Missions for America
Semper vigilans!
Semper volans!

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CURRENT EVENT & BIRDSTRIKES

RAF Typhoon Eurofighter After Pilot Jettisons Canopy

A suspected bird strike led to a pilot choosing to jettison the rear section of the canopy and making an emergency landing at RAF Coningsby in Lincolnshire. At this time, no reason has been ascertained but a bird strike is suspected

Bird strikes are not uncommon. Capt. Sullenberger and First Officer Jeff Skiles are best known for executing the "Miracle on the Hudson" landing after Canada geese took out both engines on their Airbus A320.

The recent loss of a canopy on an RAF Typhoon was a suspected birdstrike and authorities have found bird feathers and blood inside each of the engines of the Boeing 737 calamity while attempting to land at Muan International Airport.

The Coastwatcher Editor was a passenger aboard a Delta MD-80 series while on an approach to Newark. He saw a flock of birds speed by the aircraft and heard a thumping noise aft where the engines are located but they kept running. After landing, the captain disembarked and was observed staring up at the port engine. The Editor asked the first officer about it and he said they saw the birds above them but they dived down into the path of the aircraft.

The Editor was at Groton when a Learjet hit a flock of Canada geese on approach to to Runway 23. The damage was extensive and expensive. Is this an argument for increased security along our northern border?

The Editor himself took a birdstrike in the left wing of a Piper PA-28 while returning to Waterford Airport at night after a charter flight to Kennedy. A thump was heard while cruising over Charles Island at 3,000 ft. When he landed, it was dark and a walk-around revealed no damage. The strike occurred just under wing and just by the fuel cell and could only be seen if you looked under the wing. He got a wake-up call from the boss, Ed Reeves, in the morning! What a herring gull was doing at night at 3,000 feet is unfathomable.

A friend, Tom Cassidy was heading from Groton to Hartford in a Pilgrim Twin Otter when he took a hawk through the windscreen. The shredded bird landed in his lap so he threw it over his shoulder. Those of you who are familiar with the Twin Otter know that there is no door between the cockpit and passenger seatings so the passengers were somewhat perturbed seeing a hole in the

windscreen and a pilot covered in (bird) blood. And consider the passenger who got hit when Tom performed the over-shoulder bird toss?

Tom had seen it all so he calmly flew the plane to a safe landing. His chief worry was prosecution for killing a protected species.

There are around 13,000 birdstrikes in the United States each year. The chance of a fatality is low, around one in a billion flying hours. Mitigation of the bird risk is an ongoing battle. Groton was using some sort of a noisemaking gun. Around the country dogs, predator birds, habitat modifications and plastic owls.

Deer and coyote pose a major hazard and they have been reported at Groton. About 50 strikes a year are reported in the United States and an estimated 400 more go unreported.

The Editor has had some experience having had three car collisions with deer and one coyote strike. While flying in South American, he had to use some rustic airports and from time to time needed to buzz the strip to get the cattle, sheep, llamas or alpacas to find another grazing pasture.

The Editor claims ace status since he has taken out two white tail deer, one mule deers, a rabid coyote, a herring gull and his squadron'd flag pole.

In conclusion, pilots, do not thing it can happen to you. Stay cool, calm and collected and fly the aircraft. Check the aircraft for damage, especially the control surfaces and land at the nearest airport.

ADDENDUM

Air Tankers Operate at Night

Last week's feature article on controlling wildfires using aircraft made no mention of night operations and the media have been silent about the tactic. Ir is being done and this note is an addendum to last week's edition.

In the 1970s aerial tanker operations at night were ended due to safety issues and cost. But in 2014, the Colorado government establishing a program to study the cost-benefits of operating aerial tanker operations at night. They concluded that the benefits would justify to risk and cost.

However, they developed protocols for flying the aircraft to not only drop retardant but to provide the ancillary aircraft aircraft which are part of the traditional services needed to support the tankers such as lead-in aircraft.

Night operations have some advantages. The winds and temperatures are generally less and the humidity is higher. The use of night vision goggles and forward-looking infrared systems provide not only good situational awareness but a better picture of the drop zones. Lasers provide better and targeting.

The system was first tested 2109 in Australia with Coulson Aviation helicopters and later with fixed-wing aircraft. The U.S. trials were a partnership between the Orange County Fire Authority and Coulson.

(Credit: Coulson Aviation)

(Credit:Kestrel Aviation)

Israel's Elbit Systems developed HyDrop which uses a ballistic computer linked to a command and control system which guides the aircraft to the target and compensates for aircraft velocity, altitude, wind conditions, and the weight and the shape of pellets dropped from a custom container. The pellets which contain the the retardant are

biodegradable and can be manufactured on site. They can be dropped accurately from 500-3,000 feet which provides a considerable margin of safety.

HyDrop Command and Control Display (Credit:Elbit)

Initial trials used two Air Tractors AT-802Fs and demonstrated precise targeting and excellent saturation of the target. The system can be installed in any type aircraft.

So the use of aerial firefighting methods at night is currently done but not well known, probably because the spectacular imagery which is broadcast cannot be video taped at night.

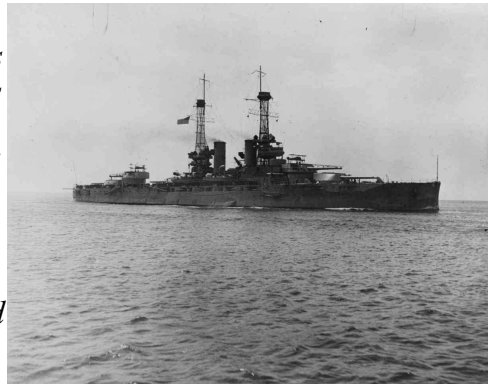
FEATURE ARTICLE

The U.S. Military Adopted Foreign Designed Aircraft In The World Wars

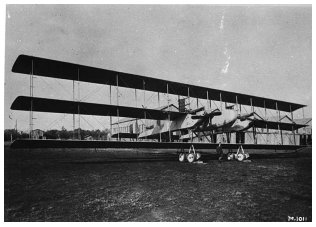
The heavier-than-air manned, controllable, powered aircraft was an American product developed by the brilliant Brothers Wright. But before long, Europeans, especially the French, capitalized on the idea and by the time of our entry into World War One, our domestic industries, with the exception of Glenn Curtiss and his flying boats, could not field an adequate combat aircraft. So we turned to European designs such as the French SPAD XIII, the British Sopwith Camel and the Italian Caproni Ca.44/600.

SPAD XIII - Hat in the Ring Squadron (Credit: USAF Museum)

Bristol Sopwith Camel



U.S.S. Texas with Camels mounted on turret 2 and turret 3. (Credit: Naval History and Heritage Command)



Caproni Ca.44, the type flown by Fiorello LaGuardia, who signed Administrative Order No.9 establishing the Civil Air Patrol

During the interwar period, American airframe manufacturers such as Martin, Boeing and Curtiss produced a series of combat aircraft and the service inventories consisted mostly of domestic designs.

In World War Two, the American "Arsenal of Democracy" produced almost 300,000 aircraft, many of them favored by our European allies such as the Douglas C-47, Skytrain, Bell P-39 Airacobra, Lockheed Model 14 Hudson and the Martin 167 Maryland, about 60,000 aircraft or about 20% of the total U.S. production.

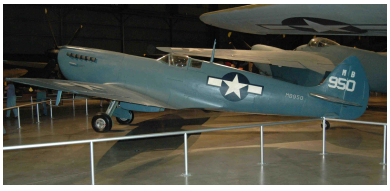
The United States did adopt some British and Canadian aircraft for operational units in what was called "reverse lend-lease." Around 600 Spitfire

Mk.Vb and Mk.XI models served as fighters with the Eagle Squadrons under RAF colors. The Canadian Norduyn Norseman was acquired in large number, around 749, and designated as the C-64. 140 de Havilland F-8 Mosquitos were outstanding performer for the reconnaissance and weather check roles and around 100 Bristol Mk.Ic Beaufighters were used as night interceptors. Small amounts of other aircraft such as the Airspeed Oxford and Anson were loaned as trainers.

Norduyn UC-64 Norseman

DeHavilland DH.98 P.R. Mk. XVI flown by the Army Air Force as the F-8 (Credit: USAF Museum)

Bristol Mk.1c Beaufighter



Supermarine PR. XI

Today, the United States military uses or has used around two dozen types of foreign origin. Some are licensed and produced by domestic airframe producers and some are purchased from overseas companies. Almost all are modified to meet our military's mission requirements and they will be the subject of a future article.

AEROSPACE HISTORY

Jan, 29, 1910–Birth of Philip Gerald Cochran, co-commander of the first U.S. air commandos. Cochran achieved notoriety as "Flip Corkin," in Milton Caniff's comic strip "Terry and the Pirates." Caniff had know Cochran when they were students at The Ohio State University.

In 1941, Capt. Cochran invited Caniff to Groton, Connecticut to observed his 65th Fighter Squadron flying the Curtiss P-40 Warhawk. Caniff saws an opportunity and "inducted" Terry into the Air Corps with "Flip Corkin" as his flight instructor.

When Terry receives his wings, ending his pilot training, Flip Corkin gives a short sermon on Sunday, October 17, 1943. The most famous of Caniff's strips, it was read into the Congressional Record *and reprinted all around the world in military publications.*

Enlarge this cartoon strip to read Flip's "sermon" to Terry.

After a combat tour in North Africa and a spell training P-40 pilot's at Tuskegee, Alabama and an assignment in Groton, Connecticut, Lt. Col. Cochran was paired with Lt. Col. John Alison and in 1944 given carte-blanch by President Franklin D. Rosevelt to form the 1st USAAF Air Commando Group to support the eccentric British Maj Gen. Orde Wingate and his Chindit Long Range Penetration Group in the Burma Campaign.

Cochran and Allison

The composite unit flew an eclectic mixture of aircraft: P-51A Mustangs, B-25H Mitchells, C-47 Skytrains, Stinson L-1 Vigilants and L-6 Sentinels, the Norduyn UC-64 Norseman, Sikorsky YR-4B helicopters, and Waco CG-4 Hadrian gliders.

The fighters and bombers provided airborne artillery for the lightly armed Chindits. C-47s towed the Hadrians in the glider assaults. The light aircraft were used for casualty evacuation and resupply missions. The Sikorskys executed the first, very first, of the millions of helicopter helicopter rescues to come.

Pilots and service crew of the YR-4 in Burma (Credit: USAF/Sikorsky Archives)

Jan 30, 1932–The Imperial Japanese Navy aircraft carrier *Kaga* arrives in Chinese territorial waters at the outbreak of the Shanghai Incident. The Japanese Navy's use of aircraft carriers in the Shanghai Incident will be history's first significant combat use of carrier-borne air power.

T h e *Kaga* supported the operation with her Nakajima A1N4 fighters and Mitsubishi B1M3 torpedo bombers, some of which were detached to Shanghai's Kunda Airfield.

Note the triple flight deck of the Kaga. Mitsubishi B1M bombers are on the top deck and Nakajima A1N fighters are parked forward on the lower deck.

A month after arriving, Kaga's A1Ns shot down a Boeing P-12 being flown by an American, Robert Short, for the Chinese Air Force.

Kaga, twice rebuilt, was one of the six carriers assigned to the Kido Butai for the attack on Pearl Harbor. It was scuttled at the Battle of Midway after it was severely damaged by dive bombers from the *USS Enterprise.*

Jan 31, 2011 – Death of Charles Huron Kaman,

Connecticut resident and American aeronautical engineer, businessman, inventor and philanthropist, known for his work in rotary-wing flight, musical instrument design and the breeding and training of guide dogs.

Kaman flying the K125A, with Glen Campbell playing his Ovation guitar and with his guide dogs. (Credit: Fidelco))

Feb. 1, 1958 – After the successes of the Soviets and repeated American failures, the successful launch of Explorer I was, in more ways than one, an uplifting moment for the US space program.

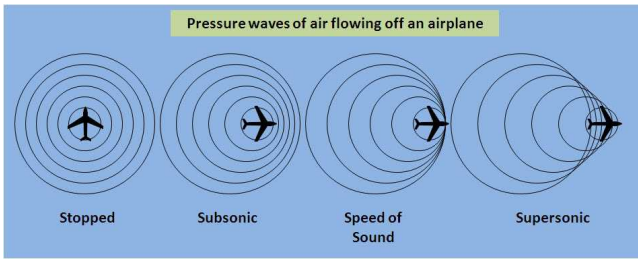
William Pickering, JPL, James Van Allen, University of Iowa and Wernher von Braun, Army Ballistic Missile Agency triumphantly hold a model of Explorer I aloft. (Credit: NASA)

Feb. 2, 2001 – First flight of the Prototype General Atomics RQ-1 Predator B, later re-designated MQ-9 Reaper.

Feb. 3, 1964 – Operation Bongo II was a Federal Aviation Administration experiment to determine the effects of sonic booms on people and structures. For six months, B-58s and F-104s flew eight flights/day scheduled for specific times between 0700 and mid-afternoon over Oklahoma City. Noise was limited to that expected from the planned supersonic transport (SST) planes.

A sonic boom is caused by the shock wave which result at supersonic speeds. Think of it like the wake of boat. Air, like water, is pushed aside and energy from the vehicle is turned into other forms of energy such as fluid displacement and noise. In he case of aircraft, the shock wave forms a cone of pressurized air which trails the aircraft. The pressure drops swiftly and the noise, a boom, is created. The “crack” of a bull-whip is a sonic boom.

“Indie” wields his whip and a conical shock wave is delineated by the condensation of air caused by the drop in pressure behind the F-22.



The noise was tolerated at first but before long, aggrieved citizen groups and their lawyers objected and claims were filed for building damages and apolitical pressure applied. The FAA acted in an imperious manner but finally paid (read tax-payers paid) $123,000 to settle a class action suit. A national grass-roots campaign against the SST led to cancellation of the Boeing design leaving the field open to the Concorde and the Soviet Tu-144, both economic failures.

Mock-up op the cancelled Boeing 2707 and a British Airways Concorde at Heathrow

After what has been called the "Russian Conkordskis" were retired, one was flown by NASA and the Tupolev Design Bureau to validate data acquired from wind tunnel and computer models and to study issues involved in high speed flight. Ironically, Boeing was one of the contractors.

Dryden Flight Research Center EC98-44749-19 Photographed SEP1998
The Tupolev Tu-144LL Flying Laboratory lifts off the runway at Russia's Zhukovsky Air Development Center near Moscow on a high-speed research flight. (NASA photo by Jim Ross)

Earlier, in 1962, the USAF treated the nation to a transcontinental sonic boom. Capts Robert G. Sowers (pilot), Robert MacDonald (navigator) and John T. Walton (defensive systems operator) flew from Los Angeles to New York City in the B-58A "Cowtown Hustler II" on a Los Angles-New York, Los Angeles round trip. They won the Bendix Trophy for their average speed of 1,200 mph.

Cowtown Hustler II

Feb 4, 1986 – All pilots who fly aircraft retractable landing gear aircraft live with the dread of a gear-up landing. A check list, automatic gear warning signals and inculcated habits are the best preventative but accidental gear-up landings are more common than one would expect.

Pakistan International Airlines Flight 300, a 747-200 may have been the largest aircraft to make an accidental gear-up landing. The "annoying" automatic gear warning signal has been disabled.

The plane “touched down” at Islamabad Airport and slid some distance before stopping. All 264 on board left by emergency slides and no one was injured!

The Captain's resignation was accepted. The first officer, Capt. Ahsan Aftab Bilgrami continued with PIA but was killed three years later when his Fokker F-27 crashed in the Himalayan Mountains.

The aircraft, AP-AYW, was repaired by Boeing and re-entered service.. First flown in 1975, she served the Portuguese airline TAP until leased and then bought by PIA. PIA flew it for 13 years after her belly landing and sold it to Evergreen Aircraft in 2005 for storage in Arizona. In 2009, Baltia Air Lines purchased it. (In its thirty years of existence, Baltia had not flown a single commercial flight!) Baltia ferried it to Malaysia and sold it in 2012 for $144,164.06. The aircraft was then scrapped.

THAMES RIVER COMPOSITE SQUADRON

Cadet Meeting
28 January, 2025
Submitted by
Capt Steven Deignan-Schmidt

The weekly aerospace current events briefing was led by C/CMSgt Larson who discussed the two new F-15E Strike Eagle aircraft that were recently delivered with a new passive warning survival system installed.

A character development seminar was led by Capt Deignan-Schmidt and discussed the importance of integrity.

Senior Meeting

Maj Farley engaged the seniors in an exercise in unconventional problem solving, 'thinking outside of the box.” Many Civil Air Patrol missions are governed by well established methodologies or regulations which work. Sometimes contingencies may demand an alternate solution and require “thinking outside of the box”

MORE PAINTERS OF CAP AIRCRAFT BY CAP'S NATIONAL ARTIST, MAJ RON FINGER