FORWARD in FLIGHT

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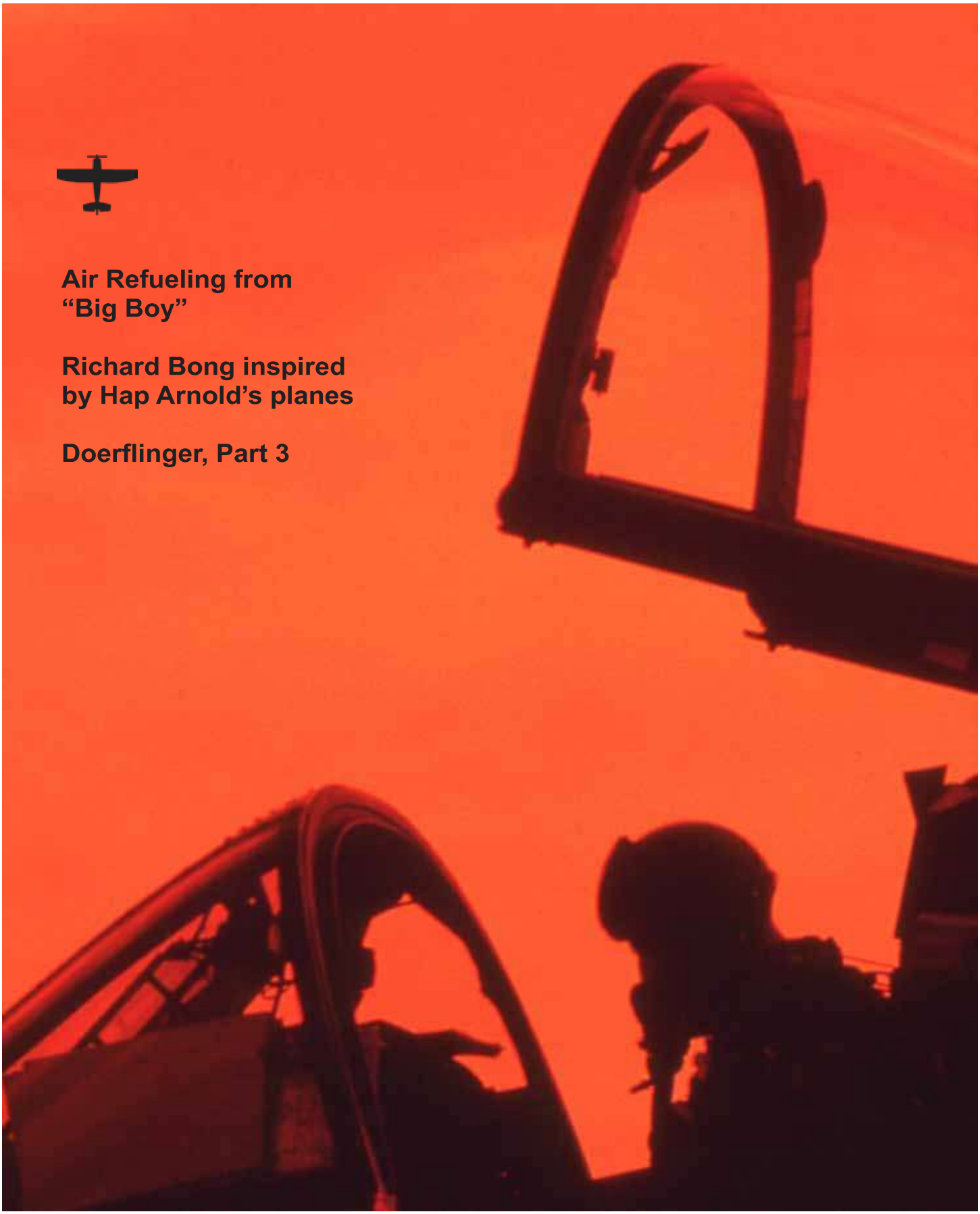

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A publication of the Wisconsin Aviation Hall of Fame

The photo below shows a 4-ship of A-10s in a peel off, preparing to land at Truax Field. This action was captured by Tom Thomas on his cell phone.

We are featuring the A-10s and the 115th Fighter Wing (formerly designated the 128th Fighter Wing), located at Truax Field in Madison. Check out Tom Thomas' gripping story of refueling an A-10 from a KC-10 "Big Boy" while flying the skies of the central United States. [Page 6 in this issue.] We also report on the 70th anniversary of the 115th Fighter Wing [see pp. 18-19].

A-10s were flown at Truax Field from 1981 to 1992. During this time, some dramatic scenes were captured in photos, many of which are accessible on the 128th Tactical Fighter Wing's Flickr website (since 1995, re-designated as the 115th Fighter Wing).

When you have time, look them over. One such photo from that Flickr collection is shown on our cover. Thanks to Ron Wojnar and Sally Helton for their assistance in producing our cover.

President's Message
By Tom Thomas

We are starting off January full of energy and vision for the coming year. On January 20th when I was in Eagle River, the 56th World Championship Snowmobile races were going on right across the highway from the airport. When I am in an area that has an airport that I've worked with in the past, I always find it worthwhile to visit and see how things are going. That was the case on January 20.

It happened to be the same day as the finals for the top qualifiers to determine the 2019 World Snowmobile Champion. While standing by the airport sign, the sound of the snowmobiles fighting for the lead was a "sport's brand" of classical music whose instruments fought to be the winner while creating the most sound energy. It is reported to be the world's premier snowmobile racing event, with 1400 entries in front of 30,000 spectators, all right across the highway from the airport. Eagle River's airport has a heated transient hangar that is full for two consecutive weeks, with the Vintage World Championship Snowmobile Derby being first, January 11-13, followed by the unlimited category races starting on January 18.

These two events are an economic generator in northern Wisconsin second to none. So is the airport. The airport provides private, charter, and public access year-round. It is one of the catalysts supporting the snowmobile participants, the visitors, Vilas county, and the state.

There are several announcements of statewide aviation gatherings covered in this issue, including EAA's AirVenture 2019. Check them out. At each of these coming events, some aspect of aviation activity will be making history and, by attending, you can be part of that history.

Our state's aviation industry is holding "The 64th Wisconsin Aviation Conference" in Green Bay, May 5-7, 2019. WAHF will have a booth there providing information on Wisconsin's aviation history. In the past, we have been invited by airports to present talks on various aviation topics. We have traveled from Superior to Racine, and from Dubuque, Iowa to Marinette, spreading the word.

We are approaching our goal of 500 WAHF members this year, and at the aviation conference we will encourage attendees to sign up. Thanks to all of you who have given gift memberships to family and friends.

Our $7 "Youth Membership," for those under 18 years old, is great for young people who are interested in aviation. You can use the form on the inside back cover of this issue. Never pass up an opportunity to support a young person in your life who is interested in the wonders of flight, future space travel, and beyond.

In closing we wish to say thanks for your support of our WAHF Mission. Please keep WAHF in mind if you are looking for an aviation speaker at your local community events.

Tom Thomas at the Eagle River Airport, ready to enjoy the snowmobiles racing in a winter wonderland.

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.

On the cover:

A-10 Thunderbolt II cockpit at sunset, Truax Field, Madison

Photo courtesy of the 115th Fighter Wing, WI Air National Guard

50 Years of Happiness
John Hatz and the Hatz Biplane

By Patrick Weeden

In the spring of 1968, John Hatz climbed into his now-iconic homebuilt biplane and made its maiden flight at the Merrill, Wisconsin airport. Eight years of hard work on the design and construction culminated with that inaugural hop around the patch - and such an accomplishment called for a celebration! So, in the summer of 1968, friends and family gathered and threw a party. John's wife Berdina took a bottle of wine and christened the airplane "Happiness." Why? Because working on the airplane made John happy.

Fifty years later, in July of 2018, members of the Hatz Biplane Association, along with family and friends of the Hatz family, gathered at the Wausau Downtown Airport to celebrate the 50th anniversary of the first flight of "Happiness." Although the weather didn't cooperate, the event was well attended, and it properly honored the legacy of John Hatz and his lasting creation, the Hatz Biplane.

The homebuilt airplane movement certainly has its roots firmly planted in Wisconsin; the Experimental Aircraft Association was founded in Hales Corners in 1953, and holds its annual world-wide celebration in Oshkosh each summer. Yet the Hatz name isn't so well known, in spite of being a Wisconsin story and one worthy of recognition.

Born in 1925 on a Sauk County farm along the Wisconsin River, John Hatz was first exposed to airplanes that were flying IFR along the river. In this case, IFR meant "I Follow Rivers" and it accurately describes one of the preferred navigational methods of the day. The Wisconsin River attracted quite a lot of air traffic around this time, and John glimpsed many different aircraft types of the era, including transports like the Ford Tri-Motor. Fascinated by aviation, John began building model planes - but instead of hanging the models from the ceiling in his bedroom like other kids, he built miniature hangars for them all in the backyard.

By the early 1940s, John was ready to take flying lessons. Construction of the Badger Ordinance Works had displaced the Hatz family to a farm near Portage, Wisconsin, so at age 17, John started training in a Piper J-3 Cub at the Portage Airport. His instructor was Chet Mael, and flying the J-3 gave John a lifelong love of the Cub.

When WWII came along, John was drafted into the U.S. Army and trained as a telephone cable splicer. He was en route to the Philippines when the war ended, but people still needed telephones, so he returned to civilian life with the same job. Telephone cables weren't half as fascinating as airplanes, however, and John knew he needed to get back into aviation. The GI Bill allowed him to enroll in Curry's School of Aeronautics in Galesburg, Illinois, where he received his commercial and CFI pilot certificates, as well as an A&P mechanics license.

After graduating, John opened an FBO at the Earlville Airport in north central Illinois. He even had a couple of Cubs for training, but the business soon failed. Next he flew a short stint in Arkansas spraying cotton in 85 h.p. Cubs, but it just wasn't what he wanted to do with his life. So, in 1952, John moved back to Wisconsin to work part time for Lyle Grimm, owner of the FBO at the Wausau Airport. He worked as both an instructor and a mechanic at Wausau for the next 11 years, during which time he married Berdina and started a family. In 1963, John took the position of Airport Manager and FBO operator at the nearby Merrill Municipal Airport, and bought his own farm near Wausau. A Piper PA-11 served as the training airplane at Merrill. Within a few years the business thrived, and John began to work on several project airplanes that he had collected, including a J-3 and a 1929 Velie Monocoupe 113. He finished both projects by 1966, and looked around for the next challenge.

Little did he know at the time, but in a few scant years John Hatz would become famous in the world of sport aviation. Around this time, EAA and the homebuilt aircraft movement really began gaining traction, and new designs were popping up all the time. John had been pondering an idea for building his own sport biplane for several years, but never had the time or money to work on it. Now, with the Monocoupe and Cub flying, John started seriously working on what he'd dubbed "The Homebuilt."

John's new machine would be a two-seat tandem sport biplane with dual controls and suited for a standard four-cylinder Continental or Lycoming engine of 85-100 h.p. The steel tube fuselage and wood wings were fabric covered and easy to build, and suitable engines were plentiful.

After two years, John began to assemble the prototype craft at the Merrill Airport. John's boys Lyman, Clifford, Al, and Aaron, along with daughter Barbara, all helped prepare the biplane for a test flight, and in the spring of 1968, the beautiful little plane finally rose into the sky.

Eager to hit the fly-in circuit in the summer, John quickly flew off the 40 hours required for approval by the FAA in time to show off his creation. He made it to local events, including the EAA fly-in at Rockford, Illinois. The airplane always garnered a crowd of admirers, and other pilots and builders were soon asking where they could get a set of plans to build their own biplane. The trouble was, John never intended to sell plans; he just wanted this little biplane for himself - and in fact, he never had a set of plans drawn to begin with. He built solely from rough working drawings that he sketched along the way.

The next summer, John flew "The Homebuilt" down to Ottumwa, Iowa, where the newly formed Antique Airplane Association held its annual fly-in. It was said that John could sit down with just about anyone and within five minutes, be good friends with them, and so it was with the man parked next to him on the flight line: Dudley Kelly, pilot of a De Haviland Gypsy Moth. Kelly mentioned that he wished he had a simple

"get in and go biplane" instead of the Moth. "You know, like yours," he said to John.

After John explained once again that he wasn't interested in selling his plans, Dudley said that he was an engineer and would be willing to draw the official plans. "How about I come up to Merrill, measure your airplane, draw up the plans, and handle selling them?" he said. John replied, "If you're serious, maybe we could work something out," then promptly dismissed the conversation as fly-in talk. Just one week later, Dudley Kelly flew in to the Merrill Airport, walked right over to John's hangar, and started measuring. In time, Kelly finished the plans for the "Hatz Biplane" and made a handshake deal with John to split the proceeds. The plans sold for $100 and soon John had earned enough to recoup the $3,000 he had invested in building his airplane. He then turned everything over to Dudley.

In the following years, John's work at the Merrill Municipal Airport turned into more of a job than a joy; just flying and maintaining "spam can" airplanes hardly inspired him. Longing to return to grassroots flying, in 1974 he closed out his contract with the city of Merrill and bought a farm three miles south of Gleason. There he created "Haymeadow Airport" and returned to instructing new pilots in J-3 Cubs. Over time, "The Homebuilt" went through modifications to improve the landing gear, and the belly stringers were deepened to accommodate a new torque tube assembly in the cockpit. A redesigned cowling and turtledeck helped reduce wind in the cockpit and gave the airplane a new look, and an engine upgrade from 85 h.p. to 150 h.p. improved performance. John continued to fly the CB-1, as it was now designated, until his untimely death in a 1989 auto accident.

His legacy lives on in the hundreds of examples of the Hatz Biplane that have been built all over the world. Along with Dudley Kelly's original plans, builders can also purchase plans from others who have modified the original design. The Hatz Classic and Hatz Bantam are two such examples.

The Hatz Biplane Association was created as a non-profit organization to help facilitate builders and to preserve the history of the aircraft design. The association holds an annual Hatz Fly-In at the Brodhead Airport each July on the weekend before EAA's big show in Oshkosh; this year, the dates are July 19-20, 2019. More information will be available at *hatzbiplane.com.*

Throughout his life, John Hatz would inspire countless builders to begin and complete the arduous task of building their own airplane. He was fond of the old saying, "The only thing worse than a quitter is someone who doesn't start." This was often followed by, "You gonna start building, or what?"

50 years later, today's builders can take inspiration from his story and the simple little biplane that he created on a farm in northern Wisconsin, bringing happiness to aviators the world over.

[*Many thanks to Lyman and Clifford Hatz for the biographical information and historic photos, and to Ami Eckard-Lee for additional research.*]

Blue twilight: Jeff Cain of Denver flies his Hatz CB-1 over the Valmont Reservoir. Photo by Julia Apfelbaum, Distant Thunder Aviation Photography, LLC.
Sepia: John Hatz's original "Homebuilt" at the Merrill Municipal Airport, summer, 1968. Photo courtesy of Lyman Hatz.

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.

Photo credits in respective captions.

Let's Talk about Your Nerves (and Neurons)
Acting promptly if you suspect a stroke

By Dr. Reid Sousek, AME

Nerves and neurons – everyone has them. And I don't mean the kind of nerves it takes to go skydiving or bungee-jumping. Either of those can be life-changing; but this column is about another kind of potentially life-changing or even life-threatening neurologic condition: a stroke or cerebrovascular accident.

Both are frightening events. The key theme that I hope everyone takes away from this article, however, is to take action. If you notice your plane's engine sounding rough during run-up, you don't push forward with take-off. The same thing is true with a sudden neurologic change or loss of function. If something doesn't seem right, or you have any inkling that there could be stroke symptoms, get that person (or yourself) evaluated immediately. Neither waiting to see if things improve, nor waiting on hold to talk to your family doctor's triage nurse, is appropriate. You've heard, "Time is money." Well, with strokes, "Time is brain."

My first year of medical school consisted of a lot of "background" info—things you needed rattling around in your brain somewhere but not necessarily making you feel like a doctor making amazing diagnoses. Anatomy, biochemistry, genetics, and physiology were all challenging during my first year and definitely on the "need-to-know" list for any physician. But it was during my second year of medical school that we began studying neuroscience. It was truly amazing to learn about the brain, spinal cord, and nerves because, with an understanding of neurologic anatomy and physiology/pathophysiology, we could finally diagnose and target the location of a stroke or mass in the brain, or even identify the location of an obstructed blood vessel in the brain without an imaging procedure. Based on the distribution of pain and weakness in an arm, we could identify which level of the cervical nerve was pinched or compressed. These patterns of symptom presentation came together and just made sense.

The most important issue with a possible stroke is early recognition and treatment.

Studying this mountain of information became more tolerable when you began to see that information could save lives and went beyond just memorizing. For you, too, knowing about strokes and their symptoms might not only help you, it just might save your, or someone else's, life. And the more you know about strokes, the better off you are and everyone else is.

General information

A stroke or cerebrovascular accident (CVA) is a sudden loss of brain function which affects a focal or localized area of brain tissue. Based on the area affected, the ensuing symptoms present differently. There are two different classes of strokes: hemorrhagic and ischemic. In some senses, these are 180 degrees apart, too much vs. too little blood. In a hemorrhagic stroke, a bleed causes extra volume of blood in the confined space of the skull and compresses tissues and causes symptoms. In an ischemic stroke, an obstruction to flow in a vessel restricts blood flow which affects a certain area of brain and causes symptoms.

One of the first steps upon presentation to the Emergency Department (ED) is often to differentiate an ischemic stroke from a hemorrhagic stroke. A non-contrast CT of the head is performed to determine if there is evidence of a bleed, because the treatment plan for a bleed is completely different than it is for a non-bleed. In the US, there are nearly 800,000 strokes per year. Of these cases, 87 percent are ischemic. And 10 percent are due to intracerebral hemorrhage, while 3 percent are due to subarachnoid hemorrhage (Circulation 2017;135(10):e146).

The most important issue with a possible stroke is early recognition and treatment. Many medical professionals are trained in Advanced Cardiac Life Support (ACLS) which provides algorithms for initial stroke care in addition to heart conditions. However, you don't need to be a medical professional to recognize possible stroke symptoms. The guidelines of the American Heart Association list three signs that can be quickly evaluated. If any one of the three following signs is present, the probability of a stroke is 72 percent.

1. Facial droop (have the patient show teeth or smile – should be even on both sides)

2. Arm drift (patient closes eyes and extends both arms straight out for 10 seconds – arms should stay at same height, or both drop)

3. Abnormal speech (have patient say "you can't teach an old dog new tricks" – slurring or inability to repeat are potential signs of stroke)

Once in the ED, the goal is assessment within 10 minutes, CT within 25 minutes, and if indicated, fibrinolytic (clot buster) treatment within 1 hour of arrival in hospital and 3 hours from symptom onset. These short time goals show the importance of prompt decision-making. The longer the delay to restoring blood flow, the more brain tissue damaged.

Guidance for Pilots

In the FAA's Guide for Aviation Medical Examiners, item number 46 is Neurologic. This is not evaluated as an isolated question or single exam step, but rather is intertwined with the general history and exam. Questions about subtle changes (such as headaches, dizziness, loss of consciousness, weakness, fainting, numbness, visual field loss) may lead to early diagnosis of a neurologic anomaly, even before obvious neurologic conditions (such as stroke or seizures) become apparent. Similar questions may also identify any lingering after-effects of a stroke.

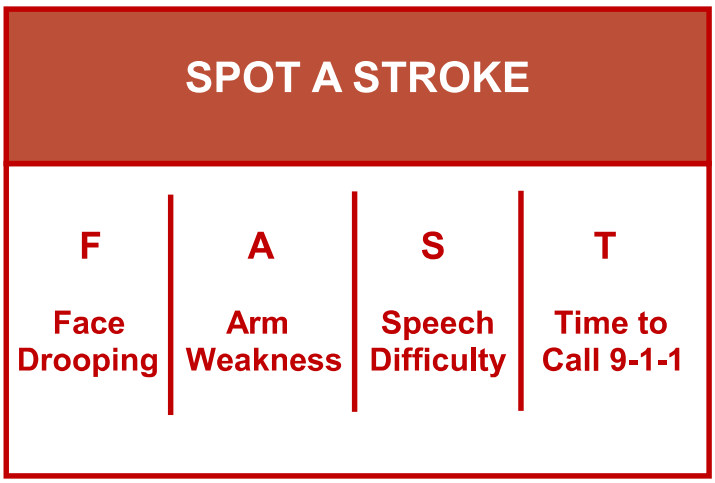
In the unfortunate event that a pilot has suffered a stroke, what is needed for FAA medical certification? Even if there are no apparent residual deficits, the FAA will likely still require extensive testing to evaluate risk for a repeat stroke. The FAA may require a minimum wait time to confirm stability of recovery before even considering a "Special Issuance."

First, as with other conditions, the full medical record (from ED records to hospital admission, inpatient, and discharge records, as well as outpatient follow-up records), are required. A detailed neurologic examination specifically addressing motor and sensory function, including language and cognitive function assessments, will be reviewed closely. If medications are indicated, dosing and documentation of any side effects are needed. The FAA wants to review the actual office notes and chart documentation. They will not accept a simple letter stating, "Pilot X has no deficits." This holds true across almost every medical condition. The original reports, and often the actual images (CT/MRI), are required, in addition to the radiologists' reports.

From an imaging standpoint, an MRA or CTA of the head and neck are reviewed. (These are an MRI or a CT with the use of contrast to help visualize the blood vessels more easily.) In addition to the CTA/MRA, an ultrasound of the carotid arteries may be required, depending upon which type of stroke occurred. Lab-work, including blood sugars and cholesterol, are reviewed, as diabetes and elevated cholesterol (i.e., control of these conditions) may impact future stroke risk.

Many embolic strokes are related to an underlying cardiac issue, such as atrial fibrillation or a heart valve or heart wall abnormality. In these cases, a clot from another location travels into a brain blood vessel. Arteries tend to narrow as they travel further from the heart, so eventually the clot will reach a spot where it gets stuck. This may lead to additional clot aggregation on that initial clot. Therefore, a thorough cardiac evaluation will be required, as this is a common source of emboli. This evaluation may include 24-hour or 48-hour heart rhythm monitoring and an ultrasound of the heart (Echocardiogram).

In some cases, there may be a seizure risk, depending on which part of the brain is affected by the stroke. Any airman with an increased risk of seizure will likely not be able to be certified. An EEG may be required to assess whether there is an increased risk of seizure. As well, on occasion, a Neuropsychologic workup will be required to further evaluate for cognitive function. This will include testing for evaluation of functions such as memory, problem solving, calculation, reaction time, and attention. The performance on these tasks is compared to standards from other pilots.



The National Stroke Association uses the acronym ***FAST*** to teach people how to recognize a stroke. FAST stands for Face, Arms, Speech, and Time. It's designed to alert people to the potential warning signs of stroke, which include one-sided facial drooping ('face'), raising the arms and one drooping downward ('arms'), and slurred or strange-sounding sentences ('speech'). 'Time' is a reminder to call 9-1-1 immediately, as time is of the essence.

Closing Thoughts

Another common issue that comes up when discussing strokes are "Transient Ischemic Attacks" (TIA). These are so-called "mini-strokes" in which symptoms occur and then improve spontaneously. The original definition of a TIA was a neurologic symptom lasting less than 24 hours and caused by reversible cerebral ischemia (ischemia = inadequate blood flow to tissue). However, it was discovered that even one hour of ischemia can cause permanent brain injury and cause abnormalities on an MRI of the brain. Even though symptoms resolve, these signs are not something to ignore, as they are associated with increased risk of ischemic stroke. These should be taken seriously and should prompt further testing to identify modifiable risk factors. Even though the symptoms may have resolved, the FAA is still going to require the thorough evaluation listed above to assess future risk of incapacitation. For some, treatment with anti-platelet medication may be indicated. Medications such as aspirin and clopidogrel (Plavix) are commonly used for prevention of recurrent stroke after CVA or TIA.

An engine failure on takeoff at 300 feet AGL may not allow you time to pull out your emergency procedure checklist. In this case, you need to know the appropriate initial actions: continue flying the airplane, and look for the best place to attempt a landing. Similarly, sudden onset of neurologic changes and loss of function are not only scary, but also require immediate action. While not every episode of numbness or facial weakness is a stroke or TIA, when one occurs unexpectedly, it is not the time to look on WebMD or Google. *Seek help immediately*.

Knowing the warning signs will allow you to act appropriately, landing safely in an emergency department for complete evaluation.

Air Refueling with "Big Boy"

By Tom Thomas

For most of my flying career with the Air Force and Air National Guard, I have been involved in inflight refueling either by passing fuel to receivers or as a receiver getting gas from a tanker. The tankers included the KC-97L, the KC-135A, and the KC-10. In tankers, I have passed gas/JP4 to aircraft ranging from the "Super Tweet/Dragon Fly" A-37 to the B-58, our first supersonic bomber, and many other planes in-between. (The B-58 was back in the late 1960s and a beautiful bird it was, as we refueled at 0.9 Mach.)

Tom Thomas in the cockpit of a KC-135.

Except for the KC-10, all of my refueling experiences were positive and completed with highly trained aircrew members at both ends. The KC-135A was the Air Force's primary tanker aircraft; it took over for the KC-97L, which replaced the KB-50, which itself was virtually a B-29 modified as a tanker. The KC-97s were sent to the Air National Guard in 1960, and Milwaukee's share of KC-97s were flown to the "Bone Yard" at Davis Monthan AFB in early 1978. The KC-10 was designed initially to replace the KC-135 with a "next generation" aircraft that could carry more fuel and provide an improved refueling performance for the Air Force. Anyway, that's the way I understood it. That turned out to be wrong!

Let me explain. I was returning from an A-10 deployment to Davis Monthan AFB in February 1983, where we had fired TV-guided Maverick missiles and dropped live 500-pound bombs on tactical targets in the desert ranges. During the return, we were informed that we would be refueled by a KC-10 prior to our reaching Madison. We had a dozen or so A-10s in Tucson that had to be flown back to Truax Field in Madison after our training was completed. A KC-10 had been scheduled to refuel two flights of four A-10s. With a couple thousand hours of inflight refueling time in the KC-135A and the KC-97L, I wanted to have a look first-hand at the KC-10 and "get some gas on a high pass." Luck being what it is, I was selected to lead the second element in the first flight of four Warthogs. Gary, a charter pilot from Beaver Dam, was lead, his wingman/#2, Ron, was a state engineer, I was #3, and #4, Sandy, a dentist, was our "tail-end Charlie."

It was a typical beautiful day when we left Tucson just before sunrise. Our four-ship of Warthogs lined up on Davis Monthan's long runway with Gary and Ron making up the first element lined up 500 feet down the runway, making room for Sandy and me at the runway's end. The 500-foot separation was to keep the second element out of the jet wash of the first element's turbofans at full power for takeoff. We held briefly in place awaiting clearance from the tower. The sun had just crested over the horizon shining on the picturesque rocky hills and mountains around the City of Tucson. The large white dome of Kitt Peak some 40 miles to the southwest glistened like a diamond sitting in a field of blue with varying soft shades of tan. Our UHF radio crackled, "Ram 11 Flight, cleared for takeoff, cleared to Tucson departure on 386.3." Gary replied "Roger DM Tower, Ram 11 flight run them up and go Uniform 386.3." We responded in order "2,3,4." I gave Sandy the visual hand signal to run up his engines and he acknowledged with a head-nod.

While the engines were stabilizing, 386.3 was dialed in the UHF radio. Completing the before-takeoff check, I looked back at Sandy and he gave me another head nod. Gary called, "Ram 11 flight check," which we acknowledged by "2,3,4." I then called, "Element 2 ready," and Gary responded, "Roger 3."

Watching the first element, there was a brief pause until Gary and Ron released their brakes and their Warthogs lurched forward. I looked at Sandy and tapped my helmet. This meant "At my head nod, release brakes." Ten seconds after Gary released his brakes, I gave the head nod and we released our brakes and our Warthogs lurched forward, wanting to get in the air. As we accelerated, we made a quick check of the engines and other relevant cockpit instruments to ensure everything was

Photos courtesy of Tom Thomas

When a 4-ship joins up on a tanker, the lead and #2 take the left wing, and #3 and #4 take the right wing.

Planes depicted here are Fairchild Republic A-10s (official designation: Thunderbolt II; unofficial designation: Warthog) of the 115th Fighter Wing, a Wisconsin Air National Guard unit.

Original Thunderbolt was the Republic P-47, used in World War II. They were famously rugged prop-planes, whose eight 50-caliber machine guns, and immense bomb-loads or rocket-loads, gave ground-support.

These new Thunderbolt IIs are worthy heirs to the "Thunderbolt" name. They use a 30-mm GAU-8 Avenger rotary cannon, with numerous other weapons-configurations, to decimate enemy armor units and other formations. They were introduced in 1977, and are still used today.

working "ok" before the go/no-go point. A quick check over my right shoulder confirmed Sandy was locked in position as our Warthogs accelerated down Davis Monthan's 11,000-foot runway. At 50-knots [kts] the nose wheel steering was disengaged, at 100kts everything looked good, and at 125kts the nose was smoothly lifted off the runway.

The takeoff in the Warthog is smooth, almost stepping from the ground. After the nose is off the pavement, it seems as though there is an ever so slight delay when the main gear lift off. This can be felt as the airplane just begins to fly and the main gear struts are extending as the wings begin to carry the weight of the craft. Although the transition from an earth-bound vehicle to a flying machine is momentary, you get to recognize these little individual characteristics.

As we accelerated through 135kts, the Warthogs stepped anxiously off the ground. Looking over my right shoulder, Sandy was airborne and tied in good position. A nod of my helmet and I raised the gear handle, the handle's red light came on as the gear horn began pounding in my ears, indicating everything was moving ok. Another quick check of Sandy and his gear was retracting in unison. In the Warthog, you get a reassuring pat-on-the-butt with an accompanying fairly loud "clunk" to tell that the nose gear's fully retracted.

Passing 200kts, with a kick of the rudders back and forth, Sandy slid out into route position with about 50-75' wingtip separation. In the route position, you then complete your after-takeoff-and-climb checklist, including engine and flight instruments. Gary was holding 200kts, and as our element continued to accelerate, we began to catch up to the first element. In no time at all, we were tied together as our four-ship flight climbed steadily now toward the northeast and MADCity.

As we continued to lift skyward, the sun was now above the horizon and the noses of our jets seemed to be homing on its golden brilliance. The level off at 21,000-feet was followed by a fuel check over the radio: "Ram 11 – 9.3, Ram 12 – 9.2, Ram 13 – 9.4 and Ram 14 – Same."

The visibility was unlimited, and we could virtually see forever. The Rocky Mountains in southeast Arizona and New Mexico are beautiful from three miles up, especially when shrouded by shadows cast by the rising sun. Those moments are still painted in technicolor in my memory's photo album.
We now slid out into loose route formation of 100-200' to give more opportunity for cockpit duties and clearing. It took about two hours at cruise before we initiated the air refueling checklist and began calling for "The Big Boy." The winds at altitude were considerably different than forecast and in the negative, so we were ahead in our fuel burned.

Lead contacted the refueler and initiated the rendezvous. All went fine and the KC-10 didn't look much bigger than its predecessor, the KC-135. The fuselage looked bigger, but as far as the wingspan and over-all length, the two refueling planes seemed quite similar. The KC-10 tanker was painted in the standard Air Force white, silver and blue paint scheme; it was a beautiful sight to behold.

Gary was cleared by the KC-10 Boom Operator ["Boomer"] to the pre-contact position, about 50-feet back and slightly below the boom. Ron/#2 was on the left wing, and Sandy and I were on the right wing. The standard refueling sequence is 1-3-2-4. This sequence allows for a smooth cycling of fighters from one wing to another.

When the Boomer cleared Gary in, he moved steadily forward with a brief pause at the boom's nozzle. The tanker boom operator made contact by extending the boom into Gary's air refueling receptacle. The Boomer called "Drawn 57 contact"

and Gary replied, "Ram 11 contact." Next came, "Ram 11, you are taking fuel," and Gary replied, "Roger, Ram 11." Everything was going super-smooth and I was thinking that this KC-10 refueling would be a piece-of-cake.

It took about 6 minutes for Gary to get topped off. When the designated fuel had been transferred, the boom operator disconnected Gary's jet. As Gary left, however, fuel/JP4 continued spraying from the boom-end nozzle. As Gary slid up to the left wing, the Boomer told us to "standby" while he worked on the fuel spray. The steady stream of JP4 continued flowing out the end of the boom as we glided along in smooth air at 350 mph, some three miles up.

We had begun refueling in clear air, but now we were on top of an overcast deck of clouds. The fuel state of the remaining Warthogs was beginning to become a concern; we had established 3500 pounds as the fuel needed to make our alternate if we missed the tanker. The remaining three jets were closer to 3000 pounds. While this was of some concern, just before we had gone on top of the clouds, we had flown over Gaylord, OK, which had a 7000-foot runway. That could be our alternate if things deteriorated and "turned south."

The KC-10 Boomer tried for some time to stop the fuel from spraying out the boom, but couldn't. This could never have happened in the KC-97 or KC-135, to not be able to shut-off fuel to the boom. How could this be happening here and now? It was surreal.

The Boomer was frustrated and apologized, saying they could not shut off the fuel flowing out of the boom. Incredible! Then came our options, which I had expected all along. The Boomer said we could terminate the refueling, or the next aircraft could come up and make a contact, which "should" reset the valve and stop the fuel spray. Oh boy, who was the next refueler? I was, Ram 13. (The next 4-ship flight of Warthogs was coming after us, too, so if this couldn't be fixed, they would have to land somewhere in-route.)

After a hard swallow, I came back with a 'cheery' "Roger, Boomer, Ram 13 will give it a try." Oh boy, flying along in a stream of JP4 in a jet full of electronic circuits, wires, and fuses hadn't been on my agenda for that day. What a crazy thing in the first place, how could they not shut off the fuel? In the other tankers I had flown, we would switch the source of the fuel being transferred from tank to tank. If one needed to shut off the loss of fuel, just transfer it to another tank. Guess that wasn't something one could do on a KC-10. Crap…no CRAP!

This would be my first try at refueling behind the Big Boy and it was going to be with a slight handicap. The refueling receptacle on the Warthog is on the nose in front of the cockpit and canopy. This meant I'd have to fly up the stream of JP4 to make contact while the fuel was making a filmy, blurry cover of the entire canopy. This would virtually put one in a 0-0 visibility condition. Basically, I would be flying blind—with jet fuel streaming across the fuselage from nose to tail.

Sliding back down behind the KC-10, the thought occurred to me, "Boy, am I lucky it's not nighttime!" Joy and Rapture unforeseen. It is a lot easier to handle misfortune if one can see a glimmer of the positive, and that was the only positive thing that I could imagine at the moment.

The Warthog was stabilized about 50' back from the end of the boom with fuel streaming just over-head. What would happen once the Warthog was flown up into the streaming jet fuel and virtually "took a bath in gas?" Would the Warthog and I both go out in a blazing flash? Would there be time to eject? The ejection seat arming handles were double checked in the correct position and the oxygen system was turned to 100percent in case any jet fuel leaked through the canopy edges. Since the cockpit was partially pressurized, that leakage wasn't likely, but I wanted to be ready for anything.

I called, "Ram 13, stabilized pre-contact position," and the Boomer called back, "Drawn 57's ready, Ram 13 cleared to the contact position." At this time, not quite knowing what to expect, but anticipating everything would work out "ok" (or it wouldn't), some thoughts crossed my mind. "Well, it has really been great, Thank you Lord," and then I smoothly advanced the throttles. The Warthog moved forward on the Big Bird and stabilized about 10-feet out from the end of the boom. Gently pulling back on the stick, the Warthog smoothly lifted up into the streaming jet fuel. The canopy was immediately covered with the filmy diesel fuel and the Big Bird became a Big Blur.

I continued to move forward and stabilized at what felt and looked like the contact position. This was my first opportunity behind the KC-10 and all that was visible was a silvery whitish blur. Looking through the front windscreen was sort of like driving your car down the highway in a driving rain with no windshield wipers. It was real fun-city.

The nozzle banged against the nose of the Warthog and I could vaguely make it out when it moved. The normal contact is actually made by the boom operator and not the pilot of the aircraft when working with a boom. If refueling with a basket, the pilot normally makes the contact, but the boom operator can assist by moving the basket into position, which is what we did while flying an A-37B Dragon Fly. I was wondering why the Boomer didn't make contact while the Warthog was holding steady in the streaming fuel coming out the end of the boom.

The blurry object began to move around as I chased the evasive nozzle. It was time to disengage. The throttles were gradually retarded, and the bird slowly slid back and dropped below the streaming jet fuel. In a matter of seconds, the windscreen cleared up and the images in front now became clear and crisp. Well, we hadn't exploded. So far, so good. But still no gas and the fuel was still spraying out.

From the first try at it, I realized that I would have to make the contact. This seemed strange, but this wasn't the time nor the place to get into a discussion of the whys and wherefores. My bird and the other two Warthogs needed gas, plus the four coming after us, so it was now or never.

For the second attempt, once I stabilized and again called, "Ram 13 stabilized in pre-contact position," the Boomer came back, "Drawn 57 ready and you're cleared to the contact position." Well, here we go again. The thought of the spurious electrons igniting the flying mass of metal, glass, and guts, again passed through my mind, as the Warthog was smoothly sliding forward. Before pulling up into the streaming JP4, I realized,

A-10 approaching tanker with fuel door open

"This is it, you have to do it yourself." These KC-10s are something else.

Before rising up into the streaming jet fuel, I noted where the end of the boom was and knew I had to fly the Warthog to that point in space blind, as we flew along together at 350 mph. Once in the streaming JP4, the beautiful KC-10 disappeared again and was replaced by a blurry object continuously changing shapes and colors as the JP4 covered the canopy in a wavy motion. The Warthog stabilized and I ever so carefully eased it toward that point in space that I had visualized moments earlier. The thought waves connected the dots as the Warthog connected with the boom.

The fuel stopped spraying and it began rapidly disappearing off the canopy, the green contact light in the Warthog's cockpit came on, and the KC-10 was clearly in sight. All things came together as I relaxed my death grip on the stick and let out a deep sigh of relief.

Just then the Boomer called, "Well, it looks like that took care of the problem, disconnect now." No wait, and then we were disconnected. Once stabilized in pre-contact, the Boomer cleared me back into the contact position. This one was a piece of cake. The Warthog was taking on gas and approaching 3500 pounds, and the Boomer suddenly disconnected me. When asked why, he replied that I had hit the upper limit and the ensuing disconnect was automatic. That was strange, as any time my aircraft was ever approaching a limit, the Boomer would advise me that the aircraft was approaching a limit. This was another KC-10 "undesirable" characteristic.

This second contact was quick, and with my Warthog being finally topped off, I returned to the right wing. Ron cycled in next, followed by Sandy. They both made one contact, got their gas, and our flight had no more fuel spray problems.

As we were dropping off the tanker, Gary passed on our thanks to the tanker. The tanker gave us very little instruction on the proper refueling positions, which was somewhat curious to us. The tanker pilot said we did a good job. He seemed quite surprised when Gary told him this was the first time for any of us to refuel behind a KC-10.

It was interesting to hear the stories from the second wave of Warthogs that refueled from the same tanker. They complained about all the instructions they received from the Boomer. Hearing this, I just sat back and smiled.

From time to time, I pinch myself to see if I'm really here—or did the ship and I go up in a fantastic aerial blast and this is all a dream? No matter, it's been great, and we all need to understand that every new day is a gift!

Ram 88.

[Addendum: After looking at the photo from the KC-10's refueling station, if I were sitting in the boom operator's chair, it would be difficult to see where the A-10's air refueling receptacle was with jet fuel streaming out and spreading in the thin air. It would pretty much obscure the entire nose of the Warthog, and it did. Now I understand.]

Joseph Doerflinger
From Mulhausen to Milwaukee, Part 3

By Michael Goc

Prefatory note from Fall 2018 issue: Joseph Doerflinger began his aviation career at a civilian pilot training school at Halberstadt in western Germany in early 1918. He ended it at the Knaup Brothers' Civilian Pilot Training school at Mitchell Field in 1943. In between he flew in combat for the German empire, as a transport pilot in colonial French Africa, as a polar flyer in Norway, and as a commercial pilot in the United States.

After an uneventful trans-Atlantic crossing, Joseph Doerflinger landed in New York and promptly boarded a train for Chicago. He visited the airport not yet named Midway and saw "how far behind American had fallen in the development of commercial flying." With family help he was introduced to Colonel P.G Kemp who was organizing a passenger airline. After scanning Doerflinger's license and log book, Kemp hired him on the spot—providing he could get an American transport license and pass medical and flying tests.

To get a pilot's license, Doerflinger had to file his first papers for citizenship, take an oath of loyalty and pay one dollar. After a short delay he got his papers and was licensed to fly in the USA. His first chore was to accompany Colonel Kemp to the Hamilton Aero Manufacturing Company in Milwaukee. Tom Hamilton was the Washington state born whiz-kid who came to Milwaukee to manufacture wooden propellers and aircraft pontoons for World War I. He switched to airplane design after the war and produced one of the first all-metal airplanes, *The Maiden Milwaukee*.

On his visit to the Hamilton plant, Doerflinger inspected the assembly line and met with engineers and designers. The atmosphere was decidedly different than Doerflinger experienced at the Latecoere factory in France, where people who actually flew airplanes were ignored by the people in charge of building them. The Hamilton crew was discussing whether to control their newest plane with a stick or a "wheel". Doerflinger "put up an argument for the wheel," and Hamilton planes were equipped with a wheel.

He was able to fly a new model back to Chicago and was well pleased with it. The Hamilton cabin plane could carry five passengers with luggage, plus the pilot, whose cockpit was inside the cabin. "The plane flew as easily and as comfortably as if I had handled it all my life." He was an airline pilot again, flying Hamilton and Stinson cabin planes for Kemp's Universal Airlines on the Chicago-Detroit route—for a while at least. Kemp had failed to get the mail contract that could have kept his venture in the air. After about a year Kemp left the struggling Universal and brought Doerflinger into his new enterprise as a dealer of Great Lakes aircraft. Doerflinger said he enjoyed flying the planes around the country, but he could also see that the dealership was not selling enough planes to stay in business.

In August 1929, with a letter of recommendation from Kemp in his pocket, Doerflinger went to the office of John B. Kohler in Chicago. No relation to the Wisconsin governor at the time, Kohler was planning to start what he called "a flying bridge" from Milwaukee to Grand Rapids, Michigan. His planes would fly a direct route over Lake Michigan and cut hours off the current course which ran around the southern tip of the lake.

Doerflinger was among the first line pilots Kohler hired. Two years after Lindbergh and others had flown across the Atlantic, the fifty-mile hop over Lake Michigan was still considered hazardous for commercial passengers. Accordingly, Doerflinger and other Kohler pilots were dispatched to the Loening Amphibian factory on the Hudson River in New York. The Loening "duck" owed its nickname to the large single pontoon extending forward and beneath the fuselage. As an amphibian

Below is a Loening "duck" at the National Air and Space Museum. A sister ship toured Wisconsin in the summer of 1927.

Loening "duck" photo courtesy of Michael Goc

Above are the pilots of the Kohler Airline. Arrayed left to right, they are: Ray McMillan, Sam Carson, Joseph Doerflinger, Lionel Stephen, Elmer Leighton, and Roy Pickering.
Such were the men who braved the unpredictable air over Lake Michigan from 1929 into the 1930s.

Joseph Doerflinger in front of the Ryan Brougham that he flew as a barnstormer in Wisconsin in the 1930s.

that could land either in water or on land, the Loening had landing gear mounted on the pontoons that the crew raised or lowered by means of a hand crank. The model that Kohler used and Doerflinger flew could carry six passengers inside, a pilot and co-pilot in open cockpits, plus luggage and mail. It was powered by a 525 hp Wright Cyclone motor and could cruise at one hundred miles per hour. Pretty it was not, but it could safely land passengers on or off the shore of Lake Michigan.

Kohler Airline inaugurated service on September 1, 1929, from Grand Rapids with Doerflinger as pilot. With him were John Kohler, Milwaukee Mayor Daniel Hoan and the postmaster of Grand Rapids, Michigan. Service began with two daily flights to and from Milwaukee and Grand Rapids. Doerflinger had flown in raging rain storms, in thick desert dust clouds, and in combat with enemies firing real bullets at him, but he had never flown in the winter.

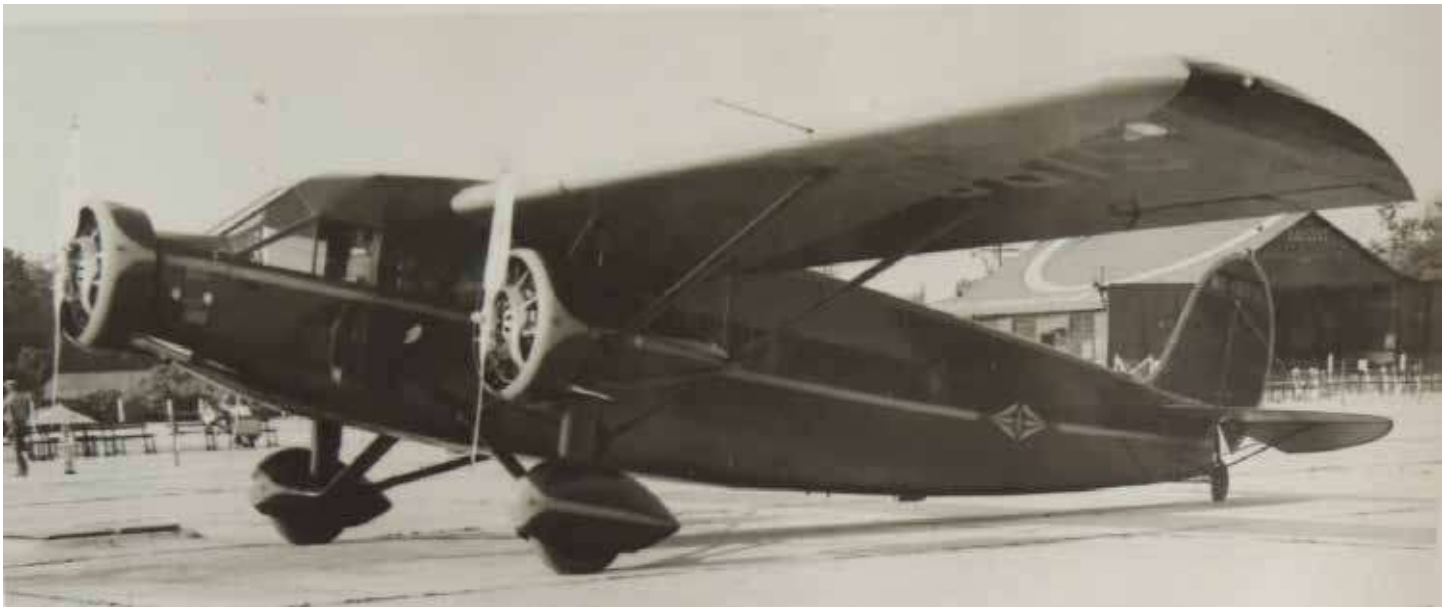
His description of flying over Lake Michigan shows he had a way with words as well as airplanes. "During freezing weather, clouds of water vapor lie over the lake and chase over the water like a thin fog. At short intervals this vapor condenses and rises like a snake getting ready to strike. ... The ensemble of these pillars of vapor gives the impression of a large snow covered forest. If snow begins to fall on such a scene ... we are in a most beautiful fairy land."

It was not always so idyllic. He wrote about a flight from Milwaukee with a strong northwest wind blowing. "I expected my flight to be a short one. It was. Over the lake I ran from one snowstorm to another. The air was rough and the three passengers were getting a jolting ride. My ground speed was about 160 mph. Suddenly I ran into darkness. Gray-black clouds rose on all sides and soon the snow was so thick I could see nothing. I turned back toward the lake hoping to fly over water until I gained visibility. Then the compass started acting up. It grew lighter and I turned toward the shore with the storm at my back. I was off course but now I could see the ground. I could also see looming ahead of me more deep black clouds. The snow became thicker. Finally I caught sight of a field that ran north and south. … It was covered with snow. There was but one thing to do—land without the wheels as if we were landing on water. It was a delicate landing to make, what with the gusting wind and the blowing snow. I touched the ground gently as a feather and shot across the snow like a bobsled." What a ride that must have been for passengers and pilot. Doerflinger had landed the Loening as if it really were a duck on the water except that this water was snow drifted on a farm field.

An obliging farmer drove the passengers back to Milwaukee but Doerflinger and his co-pilot Sam Carson decided to stay with their plane. It was a good move because they were invited to spend the night in the farm house and join the family for dinner the next day, which happened to be Thanksgiving. "I had my first real American Thanksgiving dinner—turkey and all the trimmings—served as only American farmers know how."

Despite the onset of the Great Depression in the fall of 1929, Kohler Air Line continued to operate and even extended service to Detroit. Doerflinger recalled that one of the hangar

Photos above from Doerflinger biography



Above is a Stinson Tri-motor at Midwest Airways in Milwaukee. This type of plane was flown by Doerflinger as an airline pilot.

Left: Kohler Airlines' perfect flying record was spoiled by this Milwaukee mishap. Still, no one was injured and plane was not damaged.

"boys" Kohler hired was a teenager named Herman Salmon, nicknamed "Fish." Salmon went on to become a test pilot for Lockheed who helped bring the United States into the jet age.

Kohler was all but grounded in 1933 when the federal government cancelled all air mail contracts. After a disastrous experiment in turning the air mail over to the U.S. Army, the government returned to the contract system in 1934. Pennsylvania Airline underbid Kohler for its route and therefore put the company out of business. The new airline chose not to retain Doerflinger who, "with over 10,000 hours in the air and seniority rights, had become something of a problem to them." He was out of work again and no longer a twenty-something, but a mature family man with a wife and six children to support.

He looked for any job in aviation he could find: flight instructor at St. John's military academy in Delafield; charter pilot carrying Loenings full of fisherman from Cleveland to lakes in Canada; piloting a Keystone Tri-Motor low and slow over cities while "a spieler" extolled the virtues of a soap from a loudspeaker; signing on with a Norwegian heiress who took him home to fly another Loening in the fjords; barnstorming on the Wisconsin summer fair circuit in a Ryan like Lindbergh's.

Finally, in 1937, he connected with the Knaup Brothers at Milwaukee County Airport and was hired as a flight instructor. Two years later the Knaups joined the Civilian Pilot Training program and later the Civil Air Patrol. Until 1943, Doerflinger trained youngsters to fly and fight in the next war. Then "the school was closed. … It was also the end of my flying career."

He found work at Allis-Chalmers and AC Electronics until he retired in 1966. In addition to his biography, he wrote numerous articles for aviation magazines and became a friend of the dean of Wisconsin aviation historians, George Hardie.

At the end of his book, Doerflinger reflected on his life as an aviator and the progress he had seen since his training days at Halberstadt. He imagined himself at a modern airport watching the air liners take off. "One of the giants of the air ascends in a few minutes, disappears from view. My heart is strangely touched and expands at this sight. A great silent joy comes over me. A feeling of pride swells my breast at the thought that I too was privileged to have had a share in this huge task. … Would that all the brave pilots who gave their lives in sacrificial devotion to the cause might arise for a brief time to enjoy the fruits of their work and be convinced that their sacrifices were not made in vain."

Joseph Doerflinger went west in October 1970 at age 72.

[Author's Note: Governor Walter Kohler, Herman "Fish" Salmon, George Hardie, and Jim, Ray and Ed Knaup, have all been inducted into the Wisconsin Aviation Hall of Fame. Information on Doerflinger's family was provided by Mary Lee Klaus, genealogist with the Adams County Historical Society.]

Mishap photo from Doerflinger biography; Stinson from WAHF archives

Bill Rewey, aka "Mr. Pietenpol"

We are saddened to announce that Bill Rewey died on February 11 at a hospice in Madison, at the age of 91. Bill was a long-time friend of the Wisconsin Aviation Hall of Fame, and an inductee as well.

At the news of Bill's passing, Tom Thomas said that Bill "was an accomplished pilot and airplane builder, plus a great promoter of general aviation." Rose Dorcey added, "He was a great supporter of WAHF and a heck of a nice guy."

Bill Rewey was born in November, 1927, in Marshfield. He built balsawood model planes as a youth, and in high school he was known to build model planes in his woodworking class. As a teenager, he began his flight training on the grass runways of the local airport. He took flight lessons in a J-3 Cub and made his solo flight in the spring of 1945.

Bill then moved to Madison in the summer of 1945 and enlisted in a U.S. Navy program that provided both flight instruction and university credit. Quite a deal. It ended somewhat abruptly, however, two years later, when Bill received his orders to report for his Naval pre-flight training.

Bill was assigned to the Naval Air Stations in Pensacola and in Jacksonville two years later. At Pensacola, he flew North American SNJs; at Jacksonville, Bill flew the Vought F4U Corsair. He earned his Navy wings in November 1948. Later, he was assigned to Naval Air Station Norfolk, where he flew Grumman TBM Avengers in an anti-submarine squadron.

In the summer of 1949, Bill married Marion. After his discharge in 1950, they moved back to Madison, where Bill finished his degree in Mechanical Engineering at the UW in 1952. The Rewey family moved briefly to Ohio, where Bill worked in Columbus for North American Aviation, but then the family settled back in Madison in 1953.

Parenthood and a busy career as a mechanical engineer kept Bill occupied for several years. He worked at Mead & Hunt, and then for the State of Wisconsin. Through it all, in 40 years as a mechanical engineer, he developed his skills in building things. In 1992, Bill retired from state service.

In the 1960s, however, his latent interest in aviation had taken him to the Experimental Aircraft Association, where he began exploring the joys and tribulations of homebuilding airplanes. It was during this time that, as fate would have it, Bill purchased plans for a Pietenpol Air Camper. He finished the building project in 1972, and ended up flying his new creation to Oshkosh that summer.

This decision started him down the path which, eventually, would earn him national recognition for his expertise in building, restoring, and maintaining Pietenpols. In fact, Bill became known to many as "Mr. Pietenpol."

Bill's second Air Camper, built 1986-1994, went to the EAA AirVenture in 1995, and every year thereafter Bill did his utmost to attend that gathering.

With all that he did to encourage and foster the love of aviation, it was a natural decision to induct Bill Rewey into the WAHF, which took place in October, 2011.

Also central to Bill's lifetime of promoting aviation was his enthusiasm for introducing young people into the joys of flying. He began giving the "Young Eagle" flights in his Pietenpol, and it is estimated that he gave more than 600 youngsters their first flights.

Of those flights with young folks, it is reported that Bill once remarked, "It's fun to get an instant response from the kids. There's the mystique of the open cockpit."

That closing remark seems a fitting way to remember Bill's legacy.

WAHF

Bill Rewey in various settings

Planned: "A Celebration of a Life Well-Lived"

When: Saturday, May 18, 2019
1:00 p.m., ceremony at 2:00 p.m.

Where: Kretschman's Sugar Ridge Airport

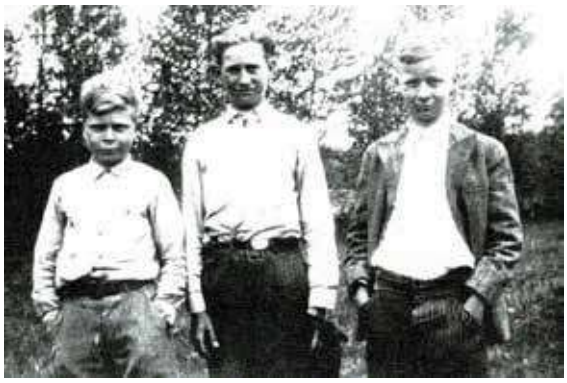
Photos courtesy of Tom Thomas

Flying Inspiration for a Wisconsin Farm Boy, Richard Bong

"Mr. President, you've got mail"

By John Dodds

From June 15 to September 11, 1928, President Calvin Coolidge stayed at Cedar Island Lodge on the Brule River, about 35 miles outside of Superior. He wanted his mail delivered every day while he was away from Washington, D.C., and planes did just that. An 8-year old farm boy from Poplar, Wisconsin—Richard "Dick" Bong—watched the planes overhead as they delivered the mail (Dick on left in photo below).



During World War II in three tours in the Pacific theater, Bong became the pilot with the most enemy planes shot down ("kills"): 40. After his first tour with 21 "kills," he was back in the United States and talked to reporters: "Bong said his interest in flying began in 1928 when he stood on his father's farm and watched the planes taking mail to President Coolidge who was summering in Brule, Wis."

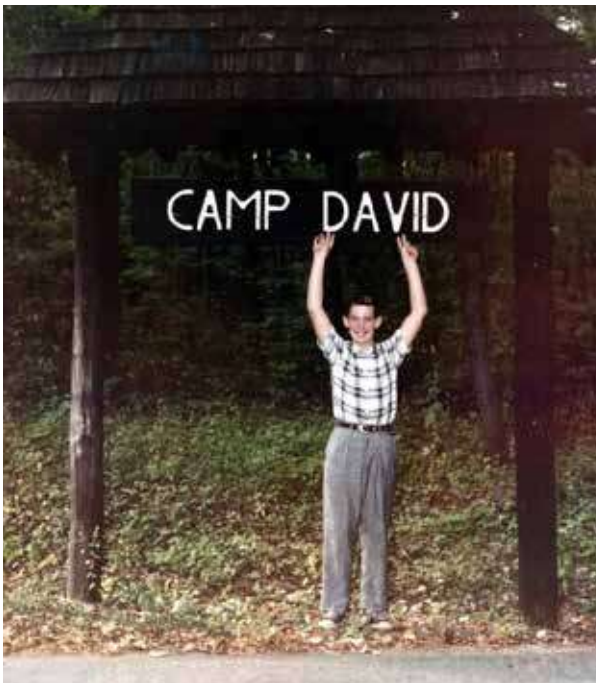
What were these planes that so inspired a boy later to be called the "Ace of Aces"? Where did they land? Where did they come from? Who were the pilots? This article will answer those questions—and more.

The first of those "more" questions is, why am I so interested in summer White Houses? There was no fixed retreat for a president until President Franklin Roosevelt selected one of three camps in the Catoctin Mountains outside of Washington, D.C. He named it "Shangri-La." When Eisenhower became president, he renamed it "Camp David" after his grandson David. David Eisenhower and I were in the same class in law school at George Washington University, Washington, D.C.

The delivery of mail from Washington, D.C., to Superior took place in three stages: train from Washington to an airfield in Hadley, New Jersey (now the Hadley Mall); plane from Hadley to Chicago (and later by train directly from Washington to Chicago); and plane from Chicago to Superior. Planes from New Jersey to Chicago were flown by contractors to the U.S. Post Office Department. Our interest is in the Chicago-Superior leg flown by Army pilots.

Unit and Planes.

The Army unit that flew the mail to Superior was a detachment of the 16th Observation Squadron, stationed at Marshall Field, Ft. Riley, Kansas. That is the same unit that delivered the mail to President Coolidge to his summer White House in South Dakota the previous summer. The commander of the squadron was none other than Major H.H. Arnold, who is better known as "Hap" Arnold, later the 5-star general who headed up the Army Air Forces in World War II. Arnold himself had gone to Superior at least once, in June 1928. The detachment of pilots and planes flying the mail was known as the "President's Airmail Detachment, Superior, Wisconsin." The commander of the detachment was 1st Lieutenant (Lt.) Charles ("Charlie") Skow of Racine, Wisconsin. The squadron flew the Douglas O-2 ("O" meaning "observation") and the later model Douglas O-2H. Both models were bi-planes with two open cockpits, one for the officer pilot and the other for the enlisted observer.



David Eisenhower at Camp David, Maryland.
Photo from Eisenhower Presidential Library, KS.

The plane shown on the next page, above, (Serial No. 28-129) was one of the actual planes that flew the mail. The photo was taken at Davis-Monthan Field, Tucson, Arizona, in June 1928. The plane was intended for the 91st Observation Squadron (whose insignia is painted on the plane) but was diverted to the airmail detachment in Superior.

Chicago and Parkland Terminals.

Planes were staged at airfields in Chicago and just outside Superior. The Chicago terminal was Chicago Municipal Airport (today it is Chicago Midway International Airport) that had run-

Photo of Bong from his sister Geraldine Fechtelkotter

During the 1920s and early 1930s, the Douglas observation biplanes (including the O-2H pictured here) were a workhorse for the military, which purchased hundreds of these biplanes.

In 1934, private airmail service contracts were cancelled due to suspected improprieties in the award of the contracts. An emergency was then declared, during which Douglas biplanes (the O-25 and O-38) were among the military planes that flew the airmail routes.

Above: Douglas O-2H, serial no. 28-129.
Photo from Antiquities Museum, Pittsburgh, Pennsylvania.

ways lit for night operations (as did the airfield in Hadley, New Jersey). Facilities of the Illinois National Guard at the airport were made available to the Army planes and pilots.

The municipal airport in Superior was deemed "unsatisfactory" for reasons not explained in the detachment's after-action report. Instead, a field was built southeast of Superior fronting the Douglas County Insane Asylum (now gone) just west of the intersection of County Roads E and Z and south of County Road Z. Then and today, the area is known as Parkland.

It was reported that the field at one time had been a "cow pasture" owned by the Powder River Cattle Company. This company was based in Wyoming with perhaps well over 50,000 head of cattle at one time.

Below, left column: Moreton Frewen, British cattle baron.
Photo from the University of Wyoming American Heritage Center, Laramie, Wyoming.

The founder and manager of this company was an Englishman named Moreton Frewen (photo at right), an uncle of Winston Churchill.

It was not unheard of that the cattle barons in the West were British. Frewen's plan was to raise cattle in Wyoming, send them to Superior by rail (bypassing the big stockyards in Chicago), and then transport them by ship across the Great Lakes for final shipment to England.

The Parkland field was just that: a vacant field. The Army graded and rolled the field for two cross runways: north-south (1,200') and east-west (1,300'). The only obstruction was to the north; although unnamed, it was probably the insane asylum. The runways were marked with lime and white flags, and the field had a 50-foot marking circle. A 3-bay hangar was built that also included an office, a guard room, and a storeroom. The roof sloped with a height of 20' at the front and 12' at the rear.

The Standard Oil Company provided—at no charge—a 1,000 gallon underground gasoline storage tank, a service pump, and a 50' hose to service the planes. Gas and oil were purchased locally in Superior. The pilots themselves stayed in Superior. At the end of the airmail mission, the Army gave the hangar to the county as "payment" for use of the field.

Route and Schedule.

The planes flew over the following cities/towns in Illinois after leaving Chicago: Des Plaines, Barrington, and Harvard. From there, the route in Wisconsin was Janesville, Madison, Portage, Hancock, Wisconsin Rapids, Marshfield, Owen, Ladysmith, Stone Lake, Solon Springs, and Parkland. Regular landing fields were available at Madison and Marshfield while emergency landing fields were available at Hancock, Wisconsin Rapids, Stone Lake, and Solon Springs. Not surprising at that stage of aviation, the route followed railroad tracks. The distance was 420 miles, and the elapsed time varied, with 3 hours being the fastest time and 5 hours and 30 minutes being the slowest time.

For the southbound trip to Chicago, the "pouch" left Superior at 2:30 p.m., ordinarily arriving in Chicago before dark. The northbound "pouch" would leave Chicago at 4:40 a.m., having been delivered by the overnight mail plane from New Jersey. Due to persistent weather delays, the schedule was changed to deliver the mail to Chicago directly by train from Washington, D.C., arriving at the airport at 8:40 a.m. Within five minutes, the "pouch" would be in the air on the way to Parkland. The original O-2 planes were not equipped with night-flying equipment and parachute flares, and a request was made to be furnished with O-2H planes (like No. 28-129, above) that were so equipped—"they proved a great help in maintaining schedule."

Both photos above as credited in respective captions

Illustration of Douglas O-2H, serial no. 28-129, by Burl Burlingame, used by permission of the artist.

Flying Conditions/Forced Landings/Accidents.

Of the 90 flying days, 54 days were "fair to good" (including thunderstorms along the route), 9 days were "poor" (low ceiling), and 27 days were "extremely poor" (rain and fog). Despite these conditions, the mail was never late arriving at Parkland, and late only once to Chicago because the detachment received the mail late at Parkland. There were 11 forced landings due to weather and 7 more due to poor oil and failure of parts.

There were several accidents, none of which resulted in severe injury to the pilots or crew. Lt. Coppin had two accidents. On June 18, only ten miles out from leaving Parkland, he encountered fog. While turning around to head back to Parkland, he hit an "exceptionally large tree." Although the plane was damaged, he was able to make it back to Parkland. On July 31, while he was testing a plane (No. 28-129), one of the wheels and part of the landing strut came loose (due to a defective weld) and dangled under the plane held only by the brake cable. Lt. Skow noticed the wheel hanging down and had another pilot (Lt. Atkinson) go up to notify Coppin of the problem. Coppin made an "excellent one wheel landing," but the right lower wing, strut, and propeller were damaged. (The plane was the one pictured earlier in this article and also in the illustration on this page.)

Lt. Erickson had the misfortune of getting lost on two occasions, only a week apart (July 7 and July 14). On July 7, he was ferrying a plane to Superior from Ft. Riley. On this foggy day, he had a generator problem and landed in a field near Ashland which would put him over 40 miles off course. Later attempting to take off, his plane hit a soft spot in the field causing the plane to veer to the right where it hit a piece of machinery in high grass. This plane had been Hap Arnold's "ship." (Arnold left the 16th Observation Squadron in the first week of July to attend Command & General Staff School at Ft. Leavenworth, Kansas.)

A week later, Erickson was about 20 miles off course when he ran out of gas. He landed in a small field, hit a ditch, and then crashed into a woodpile. He was relieved from the detail with the accident report stating: "Lt. Erickson will make a good pilot with a little more training."

On August 8, Lt. Atkinson needed the full length of the soggy field at Parkland to take off, only to have the engine quit. He landed just beyond the edge of the field, and the plane nosed over.

There were several accidents not involving the delivery of the mail. Lt. Robinson was delivering a new O-2H and had received a favorable weather report for his flight from St. Paul, Minnesota to Parkland. However, he encountered heavy fog near Nickerson, Minnesota. Attempting to land in a small field, he landed short, and the landing gear collapsed, damaging both lower wings and the propeller.

On Lt. Broughton's last flight out of Parkland on September 13, he tried to take off when the field was "very wet and soggy." He managed to get the plane over a deep ditch at the end of the runway but then it settled on the ground "at which time it went up on its nose." Lt. Duncan had better luck getting out of Parkland on his last flight the next day. Unfortunately, the tail skid assembly broke when he landed back at Ft. Riley. He stated: "It is believed that the continual landing and taking off from the improvised landing field at Superior, Wis., carrying Executive Mail weakened the members of the tail skid assembly."

One flight of Lt. Atkinson proves the determination of the pilots to accomplish their mission. Encountering bad weather at Hancock, he circled a train at the station there and landed about a mile away. The station agent knew that it was a mail plane and sent a car to the plane to get the mail. The railroads and post offices had been earlier informed that Army planes would be delivering the mail to Superior. In a letter to Arnold the following year, Skow wrote: "All the people along the route, in fact, for a considerable distance on each side, knew of these Presidential planes."

And that would include one Wisconsin farm boy.

The book that never was.

Hap Arnold was a prolific writer. While at Ft. Riley, he wrote six books on aviation targeted for young readers. Collectively, they are known as the Bill Bruce books, named after one of his sons. One book was Bill Bruce on Border Patrol (cover photo below).

After leaving Ft. Riley, Arnold proposed to write another series of five books, including one book about the delivery of mail to Superior. The protagonist in this proposed series was David Lee, named for one of Arnold's sons who was born at Ft. Riley.

Here is Arnold's description of the book to a potential publisher:

> David Lee Carrying the President's Mail. This will give experiences of pilot while carrying the aerial mail with local color of President and official family during his summer vacation at Superior.

Photo of Hap Arnold book by John Dodds

Arnold had actually gone so far as to prepare a one-page typed outline containing 22 named chapters. The Bill Bruce books typically had a villain, and in his handwritten notes on this outline, he wrote: "The villain makes his appearance in cafe [sic]." One question we cannot answer in this article is what was the café Arnold had in mind?

Unfortunately, Arnold was unable to get this series of books published.

Superior as a Presidential Retreat?

The local Superior newspaper (the *Evening Telegram*) had described the city as "agog" with the presence of President Coolidge, and the newspaper itself added these words to its masthead during his stay: "THE NATION'S SUMMER CAPITAL."

After the President returned to Washington in September, Douglas County voted to make the airfield permanent and wanted presidents to come to Superior every year (neither happened).

Before going to Superior, President Coolidge had decided not to run for re-election. In December 1928, several months before leaving office, he wrote an opinion letter in the *New York Times* advocating a permanent place within 50 miles of Washington, D.C., for presidents to get away from the White House from time to time during the year.

The only result at the time was a deluge of unsolicited proposals from people offering their property for sale or rent to the U.S. government.

Aftermath.

Parkland field never became a permanent airfield, and Superior never became the site of any more presidential retreats. President Coolidge left office in March 1929 and died on January 5, 1933. Interestingly, he was the last president not to have flown in an airplane (either as a president or as a private individual).

Dick Bong grew up to be the preeminent fighter ace of World War II, tragically dying in the crash of a jet he was testing on August 6, 1945, the day the atomic bomb was dropped on Hiroshima.

Hap Arnold became a 5-star general and chief of the Army Air Forces. He retired in 1946 and passed away in 1950 (age 63). Dick Bong met with Arnold during World War II, and one has to ask whether either knew that Bong's inspiration to fly came from seeing Arnold's airplanes in that summer of 1928?

Like Arnold, Lt. Skow had a son born at Ft. Riley. A September 27, 1928 report from Marshall Field, Ft. Riley (published in the October 6, 1928 *Air Corps Newsletter*) stated: "The 16th Observation Squadron settled down to routine business since the Air Mail Detail to Superior, Wis., returned to the station. … Lieut. Charles T. Skow, who was in charge of the detail, has gone on a well earned [sic] leave of forty-six days." His later service included assignments in Virginia and the Panama Canal Zone.

He retired in 1942 and passed away in 1974 (age 77); he is buried in Arlington National Cemetery. (Photo at right, grave of Lt. Col. Charles T. Skow, by John Dodds.)

Hap Arnold and Richard Bong
U.S.A.F. photo

Finally, we ask: what happened to No. 28-129? It was involved in another accident on September 25 while being ferried back to Ft. Riley after the airmail mission was over. On the leg from Scott Field, Illinois to Ft. Riley, the engine quit at 1,000' and Lt. Wright landed in a small field with a haystack at the far end. However, the tail section did not quite clear a fence post on the way in, resulting in some damage to the plane. There was no observer on this flight; rather, Lt. Atkinson flew as a mere passenger. Here's how Atkinson described this dead-stick landing: "In as much as it was cold and there was no windshield I was sitting in the bottom of the cockpit reading a magazine. When in the vicinity of Concordia, Mo., I noticed that the motor apparently stopped…. The only possible landing field was dead ahead into the wind and had a haystack and several other obstructions in the further end. In attempting to land in the field, pilot dropped tail of ship on fence post, damaging fuselage members."

Having survived this accident (and the one on July 31), No. 28-219 flew from a number of Army airfields for several more years. In June 1933, it was involved in another accident in which it was damaged, declared surplus, and dropped from the records.

[Note: The author wishes to extend his appreciation to Colonel Joaquin "Bill" Saavedra, U.S.A.F. (Retired), a volunteer with the Air Force History Office at Joint Base Anacostia-Bolling, Washington, D.C., for his invaluable assistance in the research for this article.]

The 115th Fighter Wing reaches 70
Celebrating an Anniversary

A-10s peeling off [above]; F-16s arrayed [below]

The 115th Fighter Wing, Wisconsin Air National Guard, based at Truax Field in Madison, celebrated in October, 2018, the 70th anniversary of its inception.

In 70 years, the 115th Fighter Wing has seen many changes. Current commanding officer, Colonel Erik Peterson, has himself pointed to the aptness of President Kennedy's remark that "change is the law of life, and those who look only to the past or present are certain to miss the future." Let's look at some of the changing names and roles of the 115th Fighter Wing.

The group came about as the 176th Fighter Squadron (SE), Wisconsin National Guard, by authority of the Secretary of War (as the now Defense Department was then known), effective October 6, 1948. The Air National Guard was created as a trained force ready to supplement the active duty U.S. Air Force. "Air National Guard interceptor squadrons provided a first-line, Category I, augmentation force." But, as often happens, what began as a stand-by force soon became an active force for American air defense.

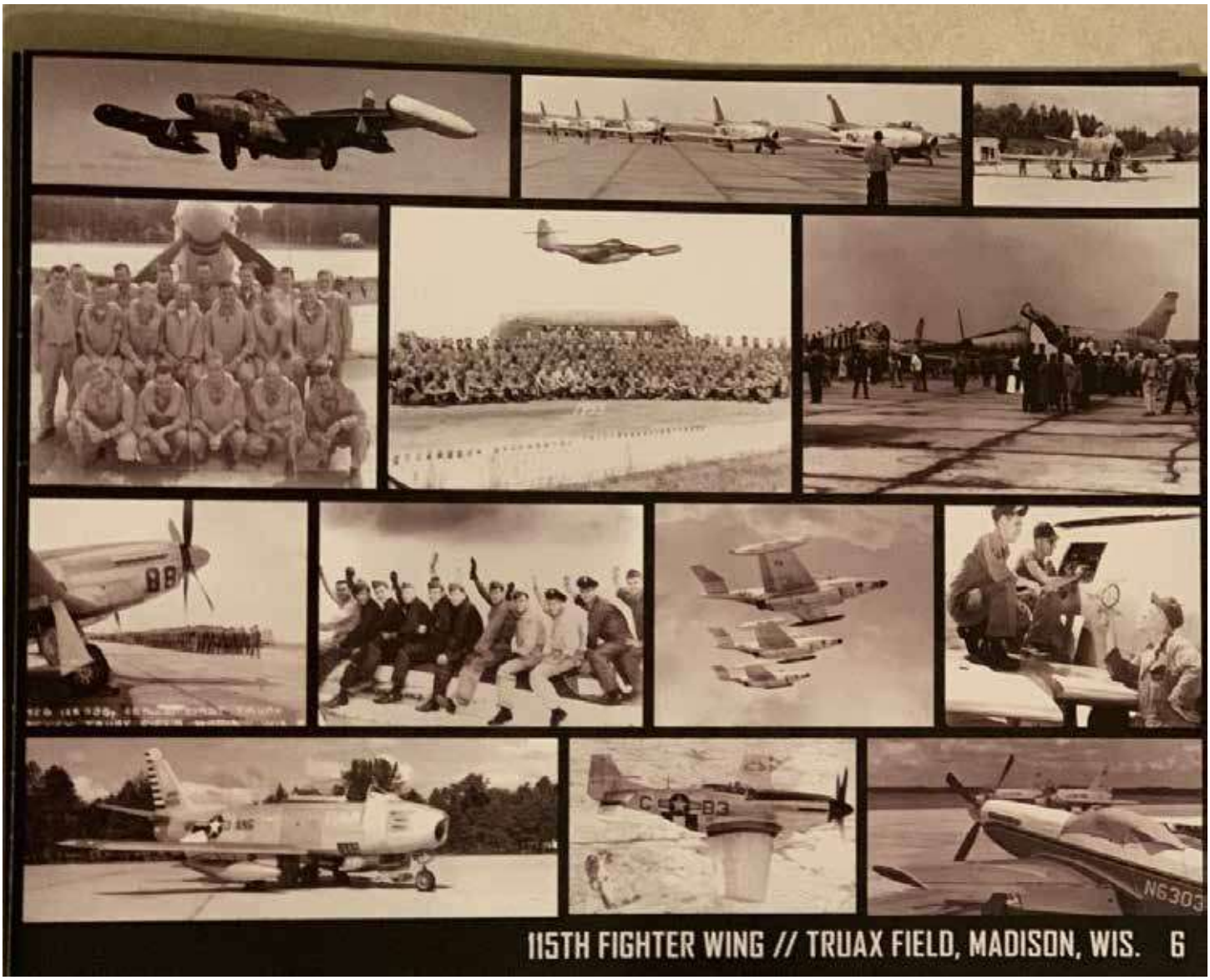
In the 1950s, unit members found themselves in the thick of plans and preparations relating to the Korean War. The unit lost ten of its F-51s for shipment to Korea. Despite the depletion of its resources, the unit was activated in-place at Truax Field on February 1, 1951, as part of the Air Defense Command. Its activation was intended to harden the continental U.S. fighter interceptor force. Personnel numbers were at full strength during the Korean crisis, and volunteers even had to be turned away. At this time, the unit became the first ANG unit to fly the new modern jet fighter, the F-89 Scorpion.

Yet, after the Korean War ended in 1953, things again changed for the unit. New fighters (the F-86A, known as the "MIG killer") came to the unit. For a stretch of years, the unit's aircraft comprised a mix of older F-51Hs, F-86As, and F-89s. Gradually the unit transitioned, and the last F-51 Mustang departed when the final F-89 Scorpion arrived. Over the next 12 years, the unit added each model of the F-89 as it became available. The F-89 was an all-weather fighter-interceptor under the Air Defense Command.

In 1956, the unit again transitioned, this time into the 115th Fighter Interceptor Group, which incorporated the original 176th Fighter Squadron, but which also added resources and personnel sufficient to create a group that could function on its own as a comprehensive air base. Also in 1956, the 115th FIG combined with the 128th Fighter Interceptor Group in Milwaukee, to become the 128th Air Defense Wing, which was headquartered in Milwaukee.

In the 1970s and 1980s, the unit once again transitioned to two new roles, that of forward air control, and that of close air support. First, in June 1971, the unit moved from General Mitchell Field in Milwaukee back to Truax Field in Madison. Then, in November, 1974, the wing changed command structure from Air Defense Command to Tactical Air Command, also changing its designation to the 128th Tactical Air Support Wing. This brought a change in aircraft, as the unit's F-102s were replaced by Cessna O-2A Skymaster forward air control planes and, later in 1979, by Cessna OA-37B Dragonfly forward air control planes. Combat experience in Vietnam made these planes important in the counter-insurgency operations then taking place.

The second change in role came in 1981, when the unit was redesignated the 128th Tactical Fighter Wing, and it began accepting the Fairchild Republic A-10 Thunderbolt II (also known, affectionately, as the Warthog). The A-10 had an excellent weapons delivery system, featuring the seven-barrel GAU-8/A 30-mm cannon, capable of firing up to 70 "tank busting" rounds per second. Its survivability in its airframe and engines, along with its devastating firepower, made the A-10 perfect for air-ground support.



The early 1990s marked yet another shift in role for the 115th Fighter Wing. In 1992 the unit changed its designation to the 128th Fighter Wing while it also changed its command unit to the Air Combat Command. This occasioned a change in planes, retiring or transferring the A-10s to other ANG units, and welcoming the F-16C/D block 30 Fighting Falcon. The first F-16s arrived at Truax Field on April 1, 1993. On October 11, 1995, the 128th Fighter Wing was re-designated the 115th Fighter Wing.

Operations during the 1990s and early 2000s were mainly in the Middle East, including unit participation in actions that took the aircrew and maintenance crews to Turkey, Kuwait, Saudi Arabia, and (after 9/11) to Qatar, Iraq, Africa, the United Arab Emirates, and Afghanistan. In the past 25 years or so, the pace has been hectic, to be sure, and the tasks challenging.

In the second decade of the 21st century, the unit continues to evolve. When tensions mounted in the Korean peninsula during 2017, almost 270 aircrew and twelve F-16s from the 115th FW deployed to Kunsan Air Base in South Korea, as a part of the U.S. Pacific Command's Theater Security Package. Also in 2017, when hurricanes ravaged the U.S. and Puerto Rico, men and women from the 115th FW set up mobile kitchens to support civilians and military personnel who were involved in hurricane relief efforts.

At present, the 115th Fighter Wing is capable of air-to-air combat, close air support of ground operations, and precision guided bombing missions. It is worth noting, as well, that the 115th Fighter Wing is one of only two Air National Guard wings selected for being equipped with the latest jet fighter, the Lockheed Martin F-35 Lightning II.

In summary, the unit's name and designation have changed several times. The unit's missions have changed, from air defense to forward air control to tactical ground support, back to air combat and defense. Even the unit's locale has changed, from Madison to Milwaukee, and then back to Madison. What has *not* changed has been the unit's award-winning efficiency and effectiveness, and its devotion to duty.

Those have remained steadfast throughout the 70 years of its proud service to this country.

Photos courtesy of 115th Fighter Wing and Tom Thomas

EAA Celebrates 50 Years in Oshkosh AirVenture July 22 - 28, 2019

The Experimental Aircraft Association is marking the 50th consecutive year of its annual EAA AirVenture fly-in convention being located in Oshkosh. Held July 22-28, 2019, at Wittman Regional Airport in Oshkosh, the event will have a full schedule of activities for arriving aviators and residents alike.

The EAA fly-in convention was first held in Milwaukee in 1953, so this year's convention will be the 67th such event overall. From 1959 to 1969, the annual fly-in convention was located in Rockford, Illinois. In 1970, the EAA annual event moved to Oshkosh, and the EAA moved its permanent headquarters to Oshkosh in 1983.

Rick Larsen, EAA's vice president for communities and member programs, said, "Oshkosh has become synonymous with "The World's Greatest Aviation Celebration" so it's a natural that we commemorate 50 consecutive years here with events that involve those who attend and those who have made the city such a welcoming place for aviators."

EAA is seeking any of the showplanes present at the 1970 EAA fly-in convention, the first to be held in Oshkosh. Current owners of these showplanes are invited to bring them to the city this summer, where they will be featured in exclusive parking areas located around the convention grounds.

EAA also is seeking members and volunteers who will be attending their 50th consecutive fly-in in 2019. Welcome too will be given any unique memorabilia or stories from the 1970 event which add to the history of what now is the largest annual fly-in in the world.

"Over 50 years, nearly every significant aircraft type in the world has landed on the runways at Wittman Regional Airport to be a part of the EAA fly-in," said Larsen. "More important are the stories of the people who have come to be a part of this event … . That is what we will be celebrating in 2019."

In addition, the U.S. Air Force Air Combat Command F-16 Viper Demonstration Team as well as the Air Combat Command F-22 Raptor Demonstration Team will be heading to Oshkosh this summer to take part in heritage flights during the daily air shows at EAA AirVenture Oshkosh. Capt. Zoe Kotnick will be the F-16 demo pilot, while Maj. Paul "Loco" Lopez will be the F-22 demo pilot.

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

Light Aviation Safety Seminar WINGS event returns to Oshkosh on March 16

The Wisconsin Light Aviation Advisory Council is holding a one-day Safety Seminar on Saturday, March 16, 2019. It is the 26th annual meeting dealing with safety in light aviation. This event will be held at the EAA AirVenture Museum's "Founders Wing," located at the EAA Aviation Center in Oshkosh.

This event emphasizes safety and safe practices for enthusiasts of light, ultralight, and drone aviation. Speakers at the seminar will discuss 2018 accident information for Wisconsin, accident prevention and risk management, Class D airspace and tower operations, drone operations in today's airspace, and unleaded future aviation fuels, among other topics.

- This event qualifies as a FAA "WINGS" event.
- Registration is free and can be done as a walk-in (walk-in registration begins at 8 am on Saturday the 16th).
- There is no admission fee.

The actual seminar begins at 9am and ends at 4pm. There are several breaks scheduled during this event, as well as a lunch break (lunch will be available on-site).

Contact Steve Krueger (715-204-2928) for additional information, or else email your inquiries to *info@WULAC.com* or visit *AVSafe.org*.

John Dorcey to present on Wisconsin Aviators in World War I, on April 16

John Dorcey, a lifetime member of WAHF, who served for many years as its secretary and treasurer, will make a presentation in Neenah on April 16, on several of the most famous of Wisconsin's aviators who served in World War I.

Wisconsin had a number of aviators involved in "the war to end all wars." John will examine the details of the participation by these aviators in the life-altering events that constituted World War I. Aviators covered in John's talk will include Billy Mitchell, Lester Maitland, Rodney Williams, and Frederick Lord. Several of these flyers have been inducted into the WAHF.

The presentation will take place at Brennand Airport (79C), hangar 11, four miles west of Neenah. The meeting will start with food at 6 p.m., and John's presentation is scheduled to begin at 6:30 p.m. The public is invited to attend.

Logos courtesy of the respective organizations

EAA Museum Dedicates "The Borman Collection" Exhibit

Astronaut Frank Borman donates personal archives and memorabilia to EAA

The EAA Aviation Museum in Oshkosh has opened "The Borman Collection: An EAA Member's Space Odyssey," an exhibit that features the personal archives and memorabilia of astronaut Frank Borman.

Colonel Borman was on the leading edge of America's space program though the 1960s. He is most famous, perhaps, as the commander of the Apollo 8 mission in December, 1968. This mission was the first manned spacecraft to orbit the moon. This memorable flight was noted for unforgettable moments, such as the famed "Earthrise" photo, and the crew reading from the Book of Genesis while orbiting the moon on Christmas Eve.

The crew of Apollo 8 included Jim Lovell , William Anders, and Frank Borman. These three astronauts made hundreds of observations and notations during their moon orbits, and these findings became the foundation for the moon landings that followed, starting with Apollo 11, Neil Armstrong, and Buzz Aldrin.

The new EAA Museum exhibit includes hundreds of artifacts — items carried aboard space capsules, awards received for Col. Borman's achievements, and correspondence with world leaders, celebrities, and other notable figures. "The Borman Collection" also highlights Borman's aviation career, which included U.S. Air Force service prior to his service with NASA.

Borman appeared at the formal ribbon cutting for this new museum exhibit on December 7, 2018. Asked why he chose EAA for his donation, Col. Borman said, "I have a long relationship with EAA and have the greatest respect for what they do." Borman is an EAA lifetime member. He added: "I believe they are responsible for preserving general aviation and our ability to fly."

In addition to Apollo 8, Frank Borman was teamed with Jim Lovell on the Gemini 7 mission in 1965. At that time, this mission set a space endurance record of more than 330 hours.

"The Borman Collection" exhibit is located on the museum's main floor, near the iconic Wright Flyer replica. It is accessible to all museum visitors as part of the regular admission.

The EAA Aviation Museum is located just off I-41 at the Highway 44 exit in Oshkosh. The museum is open daily from 10 a.m. to 5 p.m. EAA members receive free museum admission year-round. For more information, call the EAA Aviation Museum at (920) 426-6108 or visit *www.eaa.org/museum*.

David Mann to Retire on March 1st
Long-time GM at Batten International Airport

David Mann, general manager for the past 28 years of Batten International Airport in Racine, is set to retire on March 1, 2019. At age 74, Dave is ready to do more traveling, and more flying.

Dave has spent almost three decades dealing with the headaches of running a major airport. Batten International has approximately 65,000 flights in and out every year. During Dave's tenure at the helm, Batten has paid off the debt on its terminal, built up its maintenance fleet, and added a U.S. Customs port of entry. These are among the bigger achievements during Dave's time, but there have been numerous minor irritants as well.

Dave has had people climbing over the border fence and running onto the field; he has had drivers crash into the boundary fence; and he even deals with deer invading the field by bounding over the fence. "You honestly won't believe how many people we get climbing the fence," Dave said, even though it is barbed wire that is being climbed. As for the deer jumping over the fence and invading the field, during his time Dave has had to hire bow hunters and even agents from the U.S. Department of Agriculture with Starlight scopes and silencers on their rifles to keep the runways safe from invading deer. Homeless shelters get the venison.

Dave went to college at the University of Georgia, where he received a business administration degree. He then hired on at Eastern Airlines. Once he experienced the exhilaration of flying as a passenger, he began practicing to become a pilot. Within a year, Dave had his license as a commercial pilot.

When the military called, Mann answered, going to Vietnam. There he flew 786 hours of combat time, engaging in electronic reconnaissance missions in a Grumman OV-1 Mohawk for the Army. Dave was in the service for five years.

After his military flying, Dave returned to Eastern, but at that time the airline was facing difficulties and ever-more challenging competition. Eventually, Eastern folded. Dave then found his way to Virginia Tech University's Department of Aviation. From there, Dave moved to take the GM position at Batten International.

Retirement will still find Dave at Batten International, albeit in a slightly different capacity. He has become adroit in writing grant proposals — he has secured approximately $26 million in grants for Batten during his tenure there — and he is being hired back at Batten as a part-time consultant.

Dave expects to work on securing money to increase the budget for enlarging the runways at Batten, enabling the airport to handle larger aircraft.

To date, Dave Mann has 17,860 hours flying-time in 128 different types of aircraft. He figures to increase both those numbers in the years ahead. Best wishes, Dave, as you keep flying.

Photo at Dave's LinkedIn page

Wisconsin Aviation Conference, May 5-7

The 64th annual Wisconsin Aviation Conference is being held May 5-7, 2019, in Green Bay.

It is the only state-wide conference that encompasses all facets of aviation in Wisconsin: airports, pilots, consultants, FBO's, and state and federal regulatory and licensing agencies.

Attendees, sponsors, exhibitors, and all interested parties are invited to inquire further:

Bob O'Brien, AAE
Executive Director
Wisconsin Airport Management Association (WAMA)
15575 Richwood Estates Lane
Blue River, WI 53518

Phone: 608-739-2011

Email: *director@wiama.org*

MEMBER SPOTLIGHT

Isaac Lee

Occupation: Full-time college student

Where did you grow up: Wausau

Where do you live now: Oshkosh

Favorite book: The series, *The Last Apprentice*, by Joseph Delaney. I am just waiting for the author to publish the next book in the series so that I can continue reading.

One thing I want to do before I die: I would love to explore the world, not just by flying over it, but also by walking through it, exploring as I go.

What I enjoy most about my life: I enjoy everything about life, from spending time outdoors to spending quality time with family and friends.

Favorite airplane: Probably the Concorde, because of its capability to fly people around the world in record time.

Favorite quote or words of wisdom: "Be like water making its way through cracks. Do not be assertive, but adjust to the object, and you shall find a way around or through it. If nothing within you stays rigid, outward things will disclose themselves." — Bruce Lee

A person from history I would like to meet: The Wright brothers. My brother and I did a history project on them back in school. I would love to meet these two because I still have so many unanswered questions about and for them.

The person I most admire and why: Bruce Lee is my inspiration. I used to tell my friends that I was related to him, and they all believed it at one point.

How I got interested in aviation: When I was a kid, looking up at the jet airliners flying so high in the sky, I wondered where they were heading. And then I thought to myself how nice it would be to fly airplanes for a living. No one else in my family has had a career in flying, as I have.

Why I became a member/supporter of WAHF: WAHF Member/Supporter John Dodds gave me a gift membership. I hope John saw something in me that even I didn't see.

Wisconsin Aviation WAHF Hall of Fame

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 Isaac has answered 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.

Wisconsin Born and Bred

By Tom Eisele

It is an honor to be asked to help edit a magazine that recognizes and records many of the enduring moments of aviation history in Wisconsin. To look back at the past, which rarely is passed but rather more often is incorporated within our present selves, is well worth doing.

In my personal past, it was my father, Karl Eisele Jr., who made me aware of aviation in particular.

He flew in a B-24 in the European theatre of war during World War II. I told something of his story in the winter 2018-19 issue of *Forward in Flight*. Suffice to say that his service included several near-death experiences, and excitement enough for several lifetimes. That my father survived the war and came home to Madison, where he and my mother soon produced five sons who grew up enjoying the riches and freedoms of the 1950s and 1960s in an incredibly prosperous United States, is very much a central part of who I am. I was born, raised, and educated in Wisconsin into my early adulthood.

I did go out-of-state for law school, and later for graduate school, but my wife and I always maintained our ties with Wisconsin. Sandra is from Milwaukee, and we met on the campus at UW-Madison in 1966-67. Ever since then, wherever we have happened to reside because of our employment opportunities, we have seen Wisconsin as our native ground. We kept a vacation home in Wisconsin just so our three children (Adam, Carolyn, and Spencer) could grow up knowing their grandparents.

These details seem worth sharing as a way of introducing myself and giving some of my background history. I make no claims to being a flyer. To be sure, I am an aviation enthusiast, and have always been fascinated with the experience of flying, looking forward to a commercial flight (except for the crowded conditions) as a kind of spree. Unlike Tom Thomas, and Ron Wojnar, however, I have no expertise in aviation, whether it be with the actual flying or with the all-important maintenance work that keeps planes in the air and airworthy. This editorial stint affords me, then, the opportunity to feed an enthusiasm for air history in my native State. While I am only a student of the subject, I find it a happy coincidence to have a chance to conduct my education in the public forum this magazine creates.

Our challenge is to produce articles with accompanying photos that spread the word about our rich history of aviation in Wisconsin. Reading the compilation of historic events in Michael Goc's book, *Forward in Flight: a history of aviation in Wisconsin* (1998), has been a great way to introduce myself to that history. Similarly, in her editorial and authorial capacities, Rose Dorcey has done so much to protect and shepherd those historical materials into an entertaining and accessible form. I aim to continue this effort, as the Wisconsin Aviation Hall of Fame fosters and carries on the Wisconsin tradition of moving forward. "Forward in Flight," indeed.

In this spring issue, we have Tom Thomas' white-knuckle report of his experiences in an A-10 Warthog, trying to refuel from a KC-10 tanker in the skies above the central United States; John Dodds' captivating story of an 8-year-old farm boy who was inspired by Army mail planes to become, decades later, Major Richard Bong, our leading ace in World War II; the third and concluding part of Michael Goc's fine rendering of Joseph Doerflinger's career in aviation, starting in Germany and ending in Wisconsin; Dr. Reid Sousek's helpful advice on the possible signs of a stroke or other nervous system problem; and Pat Weeden's colorful review of John Hatz and his biplane.

Tom Eisele with friend and companion.

Rose Dorcey has worked tirelessly to get me up to speed in the editing and formatting of *Forward in Flight*. I am happy to say that Rose's critical eyes have made for a cleaner, tighter, and more visually pleasing spring issue. My thanks to Rose.

My daughter, Carolyn Eisele, has an uncanny ability to navigate a keyboard and the parameters of the Microsoft Publisher program, which we use to generate *Forward in Flight*. Carolyn has served in numerous ways as my Editorial Assistant, showing me how to fit edited and proof-read text in a seamless wrap-around of the photographs published here. I am very grateful to Carolyn for all of her assistance in getting this spring issue off the boards and off to the printer.

See you this summer with another selection of interesting pieces on the past and present (and likely future) of aviation in Wisconsin.

—TDE

Photo courtesy of Tom Eisele

Any time of year
is the right time to
give a WAHF membership

Membership levels:

---- Youth (under 18) $7
---- Individual (annual) $20
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CHANGE SERVICE REQUESTED

Welcome New WAHF Member/Supporters

Isabella Alberti	Greg Anderson	Tom Baumann	Emily Bennett
Alex Beschta	Quincy Eaton	Dave Ellerhorst	Jaxon Ford
James Freeman	Jacob Fuiten	Paul Gorman	Ariel Griffin
Donald Haffner	Abigail Ignasiak	Gavin Jankowski	Melvin Kegel
Isaac Lee	Ed Lehr	Tim Meyer	Siddarth Nadkarni
Isabella Nelson	Stephen Purdum	John Raspanti	Mike Rhodes
Evelyn Seymour	Aaron Wahlgren	Erik Westman	

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 22 of this magazine. 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 <rwojnar@wi.rr.com>, or call 262-347-7464.

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