

FORWARD in FLIGHT

Volume 17, Issue 2

Quarterly Magazine of the Wisconsin Aviation Hall of Fame

Summer 2019



**33 Years with the Airlines:
“Forcing the Wing to Fly”**

2019 WAHF Inductees

**Naval Aviator Earl W. Spencer, Jr.
The Mighty 8th Air Force**

FORWARD_{in}FLIGHT

Contents Vol. 17 Issue 2/Summer 2019

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Captain Harold Dahlstrom with his son, Tom Dahlstrom (not a crew-member). Father and son work for competing airlines, but have a common bond in their love for the joys of flying.

Capt. Dahlstrom, now retired, shares his reflections on 33 years flying in the airlines — please see his thought-provoking article, starting at page 6. We thank Capt. Dahlstrom for sharing his story.

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President's Message

By Tom Thomas

Spring in Wisconsin is an active time for aviators and those working in the aviation industry across the state. One of the first signs is an increase in student pilots, followed by members of our local flying clubs starting to show up on a more regular basis. The urge to fly is with us year-round, but with the spring weather bringing warmer temps (which don't require pre-heats or heavy coats in the cockpits), flying on a more regular basis is a byproduct we all look forward to. Another regular event is the return of our snowbirds, many of whom sometimes fly their own aircraft back to home-plate.

This past May, WAHF was able to participate in two aviation events attended by over 390 participants. We also gave out issues of *Forward in Flight* magazines, along with past Inductees Collector's Cards. For the Wisconsin Aviation Hall of Fame, it is an opportunity to market Wisconsin's aviation history, and also WAHF. We share stories about many of the Wisconsinites who made a difference through their aviation careers.

The first event was in early May. WAHF had a booth at the 64th Wisconsin Aviation Conference in Green Bay. The event was held at the Radisson Hotel and Conference facility across the road from Austin Straubel Field. This year's attendance exceeded 225 people, and there were 39 booths.

We shared Wisconsin's aviation history, including stories about airports and airport operators/fixed base operators, many of whom had served our country in times of war. Airport commission and committee members, and former State and FAA individuals who played significant roles in our history, also were recognized. Since we were at Green Bay, it was natural to share material on Lt. Col. Austin Straubel, a 2016 Inductee into the WAHF. Many people picked up his "collector's card."

At this event, we also had a number of copies of Wisconsin's 1994 Aeronautical Chart, a quarter of a century ago, which featured an aerial of the Green Bay airport. We had also taken copies of past charts featuring other airport aeriels on the cover including:

- Shawano Airport and Seaplane Base – 2000,
- Eagle River Union Airport – 1999,
- Lakeland/Noble F. Lee Memorial Airport – 1998,



WAMA Executive Director Bob O'Brien, A.A.E.,
with Tom Thomas at Green Bay event

- Watertown – 1992,
- Park Falls/Phillips/Prentice – 1992, and
- Kenosha – 1985 (34 years — over a third of a century).

Overall, the 64th WAC went smoothly, and FAA staff members were on hand from both the Chicago Regional Office and their Airport District Office. The sessions that I was able to attend were professionally-run, with accompanying power-points that were informative, clear, concise and without too many words. The sessions were also well-attended.

The WAHF was also on hand with our table-top display at the Milwaukee War Memorial on Monday, May 13. The WAHF was invited to participate in the Annual Bong Awards Breakfast. Annually, the top National Guard and Reserve service members assigned to units in Milwaukee County are recognized at a special breakfast, and their supervisors/bosses are also invited.

WAHF had been asked to give an overview of America's Top Gun, Major Richard Ira Bong from Poplar, WI. This year, 168 people participated in the Milwaukee awards event, and many folks stopped by our WAHF display and picked up the WAHF Bong Collector's Card.

It was a very enjoyable event, to be sure.



Forward in Flight
the only magazine dedicated exclusively to
Wisconsin aviation history and today's aviation events.

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The Wisconsin Aviation Hall of Fame is a non-profit membership organization with a mission to collect and preserve the history of aviation in Wisconsin, recognize those who made that history, inform others of it, and promote aviation education for future generations.

Cover:

For the
airlines—fair
weather or
foul ahead?

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The “Real” Stearman

By Patrick Weeden

Say the name “*Stearman*” to anyone with a passing knowledge of old airplanes and they’ll immediately think of the ubiquitous yellow WWII trainer, one of which exists in almost every aviation museum in the world. They’re everywhere; and why not? Well over 10,000 examples of various designations were built (PT-17 being the most common) and they could be bought for a song after the war. Hundreds of “*Stearmans*” are still flying today; go to just about any airshow and you’ll see one. They always attract a crowd and give the public an introduction to how military aviators learned to fly.

What many people don’t realize, though, is that the PT-17 wasn’t built or even designed by Lloyd Stearman. By 1934, when the PT-17 was first introduced, the Stearman Aircraft Corporation had become a subsidiary of Boeing Aircraft Company, and although the planes were manufactured at the factory Lloyd started in Wichita, Kansas in 1927, they were most certainly a Boeing product. At the risk of offending the fans out there, that big yellow biplane at your local fly-in isn’t quite what you think it is.

Why am I splitting hairs on the subject of what makes a Stearman a Stearman? Because in my job as director of the Kelch Aviation Museum at Brodhead Airport, I get to be a Stearman snob. (People like me annoy the heck out of me ... those self-righteous vintage airplane guys who think they’re a bit higher on the airplane totem pole than the average radial driver, just because of a particularly rare airplane in the hangar.)

Still, and despite my ironic tone, there is some well-deserved pride in owning an original Stearman.

Thanks to Al and Lois Kelch, the museum’s namesakes, we are members of the exclusive Square Tail Club: owners and flyers of an original, Lloyd Stearman-designed, Wichita-built, Wright Whirlwind-growling, pre-depression era, Stearman C3B. Most of these aircraft can be easily differentiated from their PT-17 cousins by their square tail.

Designed in 1927, and with production beginning in 1928, the C3 model “Sport Commercial” is your typical late 1920s American biplane: huge wings, open cockpit with seating for three, struts and wires everywhere, and the popular 220-horsepower Wright J-5 engine pulling the beast through the sky.

It really is a beast too. The Kelch Aviation Museum’s chief pilot, Greg Heckman, says, “It’s not a real enjoyable airplane to fly because it is so heavy on the controls.” Instead of cables and pulleys, the ailerons on the upper wing are moved via a series of push tubes. The controls in general aren’t well-balanced and the C3 models were notoriously tail-heavy. The brakes are nearly useless on landing, making inexperienced pilots fast members of the “Those Who Have” ground-loop club.

Our C3B, NC8811, just celebrated its 90th birthday in April, and there are only a handful of other similarly ancient Stearmans known to survive, mostly in museums. Only a few are airworthy, and two of them, including ours, are at Brodhead Airport.



Our restored C3B (NC8811) Stearman painted in Stearman Red.

Stearman produced a few variants of the C3 series, notably the C3MB, which had the front cockpit removed and replaced with a hopper and canvas cover for hauling mail or other freight. Many of these later variants saw service with the fledgling airline companies of the late 1920s and operated on the early Air Mail routes across the country.

Mr. C. Mike Williams, who is on the Kelch Museum’s board of directors, owns one of these C3MB models with service history at Delta Airlines, and he has graciously made it available on long-term loan to the museum. Mike hails from the Atlanta area and is a retired Delta Airlines pilot. In fact, Mike’s father was a career Delta pilot and his son is currently a pilot for Delta, so it runs deep in the family. Mike’s C3MB started life flying out of Blue Ash, Ohio for Continental Airlines (not related to the modern Continental) flying C.A.M. 16, the mail route between Cleveland and Louisville. Through a series of mergers and acquisitions, it continued on this route under the flags of Universal Airlines, Interstate, and finally American Airlines. In 1934, the plane was finally sold to Delta, which converted it to a C3B and used it as a crop-duster until 1945, when the used airplane market became flooded with war-surplus PT-17s.

By the 1930s, most of the C3 model Stearmans were being put out to pasture as better designs came into production from various manufacturers. Once passengers discovered closed cockpits, the days of the big open cockpit biplane in airline service were numbered. But the big beast of an airplane was about to find a second life in the new crop-dusting business. The carrying capacity of those huge wings and the powerful engine were put to good use dumping chemicals on farm fields across America, and our C3B, NC8811, would play an interesting role.



Not much is known about the museum's C3B until around 1935, when it was put into dusting service. After WWII, it was upgraded with a Wright J-6-7 engine, then in the early 1950s, it was acquired by Atwood Crop Dusters in California. Atwood was a major adopter of Stearman and Boeing PT-17 aircraft and had over 40 of them at one point. They were heavily modified, with 450-horsepower Pratt & Whitney engines and a beefier landing gear. The heavy steel tube construction of the fuselage was ideal for hauling heavy loads in austere conditions, and the beefier planes performed well.

NC8811 was on Atwood's roster until 1962, although FAA records indicate it was involved in a crash in 1954 and never flew again for the company. More on this later, but starting in 1962, it went through a long series of owners who did almost no work on the aircraft. By 1984, Al Kelch was looking for a C3B to restore and purchased NC8811 (along with two other wrecks) from Atwood's scrap heap. These three airframes, only 14 serial numbers apart, would be used to rebuild the aircraft that is now in the Kelch Aviation Museum. Restoration was completed in 1997 by Kent McMakin at Brodhead Airport, who is also on the museum's board of directors. The restored airplane is painted in Stearman Red.

After a test flight by WAHF inductee Tom Hegy, Al Kelch declared that his new baby was too valuable to fly, and it would remain parked for the next 19 years. Al died in 2004, and the museum bearing his name wouldn't be incorporated until 2012, with flight operations starting in 2015. By August, 2016, the museum board decided to return NC8811 to flight status and conducted an extensive inspection and series of engine runs. Greg Heckman flew it through a number of shakedown flights and we took it to Oshkosh in 2017 for its coming-out party.

When NC8811 was back in the air, several articles appeared in various aviation publications and we pushed the story for the fundraising value. Soon, I received an e-mail from Peter Grant in Astoria, Oregon. Peter had seen our story and thought the N-number sounded familiar from his father's old logbooks; a quick search confirmed it. He wrote, "My father flew your airplane for Atwood Dusters in the 50s. In fact, my father was killed in your airplane."

This was a shock to me. I knew from the FAA records that it had been in an accident in 1954 but knew no other details. The fuselage was in fairly decent shape when Al bought it, so we always figured it was a minor wreck. Peter continued, "Dad was applying a dust insecticide, Tetraethyl Pyrophosphate (TEPP) to a crop of strawberries near Watsonville, California when the engine quit. He landed in the field and hit a fence. The plane flipped on its back and the unsecured hopper door slid open, encasing him in powdered TEPP. He died of TEPP poisoning. I was seven years old."

I tell this sobering story to tour groups at the museum to illustrate just how hard these machines worked and how unforgiving the crop-dusting business was. People, especially kids, get awful quiet afterward, but Mr. Grant is pleased that we are flying the airplane again and telling his story.

The Kelch Aviation Museum is fortunate to have not just one, but two of these rare early Stearman C3Bs in the collection and flying regularly. And who can deny me the pride factor of two "real" Stearmans under one roof?



Above left: Prior to being restored, the Stearman was flown by Peter Grant's father for Atwood Crop Dusters (courtesy P. Grant)

Below: Mike Williams with his C3B Stearman in front of EAA Chapter 431's Memorial Air Mail Beacon Tower. (Photo by Patrick Weeden.)



Patrick Weeden is the Executive Director of the Kelch Aviation Museum at Brodhead Airport (C37), where he can often be found in the hangars making airplane noises. He is a private pilot and has been involved with vintage aircraft operation and restoration since childhood.

To Screen, or Not to Screen? That is the Question

By Dr. Reid Sousek, AME

The topic of this article is the most commonly diagnosed cancer for men in the U.S. It is the second-leading cause of death due to cancer in U.S. men. This cancer saw a sharp increase in newly diagnosed cases in the 1980s. (Likely, however, there were the same number of cases as in other decades; detection methods had simply improved.) Today's challenge is to fit the correct treatment to the right patients. Aggressive testing and invasive treatment of all of these newly detected cancers might not outweigh the harms caused by such treatment.

After reading this introductory paragraph, some may already have determined what type of cancer we are discussing — prostate cancer. The diagnostic approaches, screening recommendations, and treatment options have all changed drastically over the 15 years since I graduated from medical school, and they will likely continue to evolve. Therefore, I will use the most current guidelines I can find at the time of my writing.

General information

For starters, let's look at how big of an issue we are dealing with. In the U.S., men have an 11% lifetime risk of being diagnosed with prostate cancer. The lifetime risk of dying from prostate cancer is 2.5% (National Cancer Institute. Cancer stat facts: prostate cancer <https://seer.cancer.gov/statfacts/html/prost.html> , accessed 4/11/2019).

- In 2018, nearly 165,000 new cases of prostate cancer were diagnosed. This number accounts for almost 10% of all new cancer cases in 2018.
- In 2018, approximately 30,000 men died from prostate cancer. This number accounts for 5% of all cancer deaths in 2018.
- From 2008 to 2014, the 5-year survival rate for men diagnosed with prostate cancer was 98.2%.
- The 5-year survival rate was not equal, however, across all ethnicities.
- African-American men are more likely to develop prostate cancer (203.5 cases vs. average 121.9 cases per 100,000) and die at over twice the average rate (44.1 deaths vs. average 19.1 deaths per 100,000).

If your head is spinning with all these numbers, an even more challenging consideration is that not all prostate cancers are equal!

In autopsy studies, 30% of 55-year-old men have findings of prostate cancer; the number jumps to 60% of 80-year-old men.

Please notice: these men died from non-cancer related causes; cancer was only found upon autopsy. Their cancers were

generally localized within the prostate gland. Yet, we can't base screening protocols solely on these men with unknown and asymptomatic cancer because there are also (unfortunately) cases of men, often younger, with metastasis of their prostate cancer to their bones or other areas.

In this regard, all we can say is: "When it's bad, it's bad. When it's not, it's not." But this saying does not help us to diagnose and differentiate these cancer cases.

Anatomically, the prostate gland is located just below the bladder. The urethra carries urine out of the bladder and runs through the prostate. Prostate enlargement or masses may affect a man's ability to urinate, if the prostate presses on and narrows the urethra.

As many men find out (and dread), a rectal exam may be performed to feel the prostate. Nevertheless, since only a portion of the prostate can be palpated on a rectal exam, the "finger test" is of only limited usefulness as a screening test for cancer.

This limitation led to extensive research for a better way to diagnose prostate cancer.

In the late 1970s, researchers found a "prostate specific antigen." This protein was not produced by other body organs. A detectable change in levels of this protein could be an indication of changes to the prostate.

In 1986, the FDA approved testing for this prostate specific antigen (PSA) to monitor treatment and disease recurrence. A key point is that initially this was only approved to *monitor treatment and disease recurrence*. Despite being approved to *monitor treatment and disease recurrence*, this test was used "off-label" to screen for cancer. It was not until 1994, however, that the FDA explicitly approved use of this test for screening.

A look at the number of diagnosed cases of prostate cancer shows an uptick around 1986, when the PSA test was initially approved. This uptick trend peaked in the early 1990s. Yet, the graph does not show a significant change in mortality with these increased prostate cancer diagnoses.

This is because many of the newly diagnosed cancers were *not* clinically significant. Many diagnosed cases remained localized within the prostate, with minimal risk of metastasis or development of symptoms.

The question becomes: "If we are detecting cancers isolated to the prostate and with minimal risk of spread or symptoms, should we even be looking for these cancers?"

There are potential harms involved with PSA screening tests.

One potential harm is that some men will be diagnosed with cancer who would never become symptomatic during their lifetime. This can lead to invasive testing and treatments with life-changing side effects.

Another potential harm is the possibility of a false positive/negative. A PSA elevation may be a false positive — i.e.,

apparently indicating cancer — when, instead, it actually is due to prostate inflammation, or infection, or benign prostatic hyperplasia (BPH). If such conditions are misinterpreted as cancer, invasive procedures may be performed.

Surgery to remove the prostate carries the risk of damage to nerves and other structures, which can cause permanent symptoms, such as incontinence or erectile dysfunction.

As a result of the increased diagnosis of prostate cancers in the early years of the PSA test, many men underwent prostate removal, even when tumors were found that had low risk of impacting their life expectancy, or otherwise causing symptoms (situations where, previously, before the PSA test, these low-risk tumors would not have been discovered). This may be one of the few instances of cancer when ignorance is bliss.

The decision to screen, or not to screen, for prostate cancer is a discussion that every man should have with his primary-care provider or urologist. Some low-risk men may choose to not screen. Others, with a strong family history, or with ethnic risk factors, may choose to test.

Age is also a strong risk factor to consider. A decision to screen will change for most as risks evaluating a positive screening test begin to out-weight benefit of testing above age 65-70.

The United States Preventive Services Task Force (USPSTF) scores screening men age 55-69 with PSA as a Grade C recommendation. This means there is at least moderate certainty the net benefit is small. The decision for this group of men must be individualized, based on each patient's risk, rather than broadly recommending for an entire group of men.

The USPSTF gives a Grade D recommendation for screening men 70 and over with a PSA. This means they recommend against screening this group.

Use of the PSA for screening for cancer must be differentiated from its use for monitoring disease progression.

If a PSA is slightly elevated, but stable, this may suggest a localized, non-spreading disease process. If a man has undergone prostatectomy or radiation treatment, and yearly PSA tests remain undetectable, this is a reassuring sign that the cancer has not returned.

If cancer is identified by a PSA test, the treatment approaches will vary depending upon the extent of the disease. Quality of life and life expectancy are key considerations. For some, active surveillance is preferred. This may include regular, repeated PSA tests, and may include digital rectal exam and prostate biopsy. A surgical approach may include radical prostatectomy. For other patients, radiation therapy may be an appropriate treatment.

Guidance for Pilots

Enough of the background information. What does this mean to a pilot?

Men with a history of prostate cancer may in some cases be certified by their AME based on CACI (Conditions AMEs Can Issue) guidelines. Others will need a Special Issuance (SI), or an AME Assisted Special Issuance (AASI). Pilots with a remote history (> 5 years) of non-metastatic prostate cancer will be certified with a regular issuance.

Prostate cancer screening and diagnosis are the one topic that has changed most during my medical career.

To qualify under CACI, a current status report from the treating physician is required. This must state that the pilot's condition is stable and without cancer recurrence or spread. There must be no current or historical evidence of metastasis. Active treatment (such as chemotherapy or radiation) must be completed. If surgery was performed, there must be a full recovery, and the airman must be off all pain medications. The surgeon must have fully released the airman.

Additionally, to meet the criteria for a CACI certification, a PSA must have been performed within the past 6 months. If a prostatectomy was performed, this value must be less than 0.2. If the prostate is still present, this value must be less than 20.

If the pilot's cancer was metastatic, the airman will need a special issuance. To get this special issuance, copies of surgical notes, the oncologist's notes, pathology reports, and possibly MRI or PET scan results, will all be needed. The FAA will review this information. If the FAA gives a favorable decision, a special issuance will be granted. The special issuance letter will describe what documentation will be needed on a yearly basis for continued issuance.

Prostate cancer screening and diagnosis are possibly the one topic that has changed the most drastically during my medical career. While in my early training, I recall receiving guidance from instructors that it was best practice to test almost all men with a PSA test and rectal exam once they got into their 40's. Now, the guidance is much more targeted, towards testing higher-risk men, rather than all-comers. These recommendations are based on population data and perceived risks.

The best approach for each individual can be determined only by a thorough discussion with your primary care provider or urologist.

I do *not* want to give the impression that it is best just to ignore the prostate. After all, many of us have known or heard about men with aggressive prostate cancer metastasizing to the brain or spine, or men dying due to prostate cancer.

On the other hand, there might be harms from chasing an elevated PSA or removing the prostate for a small, localized collection of atypical cells.

For most pilots, a diagnosis of prostate cancer does not mean the end of their flying.

Your AME will be able to give you guidance regarding what the FAA will require for your certificate issuance. Some pilots will qualify for regular issuance. Some pilots will need to provide reports to their AME and, if favorable, meet CACI criteria. Still other pilots will need to submit information to the FAA for special issuance.

All men, though, should have a discussion with their family doctor about the implications of screening for prostate cancer.

“Pilots Must Force the Wing to Fly” Thoughts on 33 Years of Flying with the Airlines

By Harold Dahlstrom

It has been a few months since I retired from the airlines. Over these past few months, what I've enjoyed most is sleeping in my own bed and not having to listen to all the extraneous communication that comes with airline flying.

Since then, I have had a chance to look back on my 33 years with the airlines. I started as a first officer in 1986 on the Boeing 727. I have flown:

- the Boeing 757/767.
- the classic 737, through the new Boeing 737 MAX.
- the A319/320/321.
- And a short stint on the A330, when I took a leave of absence from my airline.

A lot has changed since I started. No more heavy flight bags full of paper charts and manuals. Now we uplink flight plans, clearances, weather, and a whole lot more. Our iPads have just about everything we need. The technological advances in navigation and auto flight systems since I started have made managing complex arrivals easier and safer.

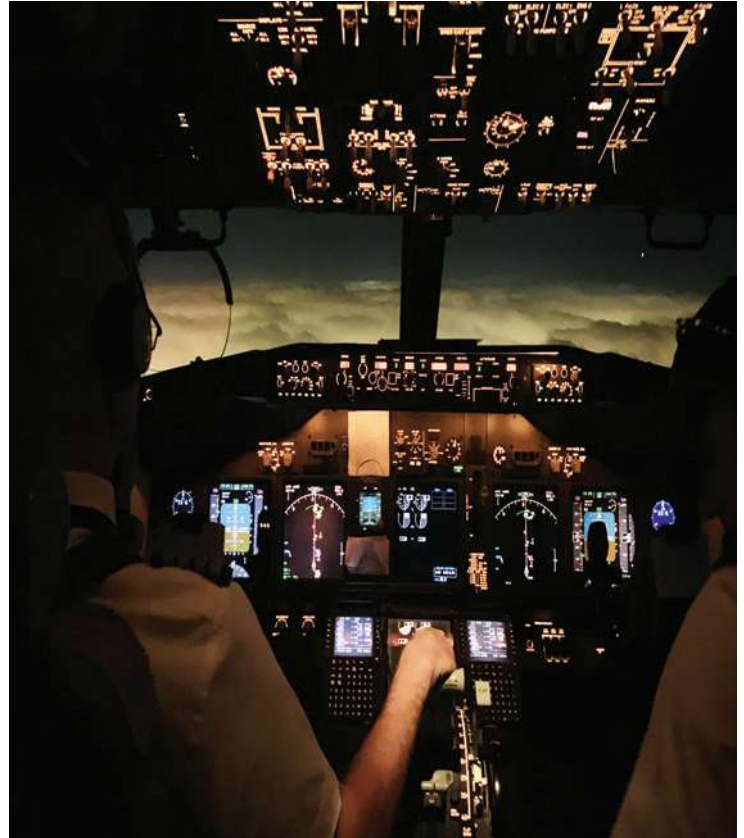
A few years ago, I flew a fully automated approach at night into Ulaanbaatar, Mongolia on the A330. No radar, just a tower operator. It is a continuous descending overhead semi-tear-drop approach to an instrument landing system. The glide path to runway 14 is a bit shallower than standard because the approach end of the runway is over two hundred feet below the opposite end. The airport is surrounded by high terrain, and there's a language barrier with Air Traffic Control.

As usual, the fully-managed approach was executed flawlessly, which allowed us to verify vertically each step-down fix and each point on the navigation track. I didn't disconnect the autopilot until one hundred feet above ground level, and it was time for visual flight rules. This is an example when automation can be your best friend (not counting, of course, the First Officer).

These advances in automation usually play second fiddle to the edicts of Air Traffic Control, however, and this can be a problem.

It is common for the cockpit crew to setup and verify an arrival both on the flight management system and on the navigation displays, only to get speed or altitude changes from Air Traffic Control at a moment's notice. This defeats the purpose of the automated setup work. It also adds to task-loading and more head-down busy-work for the crew. Someday, hopefully, flight crews will be able to climb, descend, and navigate with minimal restrictions, while only having to talk with ground control and tower control.

It has been a great career and I feel very fortunate. I always wanted to fly for a living, and I did. I have worked with so many outstanding crew members in both seats, and



I've had so many great experiences. It's hard to beat a long layover in Rome or Tel Aviv. Or flying over the oceans for long periods of time, hardly hearing a soul, and seeing the same stars that guided navigators and mariners across the same oceans in a different time.

One winter night, on our way back home from Tel Aviv, we flew well north to avoid a very forceful jet stream. We flew over Sweden and Norway. Our flight track took us north of Iceland. The track from Scandinavia to Greenland gave the most extraordinary light show I have ever seen. The Aurora Borealis was brilliant and the colors of the rainbow were charging to the heavens.

So many good memories. But there have been bad ones too.

US Air Flight 427 “loss of control”

On a beautiful September day in 1994, US Air flight 427 plunged to the ground on the down-wind leg for landing at Pittsburgh International airport. The plane was following a B727 and encountered its wake. There's nothing unusual about that on days with stable air. The B737 being flown on flight 427 rolled left and the first officer countered with slight right rudder. The airplane never again reached a wings-level



position, due to a simultaneous un-commanded hard-over rudder to the left. The airplane quickly rolled into a steep bank and the nose dropped well below the horizon.

As yaw increased, the angle of attack on the low wing retreated from the flight path. The high wing sped up and produced more lift. As the crew pulled back the yoke in a desperate attempt to raise the nose, the G-load and angle of attack increased further, driving up the crossover speed.

The flight 427 crew (if I remember) had a theoretical *seven seconds* to salvage a startling loss-of-control event in which the attitude of the airplane suddenly changed dramatically.

Shortly after that, as more was learned (but prior to the conclusion of flight 427's accident investigation), all of US Air's B737 crews were given simulator training.

The training focused on regaining control when a hard-over rudder occurs. Regaining control can only be achieved by going faster than crossover speed. In short, when an aircraft goes below crossover speed, full lateral control input (ailerons, spoilers) cannot overcome the roll that is induced by a fully-deflected rudder. The Boeing 737-300 crossover speed (if I remember) was somewhere between 185kts to 200kts flaps-up, at one-G, depending on the actual plane's weight.

Months later, in the comfort of a simulator, and first having been fully briefed by the instructor on how to defeat a fully-deflected rudder, I tried the same maneuver.

The sim instructor said, "Are you ready?" I responded: "Yes."

Suddenly, we are past sixty degrees of bank and the nose is about thirty degrees below the horizon. We push forward on the yoke, our speed increases, as does our rate of descent. When our speed increases past 200kts, opposite aileron and spoiler begin to slowly level our wings. We recover, after having lost a lot of altitude. We are flying in a severe slip, but we do have a measure of control. I feel enlightened, but still have my doubts as to whether or not this hard-over rudder event was salvageable with only 5000 feet of altitude to play with.

We also learned that flap extension *lowers* crossover speed on the Boeing 737. Aerodynamics can be a complex subject, yet always fascinating.

It was later determined for the US Air flight 427 heading into Pittsburgh that their rudder power control unit was in fact faulty and produced an un-commanded hard-over rudder. A redesign of the power control unit fixed the anomaly.

Boeing 737 MAX "angle of attack"

Fast forward to today's airline news and concerns. The recent B737 MAX tragedies are focusing on the function of the Maneuvering Characteristics Augmentation System (MCAS), which keeps the angle of attack below the critical angle of attack via the stabilizer.

The Boeing 737 Stab Trim system has several sub-systems. These sub-systems are:

- Pilot-activated Trim, from the pilot's control yoke;
- Auto Pilot Trim;

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- Mach Trim, to prevent Mach tuck;
- Speed Trim, to aid the pilots during speed changes after takeoff; and
- Nose-down Trim, approaching stalling angles of attack when flaps are extended.

Then the MCAS system for the B737 MAX model was added.

The recent B737 MAX accidents have again called into question flight-path-control and system protections (but not the integrity of the flight control system). The MCAS system is a flight-path system protection intended to minimize the progression toward higher angles of attack during manual flight when the airplane is clean (i.e., flaps are up). The MAX has a bit more pitch-up tendency when power is increased. Perhaps to a lesser extent, this tendency is also found in most under-wing-mounted engine designs.

There is no denying that these flight-path-control enhancements can mitigate loss of control of an airplane. When these systems function incorrectly, however, they can quickly overwhelm a flight crew with false information – that is, information that normally is associated with an impending flight path transgression. In short, these protections can themselves become a detriment to the air crew's flight path control when the system protections receive false information and automatically react accordingly.

What is not often reported in the media is that numerous incidents of safe landings of airliners have occurred involving unreliable airspeed, pitch-trim runaways, faulty angle-of-attack sensors, and similar false indicators. In one instance, differing angle-of-attack values on a Lufthansa Airbus contributed to a partial loss of pitch control. The captain noticed that the Alpha Protection Bands on the Primary Flight Display increased abnormally. These abnormal increases were falsely indicating a high angle of attack. Even though the Lufthansa crew recognized that the information was in error, they still lost 4000-feet because the protection system overrode the pilots' inputs. They temporarily had lost pitch control. Fortunately, they were high enough to absorb the altitude loss. Eventually, the crew regained pitch control after turning off two air data computers (ADC). They and all their flight occupants arrived safely. In effect, the system logic was saying, "I know better, I'll prevent you from stalling."

It is possible that a similar situation arose with the MCAS system involved in the B737 MAX events.

The design philosophy behind automated flight-path-control protection systems and how they interface with pilots is itself a subject of much debate among aviators. Differing design philosophies can be cherry-picked to support one's own experiences or biases.

What I have always appreciated about the B737 flight control system is that it is mechanically linked, and hydraulically assisted. The B737 pitch control system has a trim-able horizontal stabilizer (electric or manual trim) and an elevator (hydraulic and mechanical through the control columns). Either or both can manually control pitch with jams or failures. The power to the stabilizer trim motor can be cutoff on all B737 models (including the MAX) through two easily accessible stabilizer CUTOFF switches on the power pedestal. When those switches are off, no protections -- including the MCAS -- are functional.

Then the stabilizer can be controlled conventionally through the manual stabilizer trim wheels.



Family photo: Captain Harold Dahlstrom with Tom Dahlstrom (son). They share a photo op — yet they fly for different airlines.

The only difference on the MAX is that the control COLUMN switches will not interrupt stabilizer trim power with control column pressure *if* the MCAS system is activated. This design change does seem out of character for Boeing. Again, if any B737 experiences un-commanded stabilizer movement, complete electrical power isolation to the stabilizer trim motor can be quickly achieved by turning off two CUTOFF switches.

The Indonesian and Ethiopian MAX accident investigations are ongoing and when a final determination is made, more will be known. Initial reports suggest, however, that in the Ethiopian crash, the crew had turned off the MCAS system, and then turned it back on. How the crew managed this is yet unknown.

When I first started my airline career, there was more emphasis on system knowledge. Today, there is not so much emphasis on system knowledge; nowadays, airplanes are more automated. Also, in the past, we in the crew used to go through some fairly complicated system checks, mostly on the first flight of the day, or with crew changes.

Airlines got away from these type of system checks because of apparent "high system reliability," and also the implementation of aircraft monitoring systems that report faults in the cockpit. Yet the value of these human system checks (aside from verifying system operation) was that the crew members were building muscle memory and participating in daily system reviews.

One of the first things that I remembered about those checks, when considering these recent MAX accidents, was the stab trim check. The last item on the stabilizer trim check was to run the trim and simultaneously turn off the stabilizer cutoff switches to verify that the stab trim motor was cut off from any power source. Who knows? -- perhaps some of those system check rehearsals might have made a difference in these incidents.

Nearly always, automation is your friend; but very rarely, it can be your enemy.

Let's all take a moment to suspend judgment and let the investigators do their job. When they finish and make their reports, we can exercise our own judgments on the basis of those reports.

I do know that, when the regulators give the B737 MAX their blessing, I won't hesitate to ride on one.

2009 Air France incident in an A330 over the Atlantic

Then, in 2009, Air France lost an A330 aircraft over the Atlantic Ocean, en-route from Rio de Janeiro to Paris.

The initial culprit was an encounter with super-cooled moisture, which most likely obstructed the pitot static system. This interference caused unreliable airspeed indications. When the air data computers measure inputs that are erroneous, the autopilot on the Airbus disengages (as it is designed to do).

When this occurs, the flight control Laws degrade from Normal Law (the highest level of flight envelope protection) to Alternate Law, a lower level of prioritized protections.

Aside from the startle factor, along with electronic and aural warnings, the Air France A330 aircraft was still functional. So why did the plane crash?

The full accident report on the Air France incident is a chilling read with many details. What is difficult to explain is how a professional flight crew could not seem to recognize, after a time, that the primary flight display (pitch) and engine instruments (power) were their best friends.

Above all else, pilots must force the wing to fly.

Physics always wins.

It was later determined that they were descending with both engines producing maximum thrust, while the pitch was forty degrees nose up.

Before the Air France A330 accident in the Atlantic, a similar event happened to an A330 which encountered unreliable airspeed over the Pacific Ocean. The crew on that A330 apparently were able to recognize that the ADR information was garbage. In the Pacific-bound A330 incident, the auto thrust was disconnected, and the airplane was flown using pitch and a reasonable thrust setting.

Losing or gaining altitude in that type of situation is of little relevance. It's a big sky, and there's also the traffic collision avoidance system (TCAS) to avoid other aircraft.

Lack of the big picture in the Air France A330 accident illustrates clearly that over-reliance on automation can be disastrous. But it still doesn't explain the absence of basic flying skills. (Again, the laws of physics make no distinction between a C150 or an A330.)

The 2009 "Miracle on the Hudson"

In 2009, on a clear cold February day, a routine flight got ugly in a hurry. US Airways flight 1549 hit a flock of geese on climb-out from New York's LaGuardia airport. Both engines were severely damaged; shortly after ingesting the geese, the engines failed to produce thrust. Not a procedure at that point,



Head-up display on the windscreen, descending into Vancouver, British Columbia.

but the auxiliary power unit start-switch was pushed almost immediately.

The existing energy gave flight 1549 an additional two hundred feet of altitude. Shortly after that, the aircraft was descending and being flown at best-lift-over-drag speed (Green Dot) to maximize glide.

When the auxiliary power unit reached operating speed, the APU generator automatically connected to the aircraft's main electrical network, providing normal electrical power and enabling the possibility of a pneumatic low-speed engine start. As it turned out, the engines were unable to restart; nonetheless, the attempt was made.

The air traffic controller offered options to airports nearby. But the crew didn't bite. They stayed with the water landing plan. They kept flying the airplane and didn't get led astray. It was later determined (using realistic simulator tests) that the crew didn't have sufficient energy to glide to LaGuardia or Teterboro airports.

Many things went right that day. The first responders were magnificent. But impressive still is how the crew members were able to declutter chaos and fly what had become the crippled high-speed "glider" to safety.

Enough of my observations. I'm going to go fly, my friends – the C172 today. The weather's good, so I'll just look out the windscreen, keep it simple, and fly the wing. I'm looking forward to it.



TOP: Wasatch Range, Utah

Bottom: Storm clouds brewing





TOP: Major storm approaching, or passing?

Bottom: Crater Lake, Oregon



Naval Aviator Earl W. Spencer, Jr. Wisconsin High-Schooler who changed the British Monarchy

By John Dodds

King Edward VIII (known to his family and friends as “David”) abdicated the British throne on December 11, 1936, to marry a twice and recently-divorced American woman previously known as Wallis Simpson (surname from her second husband). David’s younger brother Albert (“Bertie”) became King George VI and bestowed the title of “Duke of Windsor” on David.

The road to this jarring change in the British monarchy began 20 years earlier in 1916 with Wallis’s marriage to a Navy aviator who had gone to school for four years in Racine, WI.

Wallis from Baltimore.

Bessie Wallis Warfield was born on June 19, 1896. Sadly, her father died five months after her birth. With financial help from her father’s well-to-do uncle, Wallis was able to attend a private school and became a Baltimore debutante. While she went to the major debutante ball for all the debutantes, her uncle refused to pay for a special coming-out party for Wallis herself. Her mother asked her first cousin, Lelia, for help. Lelia was married to the Commandant of the Marine Corps, Major General George Barnett. As a result, the Barnetts held a party for Wallis in Washington, D.C. (We will meet Lelia later in this story.)

The main road—Barnett Avenue—at the large Marine Corps base in Quantico, Virginia is named after him. Interestingly, Barnett was born in Lancaster, Wisconsin and grew up in Boscobel. He graduated from the U.S. Naval Academy in the Class of 1881, the first class to commission a graduate in the Marine Corps. Today, almost a fifth of the Naval Academy’s graduates are commissioned in the Marine Corps. My son Luke (*Forward in Flight*, Fall/Winter 2017) graduated from the Naval Academy last May and is now a Marine Corps second lieutenant with the 1st Marine Division (of Guadalcanal fame) at Camp Pendleton, California.

Fateful trip to Pensacola.

With no particular skills (as she freely admitted) and not really looking for a job, Wallis was invited by another of her mother’s first cousins, Corinne (Lelia’s sister) to visit her in Pensacola, Florida. Corinne was married to Lieutenant Commander Henry Mustin, one of the first naval aviators (Naval Aviator No. 11) and was in command of the naval air station at Pensacola. Wallis went to Pensacola in June 1916 – she had just turned 20 years old. In her 1956 autobiography (*The Heart Has Its Reasons*), she wrote about first meeting a young Navy lieutenant:

“THE WORLD’S MOST FASCINATING AVIATOR”—OR SO HE APPEARED to me at the instant of our meeting...

...

By the end of the evening [of the next day] I knew I was in love—in love at first sight, yes, but nonetheless completely, totally, and helplessly.

She continued to write: “Undoubtedly his attraction for me was intensified by the glamour and novelty of flying. He and the other officers seemed to me, at that first meeting, to belong to another race of men—godlike creatures who had descended to earth from a strange and adventurous realm.”

Wallis married this aviator less than six months later in Baltimore on November 8, 1916. Who was “the world’s most fascinating aviator”? He was Earl W. Spencer, Jr., known as “Win.” He was born in Kinsley, Kansas on September 20, 1888; his family later moved to Highland Park, Illinois, from where he went to school in Racine, Wisconsin.



Win Spencer, 1915, in Pensacola. (National Archives)

Education.

Win attended Racine College, an Episcopal grammar school, from 1902 to 1906 (illustration below right from the 1904-1905 yearbook). Originally a college, it dropped its collegiate program in 1889 but retained the name. When Win attended the school, students were as young as eight years old through what we today would call the senior year in high school. There were about 160 students, all of whom were boys who wore military uniforms. Its most notable student was Billy Mitchell. With its impressive buildings, the school was on the Lake Michigan waterfront. The former campus today is occupied by the DeKoven Center (school closed in 1933).



Racine College, 1904-05 yearbook

Win entered the U.S. Naval Academy as a plebe in the summer of 1906. One of his classmates and a future student pilot of his was Marc Mitscher (*Forward in Flight*, Winter 2018-2019). Win was in the choir, and his nickname was “Caruse,” ostensibly after the famous tenor Enrico Caruso. Each year there was a Christmas Parade, a raucous affair in which the midshipmen dressed up in costumes and paraded through Bancroft Hall. The yearbook *Lucky Bag* stated: “For our Christmas P-grade Caruse Spencer was High Mogul and filled his office with great eclat.” [Bancroft Hall opened with two wings. When Win was there, there were about 675 midshipmen (“mids”); today, Bancroft Hall, the only dormitory, has eight wings and houses about 4,000 mids.] He was also part of the Masqueraders, a theatrical group. In his senior year, he was also a cheerleader and on the Hop Committee that arranged Saturday danc-



Senior year, 1910, Naval Academy (yearbook photo)

es with young women from outside the Academy (the service academies admitted women for the first time in the summer of 1976).

Naval Career, 1910-1927.

Naval Academy graduates were required to go to sea for two years following graduation, and Win served on the battleship *U.S.S. Nebraska* for four years. In late 1914, he was sent for aviation instruction at the “works of the Curtis [sic] Aeroplane Co.” in Hammondsport, New York. In 1915, he was assigned to the Pensacola Naval Air Station where he was first a student and then an instructor. He was designated a naval aviator on September 27, 1915 and later designated “Naval Aviator No. 20.” The planes they flew were Curtiss hydroplanes, meaning that they had hulls (they were also called “flying boats”). There were not many of them, and they were kept in tent hangars on the beach. The planes were “pushers,” having the propeller behind the pilot.

His next assignment was to command the naval aviation station at Squantum, Massachusetts from June to October 1917, when the Navy decided to close the school. He was then sent to San Diego to establish a naval air station there.

Win’s long-lasting contribution to naval aviation was the establishment of Naval Air Station, San Diego on North Island. As one writer stated: “Lieutenant Spencer reported to San Diego November 8, 1917. This date has been accepted as the official beginning of Naval Air Station, North Island.” At that time, the naval air station existed on paper only. Personnel were initially housed at the naval training station across the bay in San Diego itself.

It would not be an understatement to say it was a Herculean effort to establish a Navy flying school from scratch. In addition to establishing the physical base itself (for which he had the assistance of the Bureau of Yards and Docks), he also had to get the training mission up and running, which included the flight school and the mechanics school (not to mention the training of homing pigeons).

North Island today is a major Navy installation and the home of a number of aircraft squadrons, two aircraft carriers, and a depot. Significantly, it is also the headquarters of the vice admiral (3-stars) who commands all of the Navy’s air forces; he is known as the Navy’s “Air Boss.” This nickname comes from an aircraft carrier’s air department head who is referred to as the “Air Boss.”

After San Diego, Win was in charge of the naval detachment at March Field, California and received instruction in land planes. He next served on the *USS Aroostook* (commanded by Henry Mustin, “Naval Aviator No. 11”) as a torpedo plane squadron leader. Win then returned to Pensacola Naval Air Station to serve as an instructor until May 1921, at which time he went to Washington, D.C. for a prestigious position in the re-



Skimmer (trainer) in Pensacola



San Diego Naval Air Station, North Island (National Archives)

cently-established Bureau of Aeronautics as head of the Flight Division (Henry Mustin was head of the Bureau at the time).

From 1923 to 1925, Win served with the Asiatic Fleet, first as the gunnery officer on the *USS Huron*. He then commanded the gunboat *USS Pampanga* of the South China Patrol from January 1924 to March 1925. The gunboat was based in Hong Kong, and its main patrol was the Pearl River, which included the city of Canton (today it is Guangzhou with a population of about 15,000,000). This period was a tumultuous time due to the civil strife in China that required gunboat protection of American diplomatic and commercial interests. Win for a short time commanded the torpedo boat destroyer *USS Whipple* from May to July 1925, before being assigned to the Office of Naval Intelligence in Washington, D.C. Following a refresher course at Pensacola, he commanded a torpedo bombing squadron attached to the *USS Wright* from May 1926 until reporting again to the Naval Air Station at San Diego in December 1927 as the executive officer. In this month, Wallis was granted a divorce from “the world’s most fascinating aviator.”



China circa 1924 (San Diego Air & Space Museum)

Separation (1922) and Divorce (1927).

The Spencers did not have a happy marriage and separated in June 1922. Wallis moved to Warrenton, Virginia on June 10, 1926 and, having met the one-year residency requirement, filed for divorce on the ground of desertion in the circuit court of Fauquier County in Warrenton on July 20, 1927. She lived at



the Warren Green Hotel (in the photo above, she lived on the second floor, in the room with the two windows on the left). Today, this building is the main office building for Fauquier County. Before moving to Warrenton, she spent the winters in Washington, D.C. and summers with her cousin Lelia Barnett and her husband and now-retired General Barnett at their home “Wakefield Manor” in a neighboring county. Although Win signed for the receipt of the divorce papers, he did not make an appearance in the proceedings, so the divorce was uncontested.

In describing her marriage in the court proceedings, she said that up until 1920, their marriage was not very happy. “There was too much drinking in it – He was unkind, stayed out all night. Would come in and abuse me – I remonstrated with him with no result.” After a separation, they reconciled in Washington, D.C. Again, their life together was “very unhappy.” She testified: “He drank terribly that year – He threw white rock bottles at me and a couple of hair brushes. [White

Rock Beverages began in Waukesha, Wisconsin in 1871 and bottled natural spring water, a popular mixer for drinks.] He was home very little. [H]e informed me [on June 19, 1922] that he was sick and tired of living with me & thus he was going to the Army and Navy Club, & he packed his things and left.” [That was a date to remember, because it was her birthday.] When asked when she determined to file for divorce, she answered: “In 1925 -- I was at Wakefield with my cousin, Mrs. Barnett.”

Wallis testified she had attempted reconciliation by writing letters to Win, her last effort being in the early part of May 1924. She was sure of the date because the next month she received a reply, stating “this letter will speak for itself.” The letter was “W.W.S. Exhibit No. A,” dated June 15, 1924, from the *U.S.S. Pampanga* (Spencer’s gunboat in China).



Dear Wallis –

After reading your letter regarding the possibilities of our living together again I have thought a great deal and have come to the definite conclusion that I can never live with you again.

During the past two years that I have been away from you I have been happier than ever before and other interests have taken your place in my life. I am sorry that things have turned out this way but I think it best to inform you exactly where I stand – Please be kind enough not to annoy me with any more letters.

Yours
Win

In her memoirs, Wallis told a different story. She wrote that Win had been writing letters to her to come to China and had arranged for her to travel to Hong Kong. She wrote that her ship (*USS Chaumont*, a military transport) left Norfolk on July 17, 1924, and arrived in Hong Kong about six weeks later. I checked the ship’s log book at the National Archives, and it shows that Wallis did indeed board the ship on July 17, 1924: “Mrs. Earle [sic], wife of Lieut. Cmdr., USN, reported aboard for passage to Manilla, P.I., in accordance with Bu. Nav. [Bureau of Navigation] Let. N621-MAC of 24 June 1924.” Since the Navy authorized her passage on June 24, 1924, Win would have had to arrange her passage before that time (and thus before writing the letter quoted above of the same date).

The log book also shows that the ship entered Manilla Bay on August 31, 1924, and moored at the port side to Pier 7. One of the “named cabin passengers whose passage was completed this date disembarked” was “Mrs. Earl W. Spencer, wife of Lieut. Commander, U.S.N.” She traveled on to Hong Kong to meet Win, but this attempted reconciliation in China lasted about two weeks and was unsuccessful.

One writer believed Win’s 1924 letter was prepared in 1927 and back-dated to June 1924 to support her claim of desertion, observing that the envelope had U.S. postage and not Chinese postage. That writer seemed to be unaware that the Navy maintains its own overseas mailing system with fleet post offices (FPOs) around the world, and U.S. postage is required. Navy records show that there was an FPO for the *Pampanga*, and it was Hong Kong.

We will never know for sure whether this letter was prepared in 1924 or 1927. In any event, the judge had not been informed that the Spencers had attempted reconciliation in China in the summer of 1924. On December 10, 1927, the judge stated that the evidence showed that Spencer had “willfully deserted and abandoned” Wallis on June 19, 1922 and that the desertion had “continued uninterruptedly for more than three years, and has so continued until this day.” [Wallis would marry two more times, and Win would marry three more times.] Under Virginia law today, Wallis and Win could have easily obtained a divorce in Virginia on the ground of voluntary separation for six months where there is a separation agreement and no minor children.

Following their divorce, Win continued to claim Wallis as his wife and collected additional money from the Navy. The Comptroller General of the United States ruled that the payments were unlawful, and Win repaid the money (\$462.13) for the period December 10, 1927 (the date of the divorce decree) to July 20, 1928.

Naval Career, 1928 – 1939.

Win served as the executive officer of the Pensacola Naval Air Station from December 1927 to June 1930. He attended the Naval War College in Newport, Rhode Island for the 1930-1931 academic year and then on June 20, 1931 became “head of the Air Department” [today he would be called the “Air Boss”] of the aircraft carrier *USS Saratoga*. He had a rocky start in this assignment.

From August 19-21, 1931, the aircraft carriers *Saratoga* and *Lexington* and other ships steamed from San Diego to San Francisco at which point a number of officers and sailors left the ships on leave. The *Saratoga*’s log book for August 23rd shows that Win left the ship at 1430 hours on “6 days leave.” He returned early – the log book for August 26th curiously states: “0800 Commander E.W. Spencer, USN reported aboard from 6 days leave.” What happened?

Officers (including Win) from both carriers went to a party at a hotel in San Francisco and sometime after the party, a wife of one of the *Lexington*’s officers (the officer was on duty and not at the party) died as a result of falling out of her 4th-floor window. A court of inquiry on the *Lexington* met several times from August 25-27; the president of the court of inquiry was the *Lexington*’s captain: Ernest J. King (later Chief of Naval Operations during World War II). I was unable to find the record of the full court



Air Officer, *USS Saratoga*
(National Archives)

of inquiry, so it is not clear what happened that evening. However, the court recommended that Win be “suspended from duty for 10 days for being under the influence of intoxicating liquor ashore” and that he be relieved from duty involving flying. Upon appeal to the Secretary of the Navy, Win contested being removed from flying duty, summarizing his service to date and pointing out that no witnesses testified as to his professional ability for flying duty. The Bureau of Navigation (responsible for personnel matters) disagreed with the court of inquiry’s recommendation. To remove him from flying duty might indicate to the newspapers and the general reading public that he was “in some measure concerned in the death of Mrs. Price” and that a careful reading of the court of inquiry “shows conclusively that such was not the case...”

The *Saratoga*’s log book for 1130, 16 September, notes: “Commander E.W. Spencer was this date suspended from duty for a period of 10 days as a result of findings of a Court of Inquiry held on the board the USS Lexington, offense, under the influence of intoxicating liquor ashore.”

He served two years on the *Saratoga*, and served for a year at the Ninth Naval District in Great Lakes, Illinois, followed by attendance at the Army War College for the academic year 1934-1935. For the next year, he returned to the *USS Wright*, the flagship of the commander (3-star admiral) of Aircraft, Base Force as the commander’s aide and chief of staff.

On June 10, 1936, he became the *USS Ranger*’s executive officer, the second ranking officer on this aircraft carrier, another prestigious assignment. On November 1, 1936, Win stopped his car to clean the windshield and slipped and fell into a gully, severely injuring his right leg. He had a spiral fracture of his right fibula and a badly comminuted fracture (where the bone breaks into several pieces) of his right tibia. He was hospitalized in the San Diego naval hospital until May 1937 and then released on sick leave. In the meantime, he was relieved as the *Ranger*’s executive officer on January 13, 1937, due to his injuries.

On April 22, 1937, Win returned to the hospital from liberty in the morning and at 4:15 p.m. “was found on floor of his room unconscious unable to get in bed because of acute alcoholic intoxication evidenced by complete motor and mental incoordination and strong odor of alcohol on his breath. One empty and one partially filled bottle of whiskey found in his room.” He was placed under arrest, and the hospital commander had him “confined to the limits of the hospital reservation for a period of ten (10) days.” The Bureau of Navigation in Washington, D.C. believed that the punishment was inadequate and that Win should have been recommended for trial by general court-martial and asked what further action the hospital commander intended to take. The commandant of the Eleventh Naval District, the hospital commander’s superior officer, wrote:

For some time before and after the commission of the offense, Commander Spencer’s ex-wife [now Wallis Simpson] was front page news throughout the civilized world, and some of it was of an unsavory nature. Concurrently Commander Spencer’s name appeared frequently in connection therewith.

The front page news was that in December 1936 King Edward VIII had abdicated the British throne to marry Wallis and that Wallis had been granted a divorce in that month from her second husband (Ernest Simpson).

As an example of front page news, the January 4, 1937 issue of *TIME* magazine named her “Woman of the Year.”

The commandant went on to write that pursuing a court-martial would have put the Navy in an embarrassing position, as it could be perceived as a “guise for bringing disappropriating punishment” upon Win.

He concluded: “That Commander Spencer’s conduct merited a very severe punishment is patently obvious. Had it not been for other seemingly controlling circumstances, the Commandant would have insisted that the recommendation for trial by General Court-Martial be made.” Having avoided a court-martial, Win completed his sick leave and in September 1937 was transferred to the Twelfth Naval District in San Francisco.



Wallis Simpson, January 4, 1937

On March 23, 1938 while at home, Win became dizzy and fell down a flight of stairs. He fractured eight ribs on his left side, seven ribs on his right side, and two lumbar vertebrae. During his year-long hospitalization, he was also diagnosed with chronic myocarditis. A retiring board determined that the fractures and his heart condition made him medically unfit for active service, and he was medically retired, effective June 1, 1939. He had 29 years of service (1910-1939), of which 13 years and 7 months were at sea.

On May 29, 1950, Win had a massive heart attack and died while at the El Cordova Hotel in Coronado, California; he was 61 years old. He is buried in Fort Rosecrans National Cemetery that overlooks San Diego Bay on one side and the Pacific Ocean on the other side.

What if?

What would have happened had the Spencers never divorced? King Edward VIII might have eventually married and had a child, who would have assumed the throne in 1972 when Edward VIII died. In this case, Edward’s brother “Bertie” would not have become King George VI, and Bertie’s daughter would not have become Queen Elizabeth II. If King Edward VIII had no children when he died in 1972, then Elizabeth, his niece, would have become queen, since her father Bertie had died in 1952. In this case, Bertie would not have become King George VI, and Elizabeth would have become queen 20 years later.

2019 Wisconsin Aviation Hall of Fame Inductees

Alfred Gorham, Lyle Grimm, Richard Schmidt, and Jeff Skiles

By Tom Thomas

The Wisconsin Aviation Hall of Fame, Inc. (WAHF) is the result of an idea by Carl Guell. While employed by the Wisconsin Aeronautics Commission (now the Department of Transportation, Bureau of Aeronautics), Guell began collecting the state's aviation history. Encouraged by the wealth of information he discovered through interviews and research, Guell incorporated the WAHF in 1985. The organization inducted its first class of three Wisconsin aviation notables less than a year later. Since then, 142 individuals have been honored for their tremendous contribution to Wisconsin aviation history.

President Tom Thomas, on behalf of the WAHF Board of Directors, is proud to announce the following individuals as this year's class of inductees:



Alfred Gorham

Alfred Gorham grew up in Waukesha and attended Carroll College, before joining the U.S. Army Air Corps to become a fighter pilot, eventually being assigned to the 301st Fighter Squadron.

On July 27th, 1944, while escorting B-24 bombers over Budapest, Hungary, 2nd Lieutenant Gorham shot down two German Focke-Wulf 190 fighters.

On February 25th, 1945, Lt. Gorham developed engine trouble and bailed out over Munich, Germany. He was immediately captured by German troops and survived as a POW until the end of the war.

Returning home to Waukesha, Alfred worked the next 40 years in the chemistry lab at AC Spark Plug in Oak Creek.

He passed away in 2009 and is interred at Arlington National Cemetery.

He is Wisconsin's only member of the famed Tuskegee Airmen.



Lyle Grimm

Lyle Grimm made significant contributions to aviation during his 35-year career. He entered the Civilian Pilot Training Program and was commissioned a 2nd Lieutenant in the US Army Air Corps in 1941. Lt. Grimm contributed to the war effort by preparing young pilots for combat before being called to B-29 training in Sebring, Florida.

After the tragic death of his father-in law, 1st Lt. Grimm resigned his commission and returned home to Wisconsin to care for and support his extended family. As owner and operator of Grimm Flying Service, he also served as Airport Manager of Wausau Municipal Airport and as a Federal Aviation Administration Flight Examiner. In December 1977, Wausau's "Mr. Aviation" announced his retirement after more than three decades as a dedicated professional, skilled pilot, strong manager, and conscientious pilot examiner, having amassed more than 20,000 hours of flight time.



Richard Schmidt

Dick Schmidt was a young man installing a television antenna in Milwaukee when an F-89 Scorpion jet roared overhead on takeoff. From that moment, he was determined to become a pilot. He was already an award-winning model airplane builder and flier.

He served as a Command Pilot in the Wisconsin Air National Guard in Milwaukee, flying mostly T-33s, F-89s, and KC-97s from 1956 to 1978. He volunteered to fly B-57s with the 1211th Test Squadron in New Mexico, where he flew through atomic post detonation clouds.

Dick served briefly as a corporate pilot and was one of the first two Captains hired by Air Wisconsin Airlines, where he served from 1965 to 1992, flying all of their aircraft from the DeHavilland DH-10 Doves to the British Aerospace BAe-146s. He founded the Northern Professional Pilots Association for commuter airline negotiations and served as its president.

Dick even managed to find time to build his own Pitts S-1S biplane, N76RS, and founded Chapter 444 of the Experimental Aircraft Association. He also flew a 1931 vintage Stinson SM-6000B Tri-Motor, giving rides to thousands of passengers at airshows throughout the United States. One of Dick's most memorable accomplishments is landing the huge C-97 on the very short and narrow runway at the Don Q Inn in Dodgeville, Wisconsin. From his lifetime of aviation in Wisconsin, Dick has amassed over 26,000 flight hours.

He recently published his autobiography, *Three Times He Cried*.

Jeff Skiles

On January 15, 2009, First Officer Jeff Skiles' flying career became defined by an event now known world-wide as the "Miracle on the Hudson." This Wisconsin native has done much more, however, than serve on an airline crew that saved the lives of 150 passengers. Jeff was born to two pilot parents and grew up flying with them in a Piper Tri-Pacer and a Cessna 182. He started flying at age 16, eventually flying as a mail, cargo, charter, and instructor pilot. He joined US Airways in 1986, flying multiple aircraft up to the fateful Airbus A320, in which he received his check flight only two weeks prior to the 2009 bird strike.

Since then, Jeff has been an industry advocate as Vice-Chair of the EAA Young Eagles program, Vice President of EAA Chapters and Youth Organizations, and a frequently published author in *Sport Aviation*, *Pilot Mag*, *Flying Magazine*, *Midwest Flyer*, *Air & Space*, and more. He also is a safety advocate on Capitol Hill as Vice President of the Coalition of Airline Pilots Associations. As well, Jeff served on the FAA's Rulemaking Committee; as a University Instructor; and as an internationally acclaimed speaker. All the while, Jeff continues to add to his 23,000 hours of flight time in his Cessna 182, or as a volunteer pilot in the CAF's B-29 FiFi, or on international flights in a Boeing 787.

Join us in celebrating the 2019 Wisconsin Aviation Hall of Fame inductees during our 34th annual induction event on Saturday, November 16, 2019, in the Eagle Hangar at the Experimental Aircraft Association Museum in Oshkosh, Wisconsin.

The evening begins with a social hour at 5:00 PM, dinner at 6:00 PM, with our induction ceremony to follow.

Additional information on the ceremony, membership, and past inductees can be found at www.wisconsinaviationhalloffame.org.

Join today and help us to preserve our state's aviation history, and to honor those who are creating it.



Bob Birmingham

A Wisconsin Flyer's Experiences in WWII

By Tom Eisele

In World War II, life expectancies in some military units were short. In the U.S. Marine Corps, for example, when Americans began to battle back against the Japanese in the Pacific, first in 1942, and then into 1943, at Tarawa, and even into 1944 and 1945, at Iwo Jima and Okinawa, many Marine units were decimated. Amphibious landings on exposed beaches in the face of hardened defensive gun positions were costly ways to re-take islands. Americans who watched news reels of these events were often shocked by the horrific images and the mounting Marine casualties.

Would it surprise you to learn that the 8th Air Force in WWII had a higher casualty rate than the U.S. Marine Corps? Survival in heavy bombers, attacking Nazi Germany across the crowded skies over Europe, was a high-risk gamble. During the course of those aerial battles over Europe, many young men lost their lives.

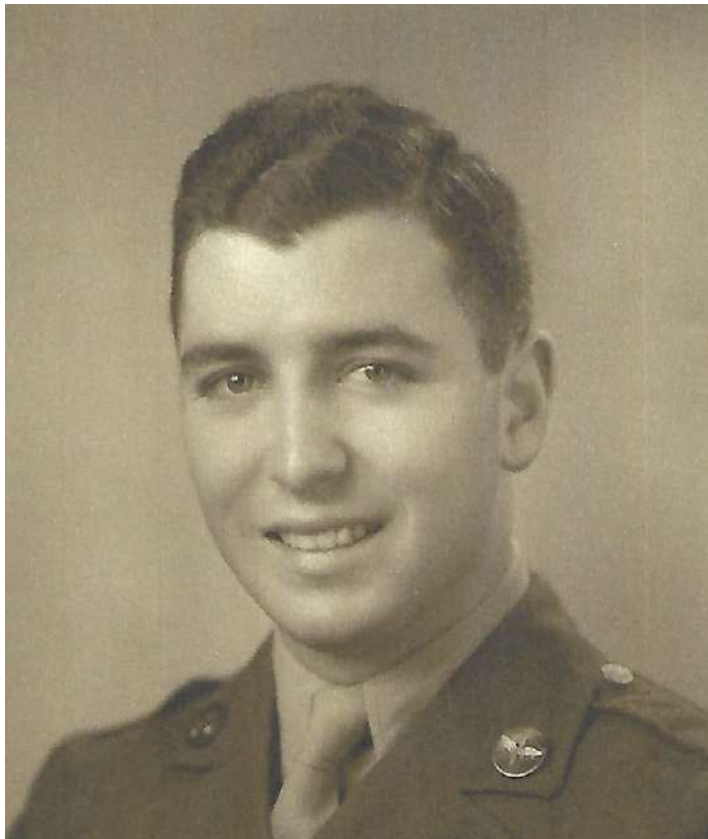
One young Wisconsin man, Bob Birmingham, who had grown up in the Milwaukee area, beat those long odds – albeit barely. Here, just in time for Memorial Day, is his story.

Bob was an 18-year-old nose gunner on a B-24H Liberator heavy bomber in the 458th Bomb Group, 8th Air Force. The group flew out of an airbase at Horsam St. Faith, which was located in the East Anglia area of England, just miles outside of Norwich. Bob's crew and plane had arrived in England in November, 1944, along with dozens of other crews and planes. The D-Day invasion of Normandy had already taken place months before, but Allied troops were bogged down on the continent of Europe and there was a respite in combat activity going into the Christmas season (until, that is, the Germans pulled their holiday surprise attack, which developed into the Battle of the Bulge).

Bob and his crew started slowly, with four missions at the end of December 1944 and into January 1945. Nothing much happened on those early missions; they mainly served as what the air crews called “milk runs,” easy missions, largely uneventful. Not so their fifth mission.

January 17, 1945, the crew awoke at 4:00 am, got their breakfast, and received their briefing: the day's mission was to bomb oil refineries near Hamburg. This was different. At the time, Hamburg had approximately 440 flak batteries in its vicinity, and those anti-aircraft guns could put up massive amounts of defensive fire against any bomber flying through the area on its bomb run. Crews did not look forward to running that flak gauntlet around Hamburg.

This was a big mission, with over 700 heavy bombers and 300 fighters participating from throughout the 8th Air Force. It took lots of time to get so many planes in the air and organized over England and the North Sea; Bob's plane did not actually take off until 9:30 am. The 93rd Bomb Group from its base at Hardwick was leading the 2nd Air Division's echelon of B-24s heading east, and the 458th BG was farther back in the pack.



A young Robert Birmingham heading off to war in 1944.

Bob Birmingham, at 140 pounds and a small frame, fit snugly in the nose of his B-24. He was the nose gunner, but he also had the important job of dropping the bombs on cue when he saw the lead B-24 dropping its bombs.

Lt. Roger Hicks was the pilot and commander of Bob's crew, Flight Officer Sirotnak was co-pilot, Flight Officer Haslauer was the navigator, Sgt. Brittain was the radar counter-measures man, Sgt. Berdar was the radio operator, Sgt. Quarford the engineer and top turret gunner, Sgts. Betz and Bennett were the right and left waist gunners, and Sgt. Schauseil the tail gunner.

Ten men, then, were riding this B-24H toward Hamburg, their lives on the line. Initially, after climbing and joining up over the North Sea, the flight was routine. Soon, however, as their planes crossed the coast near the Netherlands, their formation of B-24s began receiving anti-aircraft fire. The flak was light to begin with, and fortunately, no Luftwaffe fighters appeared that day. Then, as the men flew into German territory, the anti-aircraft fire began to increase in intensity and accuracy. Soon the formation was nearing Hamburg, and the fire from the ground became intense and much more accurate. The German gunners were finding the range of the bombers.

When the formation of bombers reached its Initial Point (the "IP"), the planes had to turn as one and begin their bombing run toward their target. At that stage, the planes could not dodge or desemble from the rigid order of their formation – otherwise, if they had, the bomb drop would become disorganized and the saturation of the target area might become negligible, or even non-existent. Everything depended on those planes dropping their bombs as an organized unit. But now the shells from the anti-aircraft guns below were coming hot and heavy, and the German gunners were right on target. Bob Birmingham remembers, as his plane turned onto the bomb run, the flak being heavy and accurate – the black explosions were everywhere, crowding out the available light.

This situation created a serious problem, because Bob literally could not see the lead plane at the front of his formation, and that meant that Bob could not see when to drop his plane's bombs. Despite the noise and smoke and violent explosions all around him, Bob did not panic; instead, he told himself, "Just do your job." Then, suddenly, there was a small clearing in the flak up ahead, and he saw the lead plane dropping its bombs. Immediately, Bob toggled his bomb switch and yelled into the intercom, "Bombs away!"

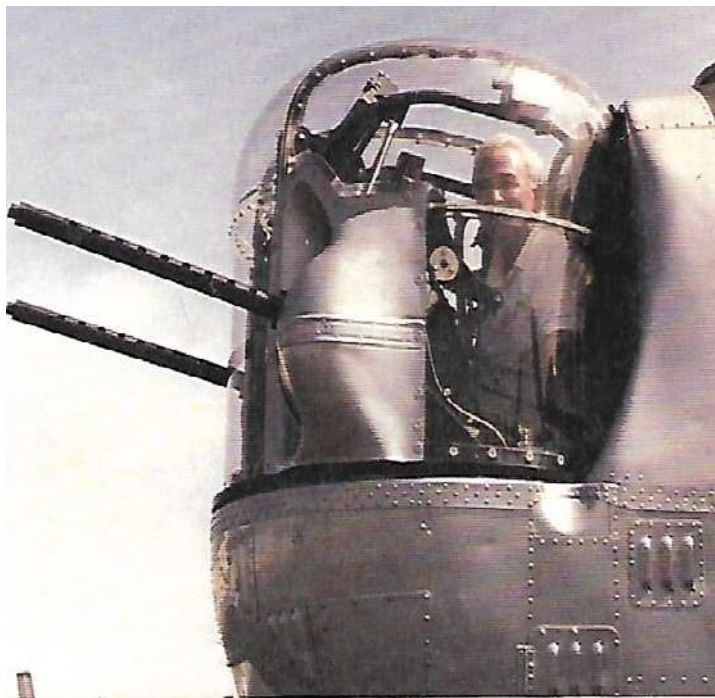
Within seconds of the bombs' release, there was a loud explosion inside the plane and the B-24H lurched upwards several yards. An anti-aircraft shell had gone in the open bomb-bay doors, had cut the hydraulic lines of the plane, and had opened a gapping hole in the plane's gas tank. Amazingly, however, there was no secondary explosion of the fuel. For whatever reason, gas was leaking out, but it did not ignite.

Almost simultaneously, another flak shell exploded near the plane's wing, knocking out the #3 engine and damaging the #4 engine to the extent that it could only generate half of its normal power.

Bob's plane was wounded, but the wound had not yet proved to be mortal. The B-24H had lost most of its hydraulic controls, it had a leaking gas tank, and two of its four engines were less than fully functional. Still, the plane flew on, although it was gradually losing altitude. The crew men conferred and soon realized that it would be pointless to try to return to base in England. Under the best of conditions, that return trip would require several hours of hard flying at high altitude – if they could maintain their height. Yet, heading back west would require them to buck the prevailing easterly flow of the jet stream winds. And they would be re-running the gauntlet of German anti-aircraft guns, and possibly even German fighters, waiting to pick off strays. Plus, no one wanted to bail out over Germany and end up a POW.

The three officers – Hicks, Sirotnak, and Haslauer – decided that the best chance of the crew surviving this mission would be for the plane to head toward neutral country, into Sweden. This would require them to cross the Baltic Sea, if they could, and land safely in Sweden. Could they manage it?

Without knowing exactly how to get there, the pilots and navigator set an approximate course for Sweden, as they left the formation of B-24 bombers returning to England. Slowly, with only two engines fully functioning, they lost altitude but also made their way over the northern edge of Germany, first toward



Familiar position, decades later: Bob B in a B-24 nose turret.

Denmark, and then over the Baltic Sea, gradually nosing their way towards Sweden.

This was all educated guess-work and seat-of-the-pants flying. The crew began lightening the plane's load by throwing out items and objects – anything that was not bolted down but that might drag them down, was thrown out.

More importantly, the engineer, Eddie Quarford, took charge inside the shattered bomb bay area and went to work trying to stanch the gas leak and the hydraulic fluid loss. Sgt. Quarford worked tirelessly. He wrapped scarves around the hydraulic lines and managed to slow the flow of fluid, to the point where the pilots could continue to control the plane. Quarford also slowed the gas loss, which enabled the plane to keep flying and which gave the crew a chance of making it to Sweden. In doing all this, however, Quarford became so soaked with hydraulic and fuel fluids that he stayed out in the bomb bay area, freezing in the cold. Sgt. Quarford even refused to turn on the electrically-heated flight suit that he wore, because he feared a fire or an explosion if he turned on the electric heating current to his fuel-soaked flight suit.

About a half-hour later, the battered crew and plane reached the coast of Sweden. Would they land? Could they land? Lt. Hicks, the pilot, thought not. The nose wheel wouldn't operate due to the loss of hydraulic fluid; in addition, there was a real risk of fire or explosion upon the impact of landing. Too much of the plane was soaked with flammable fluids. Accordingly, Lt. Hicks gave the order to bail out.

This order caught Bob Birmingham by surprise. He had worked his way toward the center or rear of the plane, away from the nose, assuming that they would be either ditching or else attempting a crash landing. Now, back near the other gun-



Original crew in Bob Birmingham's B-24H, plane 978, 458th Bomb Group, 8th Air Force:
 Standing (L-R): Blum; W. Haslauer; J. Sirotnak; R. Hicks.
 Crouching (L-R): J. Berdar; M. Bennett; R. Birmingham; R. Schauseil; R. Betz; E. Quarford.
 Not shown: R. Brittain (radar operator). [Original bombardier Blum did not accompany crew overseas.]

ners, Bob suddenly realized that his parachute was stowed up front behind the pilot's seat. He hurried forward in the ensuing confusion and met Lt. Hicks coming back through the bomb bay area. Luckily for him, Lt. Hicks quickly found a spare chute for Bob and clipped the chute onto his harness. Away Bob jumped.

As Bob cleared the plane, he tried to pull the ripcord, but his heavy flight glove wouldn't allow him to grasp the release clasp. He tried three times, unsuccessfully, to pull the cord with his glove on, then he frantically threw off the glove and finally was able to pull the cord. The chute opened, he swung once, and suddenly was jerked to a halt in the branches of a tall pine tree. Welcome to Sweden. And safety.

But this jump doesn't end the crew's story. Most of the men had bailed out at Lt. Hicks' order. Sgts. Betz and Bennett, however, who were the gunners back in the waist of the bomber, had not gotten the order – likely due to mechanical malfunction, or perhaps to the chaotic state of events unfolding so quickly and unpredictably. For whatever reason, the two waist gunners were crouched in their ditching positions, waiting for the plane to crash-land. But both pilots had already bailed out!

Hard as it is to believe, the unmanned plane righted itself in flight, after having been abandoned by the rest of the crew. The engines turned over a few times, just enough to give some power and stability to the plane, and then the stricken B-24 touched down – first the tail hitting the ground, tearing off the left vertical stabilizer, then it all went straight down, snapping one wheel, breaking the fuselage, and finally snapping the other wheel.

Sgts. Betz and Bennett suffered exactly one black eye between the two of them, and nothing else. Other than the aforementioned black eye, they walked away without a scratch.

As with other combatant crews during WWII who reached neutral Sweden, the men were interned for the remainder of the war, which ended in Europe on May 8, 1945.

As Bob Birmingham put it many years later, he and his crew survived their fifth mission by the grace of God.

Today, Bob lives comfortably and quietly outside of Milwaukee, thankful for having done his part in the fight.



[Personal thoughts and recollections attributed to Bob Birmingham based on our interview in May, 2018. — TDE]

News Notes and Nuggets — Focus on Folks

Karen Kalishek, William A. Blank, Elaine Kauh, Michael Collins, Bud Anderson Notable Aviation Awards, Achievements, Appearances, and Anniversaries

Karen Kalishek of De Pere — 2019 FAA Safety Team Representative of the Year



For more than 50 years, the General Aviation Awards Program and the Federal Aviation Administration have recognized aviation professionals for their contributions to general aviation in the fields of flight instruction, aviation maintenance/avionics, and safety.

This year, the FAA is recognizing Karen Kalishek of De Pere, Wisconsin, with its safety award.

Karen has served as FAASTeam Lead Representative for the Milwaukee FSDO since 2015, and as a FAASTeam Representative since 2013. She is a Master Flight Instructor and FAA Gold Seal Instructor who holds ATP, CFI, CFII, CFIME, CFI-Glider, AGI, and IGI certificates.

Dr. William A. Blank, MD, of La Crosse — 2019 FAA “Wright Brothers Master Pilot Award”

The FAA in March of this year honored Dr. Bill Blank, a member of the La Crosse community, with its “Wright Brothers Master Pilot Award.”

This award recognizes pilots who have shown their skills, expertise, and professionalism for at least 50 years. Dr. Blank has flown for several decades, including 30 years as an acrobatic pilot and about 25 years at Airfest.

Upon receiving the FAA’s commendation, Dr. Blank said about his years of flying, “I just always have enjoyed it. It gives you a different perspective on the earth and what you can see and what’s over the hill.”

Elaine Kauh of Watertown and Green Bay — Master CFI Accreditation Renewal

It was announced in March by Master Instructors LLC that Elaine Kauh had recently renewed her Master CFI accreditation.

Elaine first earned this national professional accreditation in 2011, has held it continuously since then, and is one of only 24 people worldwide who has earned this credential five times.

In addition to being a 5-time Master and SAFE member, Elaine is a noted aviation writer and videographer with AVweb, and a flight and ground instructor with Wisconsin Aviation at Southern Wisconsin Regional Airport and also at Palmyra.

Designees are recognized as outstanding aviation educators not only for their excellence in teaching, but also for their engagement in the continuous process of learning—both their own and their students.

In the words of former FAA Administrator Marion Blakey, “The Master Instructor accreditation singles out the best that the right seat has to offer.”

Astronaut Michael Collins to highlight Apollo 11 Anniversary at EAA AirVenture 2019

Michael Collins, the command module pilot for the first moon landing by Apollo 11 team-mates Neil Armstrong and Buzz Aldrin, will be the featured guest when EAA AirVenture Oshkosh 2019 commemorates the 50th anniversary of the moon landing on July 20, 1969.



“Even a half-century later, the Apollo 11 mission stands as one of the great human achievements of all times,” said Rick Larsen, EAA’s vice president of communities and member programs. “We are honored to have Michael Collins, [fellow Astronaut] Joe Engle, and others take us back to the memorable ‘one giant leap for mankind’.”

This event will be an evening program at Theater in the Woods on Friday, July 26, 2019. The host for this event will be four-time space shuttle astronaut, Charlie Precourt.

World War II ace Clarence “Bud” Anderson to be saluted at EAA AirVenture Oshkosh 2019 at P-51 Reunion Event

Clarence “Bud” Anderson, a National Aviation Hall of Fame member, was a triple ace during World War II, having shot down or destroyed more than 16 enemy airplanes.

His plane was the famous P-51, flown with the distinctive markings, “Old Crow.”

EAA has invited all flying P-51 aircraft to Oshkosh for this event, and they will participate in a salute to Bud Anderson during the Thursday, July 25th afternoon air show.

These flying demonstrations are a part of AirVenture’s “Push to Victory” theme for World War II anniversaries, a theme which also encompasses the 75th anniversary of the D-Day landing on June 6, 1944, in Normandy.



Women Aviators Gather for EAA WomenVenture in July at AirVenture in Oshkosh

For the 12th straight year, the Experimental Aircraft Association is affording an opportunity to women who love aviation to build camaraderie and to open doors for mentorship and participation in the world of aviation.

Since 2008, EAA WomenVenture has offered the chance to bring together female aviators from throughout the flying community. The scheduled activities are designed to encourage participation by women in aviation, as only 6% of all pilots in the U.S. are female.

“EAA WomenVenture is a tremendous experience for women, particularly as it comes during the world’s greatest aviation celebration at Oshkosh,” said Tara Parkhurst, a pilot and EAA museum educator, who also is leading the organization of this year’s activities. “These activities can be a springboard to motivate other women to get involved in aviation, either for fun or as a future career.”

Currently, the scheduled events include:

- **Monday, July 22, 5:30 pm** — The EAA WomenVenture social, presented by Endeavor Air. This kickoff to the 12th annual WomenVenture invites all women to meet and connect in the fun atmosphere of an ice cream social. Pre-registration is required.
- **Wednesday, July 24, 11:00 am** — Annual EAA WomenVenture group photo on AirVenture’s showcase Boeing Plaza.
- **Wednesday, July 24, 11:30 am** — The EAA WomenVenture power lunch at the Theater in the Woods. Tickets are \$5 each and pre-registration is required. This year’s speaker is U.S. Air Force Col. Kim Campbell, a decorated A-10 combat pilot who earned a Distinguished Flying Cross during aerial combat in Iraq.
- **Wednesday, July 24, 7:00 pm** — EAA WomenVenture evening program at the Theater in the Woods.

If you are interested in participating, you can pre-register online at EAA.org/WomenVenture.

The 67th annual EAA AirVenture fly-in convention will be held in Oshkosh, July 22-28, 2019, at Wittman Regional Airport.

Additional EAA AirVenture information can be found at www.eaa.org/airventure. For more information on EAA and its programs, visit www.eaa.org.

“Year of the Fighter” Brings Classic Warbirds and Modern Jets to EAA AirVenture 2019

A roster of the most legendary American military aircraft in history, from iconic World War II airplanes to today’s most sophisticated flying machines, will be flying, as well as on display, this summer at the EAA AirVenture Oshkosh 2019.

EAA’s activities throughout the week of July 22-28 are being planned in conjunction with the U.S. Air Force Air Combat Command, the EAA Warbirds of America, and several individual aircraft owners.

Here is a brief list of some of these events featuring past and present military aircraft, to be held this July:

- Aircraft from the USAF Air Combat Command, including the F-15, F-16, F-22, and the F-35, as well as the A-10.
- The first Oshkosh appearance of the unique XP-82 Twin Mustang (currently under restoration in Georgia).
- A salute to World War II ace Bud Anderson, with every flying P-51 in the U.S. being invited to Oshkosh.
- A gathering of U.S. Navy fighter aircraft, including F4U Corsairs, with their distinctive gull-wing airframe.
- Observance of the 75th anniversary of D-Day, with aircraft that participated in the actual Normandy invasion on June 6, 1944, as well as C-47 airplanes that will have just returned from an historic anniversary flight to France in June.
- U.S. Air Force Heritage Flights and U.S. Navy Legacy Flights involving historic and modern aircraft in formation, highlighting the legacy and evolution of military aircraft.

Rick Larsen, EAA’s vice-president who coordinates the AirVenture features and attractions, said: “Oshkosh is known for being a collection of aircraft and people that is unmatched anywhere in the world, and that will again be the case in 2019.”



MEMBER SPOTLIGHT

Erin Brueggen

Occupation: Business owner/
Photographer, Mystic Oak Photography [recent past: Photographer, EAA]

The latest book I've read: *The Little Prince*, by Antoine de Saint-Exupery. This is a great book to read with my children. They love to read, listen, and engage in discussion. Great life lesson book for all.



One thing I want to do before I die: Fly a Stearman by myself.

What I enjoy most about my life: The variety of adventures that come with my daily living. Family, friends, living on a farmette with an abundance of animals, flying, and photography — to name only a few of my favorites.

Favorite airplane: This is a tough one! I love my story and history that I have with a dear friend in his AirCam. Not only is it a peaceful and beautiful flight on a calm summer evening in Wisconsin, but also it is a great photo platform for the creativity that flows through my mind.

Favorite quote or words of wisdom: "Wild women are an unexplainable spark of life. They ooze freedom and seek awareness, they belong to nobody but themselves yet give a piece of who they are to everyone they meet. If you have met one, hold on to her, she'll show you into her chaos but she'll also show you her magic." — Nikki Rowe

A person from history I would like to meet: Princess Diana. She inspires me to be the best in all that I set out to do. She was a humble woman who remained true to herself in all that she experienced and accomplished throughout her life.

The person I most admire and why: My parents. They have provided me with the building blocks of life and encouraged me to be who I am and accomplish what I set out to do.

How I got interested in aviation: I grew up on a dairy farm on the ridge top of Coon valley, Wisconsin. As a little girl, I would run outside every time the C-17 came flying so low that I could see the pilots waving to me. The airplanes flew over regularly as it was their training route for Fort McCoy. I told my Dad I wanted to do that some day, fly airplanes. At age 16, Dad took me to Viroqua airport, bought into Viroqua Area Flyers, and I started flying lessons. I proceeded to University of Dubuque, Iowa, where I received a degree in Aviation Management and Flight Operations, completing my private, instrument, and commercial ratings, and receiving my high performance and complex endorsements.

Why I became a member/supporter of WAHF: I met John and Rose Dorcey through other aviation avenues, and they welcomed me to the WAHF community. The history of the people and their achievements intrigue and inspire me.



Have you Sent in Your Member Spotlight?

All WAHF members receive a Member Spotlight form when joining or renewing. Please complete your copy and return to the address below, or just answer the questions that **Erin** has and email them to WAHF.

Send it soon, along with a photo, so you can be featured in a future issue of *Forward in Flight*. Send to:

Tom Eisele
Editor, Forward in Flight
W8863 U.S. Highway 12
Fort Atkinson, WI 53538-9762

Or email to: t.d.eisele@att.net

Address Changes

Moved recently? Are you a snowbird? Please inform WAHF of your address change so you can continue to receive *Forward in Flight* in a timely manner. Please send a note to the address above.

WAHF Scholarships

Launched in 2002, WAHF's scholarship program annually awards scholarships to aviation students. The Carl Guell Memorial Scholarship is named in honor of WAHF's founder; the \$1000 award goes to a continuing student who meets the required academic standards and is active in both community and extracurricular activities.

Today, three additional scholarships are offered annually to students from Wisconsin enrolled in an aviation program in a technical college or college/university in Wisconsin or outside our state. WAHF member/supporter Jerome Thiessen began a \$500 scholarship. The EAA Chapter 640/Robert Payzer Memorial Scholarship and the Jeff Baum & Jim Quinn Scholarship began in 2013, for students pursuing a career in aviation management in the amount of \$500; the \$500 Payzer and \$1000 Thiessen awards are for any aviation or aerospace field of study.

Scholarship applications are available online at the Community Foundation of North Central Wisconsin website (www.CFONCW.org). Completed applications must be received by March 1.

Aviation's Past, Present, and Future

By Tom Eisele

This summer issue comes out just after Memorial Day. We take time to remember and honor some past aviators who have made a difference in our lives and our institutions.

We honor, for example, Alfred Gorham and Lyle Grimm, both deceased, who came of age in World War II. Lt. Gorham trained and flew with the famed Tuskegee Airmen; he became a POW of the Germans when he bailed out over Munich. Lyle Grimm also served in WWII, although his service was cut short when his father-in-law (Archie Towle, whom we also honor) died suddenly in 1945. As well, Bob Birmingham served his country well and truly while flying in the Mighty Eighth Air Force, narrowly escaping death on his scary fifth mission.

The present day of aviation also is well-represented here in Jeff Skiles and Richard Schmidt, both very much still with us, and both still contributing to the improvement of present-day aviation. They will be inducted into the WAHF this fall. Their past achievements (the "Miracle on the Hudson," and their many contributions to civil aviation, commercial aviation, and military aviation) are well-noted in their biographical sketches.

Harold Dahlstrom, in his riveting reflections on 33 years of flying in the airlines, manages to touch all three bases of past, present, and future. He looks back on his 33 years of flying experience in commercial aviation, but also looks at what is happening today: witness the Boeing 737 MAX concerns. Harold also looks toward the future, which will include even more automation. Still, we can't simply rely on auto-pilot. Without human intervention, innovation, and supervision, flying is impossible. In theory, we control the machines, they don't control us. But, then, does technology perhaps make us too dependent upon computers and other such machines? Or do we rely upon them as a crutch, seeming to absolve ourselves from the need to make human judgments, to exercise human control and caution?

Our charge at *Forward in Flight* is to bring you, the readers, something of today's aviation events, as well as something of the history of aviation in Wisconsin, now about a century's worth of human experience. History is not simply the events of the past; it is also what we think and feel and say about those events. It is our recounting of those events, counting things again and seeing how things add up, or fail to add up.

In almost all of these instances, we are talking about ordinary human beings, people who have worked hard, folks who no doubt have had some failures, but also some successes along the way, men and women who have done the best they could, given the circumstances in which they found themselves. Can we ask or expect more from anyone?

We honor and remember them for their aviation attempts and their achievements. On Memorial Day, or on any other day, we can take a moment to remember and reflect on the deeds of people such as Harold Dahlstrom, Lyle Grimm, Alfred Gorham, Jeff Skiles, Richard Schmidt, Win Spencer, Bob Birmingham, and many others named in these pages. —TDE



Another great aviation photo from the PxHere.com website. ID # 1273609, released to the Creative Commons CC0.

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Doug Read

Thanks for coming on board. We hope to see you at a WAHF event soon!

MEMBERSHIP RENEWALS

The WAHF board and directors appreciate your support. Because of you, we are able to continue our efforts of sharing Wisconsin aviation history. If you renew your membership annually, you'll soon be receiving your renewal reminder. We urge you to renew promptly! Don't want to wait? Use the form on page 24 of this magazine, and mail to Ron Wojnar, N8662 Stone School Road, East Troy, WI 53120.

Thank you!

HAS YOUR ADDRESS CHANGED? Please contact us to inform us of your new address. A timely reminder of your new address is very much appreciated, as it helps save time—and money—for our small non-profit. It's easy, send a note to Membership Chair Ron Wojnar at the email to the right, or call 262-347-7464.

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