



Missions for
America
Semper vigilans!
Semper volans!

discussed how scientists transition information from theory to practice and how they handle uncertainty.

The Coastwatcher

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CADET MEETING

07 February, 2017

submitted by

Commander Matthew Fontaine Maury

The meeting shifted to UConn's Avery Point Campus where cadets attended a lecture presented by Keith Dixon, Ph.D. a research meteorologist and climate modeler at the National Oceanic & Atmospheric Administration Geophysical Fluid Dynamics Laboratory.

Dr. Dixon's lecture was entitled "Modeling our Planet's Climate: Spanning and Spatial Scales for Research and Applications." The lecturer

SENIOR MEETING

07 February, 2017

submitted by

Maj J. Scott Farley

TRCS Commander Farley announced that the Squadron will support the AOPA fly-in on October 8th and 9th. SM Steve Heard has been assigned as our point man. Farley anticipates that we will assist in vehicle and aircraft parking and a CAP educational and promotional display.

The fruit sale exceeded last year's effort by 17%.

The Squadron will support the Training Exercise at Brainard Airport on 18 February and provide aircrew and mission staff members.

Ice Patrol missions and proficiency training accounted for 25 hours during the month, exceeding the Squadron goal of 20 hours/month.

Cadet orientation flights will be conducted on 19 February.

A Squadron Safety Down day is scheduled for 28 February.

PROMOTIONS. ACHIEVEMENTS AND AWARDS

SM Steve Heard has qualified as a mission scanner and has commenced training for mission observer and a Form 5 flight check.

Lt Col Stephen Rocketto has been awarded the Col (Bud) Payton PAO of the Year honors for the Northeast Region.

WATER SURVIVAL COURSE

The Connecticut Wing sponsored a water survival course last week. The course was held at Danbury Airport and the New Fairfield High School swimming pool. The program was instituted because the expanding Long Island Sound Patrol mission may require extended over-water flight and CAP regulations demand water survival training for the mission aircrews.

Around thirty members assembled at Danbury Airport for the first part of a two part training session. At the airport, participants took part in a classroom discussion, took an on-line test, and practiced aircraft egress.

The party then adjourned to the New Fairfield pool and qualified by swimming 50 feet wearing a life jack, treading water for 10 minutes and boarding a life raft.



Where's Pawel? (Photo Credit: Scott Farley)

Majs Scott Farley and Paul (Pawel) Noniewicz completed the program and are now skill evaluator trainers for those squadron members who elect to receive the training.

CURRENT EVENTS

T-X Choices Narrow

The United States Air Force is preparing to spend 16 billion dollars to replace the Northrop T-38 Talon fleet with 350 advanced trainers and associated training systems such as simulators. In order to meet the requirements, the companies which apply must keep the price under 16.3 billion dollars and produce a high performance trainer which meet specific standards such a 6.5 maneuvering capability. Six companies expressed interest but two have withdrawn from the competition.

Both Northrop Grumman and Raytheon have quit the race. Northrop Grumman has decided to exert its corporate resources on winning high value contracts such as the B-21 Raider.

Raytheon, which had partnered with the Italian firm Leonardo seem to have had internal disputes over the division of the work and profits.

The front runners are Boeing's BTX and Lockheed Martin's T-50A. The Boeing entry, a partnership with SAAB, have tailored its ship and built it from the ground up to meet the Air Force requirements. However, the aircraft is a risky investment since unexpected problems may create delays or cost increases. Boeing has little experience with its entry since only two units have been produced and not yet undergone rigorous testing.



BTX (Photo Credit: Boeing/USAF)

Lockheed, partnering with South Korea's KAI has an entry which is already flying 150 units with five air forces and development costs are already being absorbed. However, Boeing's entry might trump its early start with the development of more advanced systems.



Lockheed Martin T-50A (Photo Credit" Lockheed Martin)

Three dark horses remain in the race. Sierra Nevada Corporation and Textron Aviation. Sierra Nevada has teamed up TAI, a Turkish corporation. It is producing a prototype of its all-composite "Freedom Trainer" in Colorado. However, it has a late start, has no performance record, and as of late, U.S. Turkish relations have cooled.

Textron has invested its own funds to develop and construct its Scorpion. One prototype is flying but its performance is minimal and the company is reconsidering a future investments in the design.

A late entry in the "Trainer Stakes" is the Javelin, entered by Stavatti Aerospace, a Minnesota based manufacturer. The design rights were purchased from Aviation Technology Group Javelin which partnered with Israel's IAI and went bankrupt in 2008. A prototype did fly and still exists, disassembled and in storage. However, Stavatti has never manufactured any aircraft and its inexperience will count against it if the Javelin ever reaches the starting gate.

The number of partnerships are a reflection of the risks and costs of any new aircraft. In addition, a competitive edge might be gained if the aircraft and its components are products of different nations.

AEROSPACE HISTORY

This article on presidential aircraft is the second of three parts: pistons, turbine, and helicopters.

Presidential Aircraft II The Turbines

The last of the piston-powered Columbine Constellations were retired during the Eisenhower administration and the Special Air Missions detail of the 89th Airlift Wing turned to a version of the Boeing Dash 80, first of the C-135 and 707 line.

The Air Force acquired Boeing 707s, modified them and designated these the VC-137. In 1958, Ike abandoned the lovely graceful Connies for the swept-wing blow-pipe Boeings, all of which carried tail numbers in the 900 range.

The three planes were designated as the VC-137. Eisenhower named the first VC-137B *Freedom One*. The aircraft is now at Seattle's Museum of Flight. A second plane, a VC-137C, went on line in 1962 and was inherited by President Lyndon Johnson after President John F. Kennedy's assassination. This aircraft is now on display at the the Library of President Ronald Regan. The last president to use this aircraft was President William Clinton. The Presidential Gallery at the Museum of the United States Air Force houses this aircraft.

The 26000 and 27000 tail numbers were first applied in 1962 during the administration of President John F. Kennedy. These aircraft were long range 707s suitably modified with appointments and communication gear befitting the Chief Executive.



*Freedom One at
Seattle's
Museum of
Flight*

*971 at Pima
Before Move
to Reagan
Library*



*26000 at the
National
Museum of the
USAF*

In 1973, Richard Nixon, in an economy measure during the “energy crisis” flew from Washington to Los Angeles on a United Airlines DC-10. The call sign used was Executive One. This is the only presidential trip on a commercial airliner since FDR went to Africa on the *Dixie Clipper*.



A Douglas DC-10

During the Reagan administration, a decision was made to replace the 707 fleet with two Boeing 747s, designated at the VC-25A. The first POTUS to use the VC-25A was George W. Bush and they have been flying since 1990 and then used successively by Presidents William Clinton, and Barack Obama. At the time of this writing, the 45th President of the United States has not yet flown on Air Force One.

They are “flying White Houses” outfitted with a presidential executive suite, a wide range of communication equipment, medical facilities, conference room and quarters for crews, presidential staff, Secret Service agents, and the

media. Two galleys can serve 100 meals at a time.



*Air Force One Over Mount Rushmore (Photo Credit:
USAF)*

It must be noted that when Air Force One flies, a covey of support aircraft are generally needed. Generally, one or two C-17 Globemaster IIIs are needed to carry the limousines, security vehicles, and, if needed, the Marine One helicopters. On some occasions, a fighter escort is provided.



*Unloading Marine One from a C-17 (Photo Credit:
Arlin's Aircraft Services, Inc.)*

Presidents have used smaller aircraft such as Ike's Aero Commanders. President Johnson used a Beech 90A King Air (VC-6A) to commute from Bergstrom AFB, Texas, to his ranch on the Pedernales River. A Lockheed T-39 Sabreliner and a Lockheed VC-140B Jetstar also served as a Johnson air taxi.



*VC-6A (Photo
Credit: USAF)*



Presidential Sabreliner at the Museum of the USAF



Lockheed VC-140B Jetstar in the AF Museum's Presidential Gallery

On at least three occasions, President Clinton used a Grumman Gulfstream III (VC-20) while in Turkey and the Gulfstream was once used for a Pakistan flight. A Gulfstream 550 (C-37B) carried President and First Lady Obama to New York City in 2010 and later, the President and his Lady flew to Maine on a Gulfstream III.



VC-20A (Photo Credit: USAF)



VC-37 (Photo Credit: Anna Zvereva)

The record for short field landings is held by Navy One. The first and only Navy One was a 2003 flight from Naval Air Station North Island, California to the *U.S.S Abraham Lincoln*. George W. Bush, who flew the F-106 Delta Dagger for the Texas Air National Guard flew in the right seat of a Lockheed S-3B Viking and is the only sitting president to land on an aircraft carrier. During World War II, his father George H.W. Bush flew carrier combat missions in Grumman TBM Avengers.



Navy One trapping on USS Abraham Lincoln (Photo Credit: Photographer's Mate Airman Gabriel Piper, USN)

To utilize airports too short for the primary presidential aircraft, the President has the use of Boeing 757s (the VC-32). Six of them, operate out of Andrews AFB by the 89th Airlift Wing. The previous aircraft to perform similar missions for POTUS was the Douglas VC-9C known as the DC-9 in commercial service.



C-32A (Photo Credit: Sam Meyer)



VC-9C (Photo Credit: USAF/Roland Balik)

Parenthetically, a 757 is the flagship of President Trump's private "air force." Previously owned by Microsoft's Paul Allen, the aircraft lacks the communication and security features of a VC-32 but does have some gold plated lavatory fixtures.

A 747-8 replacement is under contract to replace the current VC-25A. Plan are to equip it with an air-to-air refueling capability, anti-missile defenses are protection from electromagnetic pulse interference generated by a high altitude nuclear explosion.

President Trump has criticized the \$4 billion price tag of the replacement which was ordered during Obama's administration. Negotiations of the price or cancellation of the contract are under study.

The next edition of The Coastwatcher will carry Part III, Presidential Helicopters.

LOCAL LADS AND THE POTUS PLANES

The first article on Presidential Aircraft jogged the memories of two CAP members, both with an association with Thames River. Lt Col Bill Dolan had a assignment as a USAF air traffic controller working in the Civil Aeronautics Authority (forerunner of the FAA) Air Route Traffic Control based in hanger 6, at Washington National Airport (Now Reagan National Airport).

...Andrews was a support base for the DC area however there was a large hanger at the NW corner of DCA that housed the 1254th Air Base Group where all Presidential aircraft

were based and...on occasion would have the privilege of talking to Air Force One while it was en route to various destinations.

Dolan also remembers the Eisenhower Aero Commanders.

Coastwatcher editor Steve Rocketto had two run-ins with Air Force One. (Perhaps that's a bad choice of words!) Both occurred at Bradley flying air taxi. On the first occasion, the arrival of President Carter led to a 15 minute landing delay.

The second instance, also at Bradley incurred a 15 minute take-off delay waiting for President Reagan's flight to get far enough away so they would not have to share airspace. Rumor has it that the national security people were well aware of Rocketto's piloting skills and decided not to take any chances. Rocketto was both honored and ecstatic. Honored because of his proximity to the two national leaders and ecstatic because in both cases, the Hobbes meter, which determined his pay, was running.

Note that Rocketto was delayed in accomplishing the "swift completion of (his) appointed rounds" by both a Democratic and a Republican president but received a monetary bonus. For his inconvenience. This is a clear demonstration of how a bipartisan effort can redress the grievances of a citizen.

"SIDEBAR"

The 1154th Air Transport Wing

The 1154th ATW mentioned in the prior article was organized in 1948 as part of the Military Air Transport Service (MATS) and was tasked with operating the Special Air Mission (SAM) service in the District of Columbia. Initially a squadron and then a group, the 1154th was reconstituted as a wing and moved to Andrews Air Force Base in 1961.

The mission was to provide air transport for high

ranking officials as designated by the office of the President. Some of these passengers were foreign dignitaries. In 1959, Soviet Premier Nikita Khrushchev enjoyed a tour of the United States on one of the SAM's VC-137s.



Khrushchev disembarking in Los Angeles. Note that the SAM aircraft bears the MATS logo. This aircraft, tail number 86970 is a VC-137B now on exhibit at Seattle's Museum of Flight with the more familiar livery adopted during the Kennedy administration.

(Photo Credit: Sam Olander/LA Times)

The 1154th flew the last of the piston engine Lockheed Constellations and the first of the Boeing 707 jets. They were also the first to fly presidential helicopters, receiving two Bell H-13Js in 1957.

AEROSPACE CHRONOLOGY

12 FEB, 1935-The USN dirigible Macon goes down in a storm of Point Sur, California. After suffering severe damage in a storm, Lt. Cmdr Herbert V. Wiley elects a controlled water landing and skillfully brings the aircraft down losing only two men of the 83 man crew. Wiley, who served in all four USN commissioned dirigibles, survived the loss of the dirigible Akron off New Jersey, two years previously, and goes on to command the battleship West Virginia in WW II retiring as a Vice Admiral.



USS Macon compared to the size of the Boeing 747 and Airbus A380

(Photo Credit: <http://www.usmilitariaforum.com>)

13 FEB, 1976-Alexander Lippisch, pioneer in the development of tailless aircraft and contributor to the design of the ME-163 and Douglas F4D Skyray goes West.

14 FEB, 1951-First Flight of the Republic F-84F Thunderstreak.



The Thunderbirds flew the F-84F in 1955.

16 FEB, 1977-A modified McDonnell YC-15 makes the first flight of the General Electric CFM56 high bypass turbofan.



YC-15 Retired to "The Boneyard" sans Engines. Note Similarity to C-17.