registration of Personal Location Beacons (PLB), scheduled AUX-17 Crew Resource Management (CRM) and is updating job/position descriptions.

Mr. Nicholls joined the Coast Guard Auxiliary in December 2009 and is a member of Flotilla 11-10, Dunedin, FL. Prior to his ADSO-AV-PM position, he has served as the AAC and AAAC-OPS at Air Station Clearwater.

His awards include: Auxiliary Commendation Medal, Auxiliary Achievement Medal (2), Auxiliary Sustained Service Award (10), Coast Guard Unit Commendation, Coast Guard Meritorious Unit Commendation, Coast Guard Meritorious Team Commendation (5), Coast Guard Auxiliary Operational Excellence "E" Ribbon, Special Operations Service Ribbon, Auxiliary Membership Service Award, Auxiliary Marine Safety Training Ribbon, Auxiliary Examiner Program Ribbon (2) and the Auxiliary Service Performance Award Examination/ Marine Dealer Visitation.

IN THE NEXT ISSUE OF THE AUXAIR DISTRICT 7 OPERATIONS AND FLIGHT SAFETY NEWSLETTER

* "Best of the Best" Highlight from the 2016 Annual Aviation Auxiliary Safety Workshops at Air Stations Miami, Savannah, Clearwater and Borinquen.

* An introduction of the new active duty officers assigned to the air stations.

* "DTRAIN The Destination Event for AUXAIR in D7" A sneak preview of coming events you won't want to miss.



"Facility Management, What You Need to Know"
 Mike Renuart, ADSO-AV-MF explains how the January 22, 2015 facilities rules are implemented in District 7.

* More on the "Centennial of Coast Guard Aviation" a continuing series, "The Growth Years." The U.S. Coast Guard Aviation Association "Ancient Order of the Pterodactyl."

