

THE GOLDEN EAGLES



Golden Contrails

December



2021



“Fore and Aft” cover photos of this edition are of the “Pilot’s Pub” and 2021 Reunion.

"Listen you young whipper snapper, real men don't need GPS or glass cockpits for situational awareness! Try using your brain kid!"



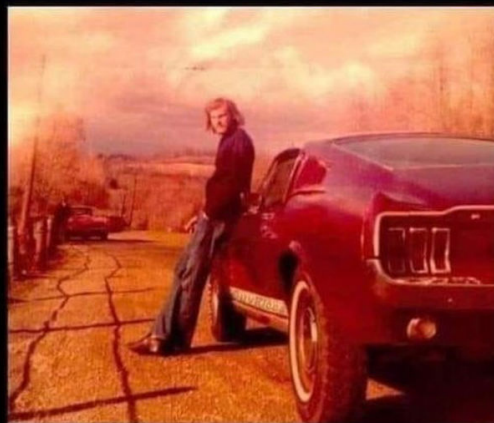
Never leave home without a kiss, a hug and an 'I love you.' Then remove the dog hair from your mouth as you walk to the car.

I hate it when I see an old person and then realize that we went to high school together.

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WE MIGHT BE OLD ...



**BUT WE HAD GREAT HAIR,
LISTENED TO COOL MUSIC,
AND DROVE THE BEST CARS!**

Editor's Notes

This edition marks the completion of the first full year cycle of the Golden Contrails being distributed as a digital or "online only" magazine. I think it's fair to say that many or most of us would prefer to keep the option of a "paper" edition, but the reasoning has been well documented previously. I can honestly say that it really does not save any workload or effort to compile, but it does allow us to use the Treasury for more fun things like REUNIONS!

The "cupboard" is starting to run a little bare in terms of Member-contributed stories (the "I been there's"). Who doesn't love a tale of "man and machinery" versus the elements or random "fickle finger of fate"? SOME of us may be holding back a bit, because we didn't quite do things the way we wish we had (I may share one or more of mine in a future edition) and don't want our peers pointing fingers..."boy, did he (she) ever F--- that up!" Well, guess what? We've ALL "stepped on it" at one time or another. Might as well get some entertainment value out of it after all these years!

Dave does a Yeoman's job of exhorting you every month to send in a Crew Room Update, and we're grateful for those who do. This section was intended to be just like the "old days" where we'd "catch up" in the actual crew rooms during "bag drags" and "sit-arounds". I've got to believe that you've been somewhere, done something or simply run into an airline acquaintance...and can spend a couple of minutes "sharing" the "latest" with your buds!

Use the Crew Room Update form on the website or just send me an email.

thanks

Gary

All past editions of the Golden Contrails are available at:

www.thegoldeneagles.org

Golden Contrails Downloads

**I think I'll just put an "Out of Order" sticker on my forehead
and call it a day.**

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Reports

President

Wow, did we ever have a REUNION! Dave has already "spread the word" (and photos) via his October Monthly Update. In case you missed it, all recent publications (Monthly Updates, Golden Contrails, Gone West and other announcements) are archived on the website.

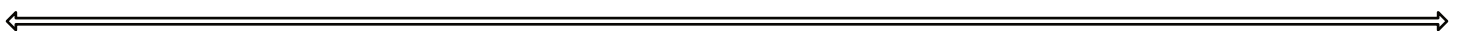
The one thing that these photos do NOT do, is justice to the **Pilot's Pub** and hospitality of **Captain Ray and Mary Booth!** Wowza!... This "venue" is a first-class aviation museum in its own right. When you add some great Texas Bar B Que, an amazing assortment of additional snacks and libations with some legendary characters, you have a real Texas sized "whing ding".

Of course, not everyone can attend these regional events any more than they could the conventions of yesteryear, but some of our members made it all the way from New England and other parts of the East Coast. I personally drove a little over 12 hours (each way) and was reminded that "*there is a lot of Texas in Texas.*" After all these months of "lock-downs" and other mandated restrictions though, it is great to take to the open road and see something other than one's own back yard.

We have discussed and are starting to plan for other regional events to include a return to Las Vegas and Colorado. Each of these will be a bit different, owing to the logistics and other realities of the locations. Las Vegas would have a Hospitality Suite hosted by the treasury with "refreshments" provided as in the past. There would be no banquet or business meeting other than some jaw-boning in the "suite". It's Las Vegas!...with so many dining opportunities that members can make their own group or individual arrangements. Captain Bob Warner has graciously offered his ranch in Colorado as a venue that the treasury would sponsor with food and drink. The timing and other details of these events will be driven to some extent by volunteers in the local areas with assistance by Golden Eagles board members. If you think you can arrange something in your area, we have adequate resources to provide some funding. Several of us "RON'd" in Marble Falls for the Hill Country event, so these things may not be in your immediate neighborhood and some travel is to be expected. A Reunion implies a bit more than an afternoon "lunch", but combined with a central gathering place or hospitality suite, it could be anywhere there is enough interest.

This being the December Edition, it remains my most sincere wish for you to have a great Christmas, Hanukah and New Years, along with some delightful aromas from the kitchen and perhaps a warm hearth by the fire.

Gary



A woman has to go to Italy for a conference, so her husband drives her to the airport.

"Thank you, honey," she says. "What would you like me to bring back for you?"

He laughs and says, "An Italian girl!"

When the conference is over, he meets her at the airport and asks, "So, honey, how was the trip?"

"Very good," she replies.

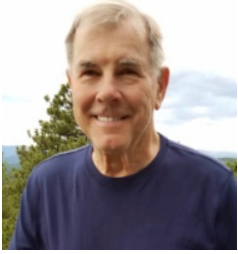
"And what happened to my present?"

"Which present?" she asks.

"The one I asked for... an Italian girl!"

"Oh, that," she says. "Well, I did what I could. Now we have to wait nine months to see if it's a girl."

Executive Vice President/Email Coordinator Report



Dave Newell

As our President Gary Small so adequately described our recent Hill Country LAC reunion in his report, I would only echo his sentiments and encourage our members to attend our LAC /lunches/ breakfasts and reunions whenever possible. Since our traditional conventions have been discontinued, our emphasis on providing a means for our members to meet and socialize has been shifted to our LAC gatherings and to Golden Eagles reunions for all members.

From the Email Coordinator “shop”, I would like to offer the following comments:

1. The Golden Eagles email notification program was originally intended to provide a means to notify our members when one of our members had flown west. We have expanded that process to include the passing of any former Continental pilot. We also now provide notice when a spouse of a member passes if the member provides a request to do so. When sending a notice of a death, please attempt to provide as much information as you can along with a photo if available. A copy of the obituary is always helpful. Member provided Tributes to the deceased will be posted via designated email notices or included in the monthly updates.
2. As you undoubtedly know, the email notification program has evolved to provide additional information that may be of interest to our members, to include important reminders of general interest pertinent to GE membership, updated information regarding pass travel, airline news, LAC and GE reunion activities, new members, and a list of those who have flown west. A section of humorous items is also included to brighten your day a bit. ☺
3. Our monthly update has become more of a “newsletter” of sorts, and we hope it has proven to be of value. Please provide any suggestions on how you feel we can improve the utility of this program; after all, it exists for your benefit.
4. Remember, keep your contact information updated by using the roster update form on the website, www.thegoldeneagles.org, in the membership section. Also remember, the rosters exist to provide a source of member phone numbers and postal and email addresses available to our members who have the current password.

**When someone asks what I did over the weekend,
I squint and ask, "Why, what did you hear?"**

Well, we made it thru another hot Houston summer, with an August trip to cooler Maine and New Hampshire visiting with family. We stopped off in Boston and Tom and Jamie Doherty gave us an excellent tour of the town! Then the hurricane hit Boston, and we were stuck in the BOS airport for two days trying to non-rev out! In October we went on a cruise to Cozumel and Costa Maya, and then later that month a road trip to the Hill Country for our Golden Eagles Reunion (see the Golden Eagles website for names and photos)!

In addition to our weekly Kingwood LAC breakfasts, we had our most recent Houston Area lunch event Nov 1...with a record number of pilots showing up. The next quarterly lunch event is slated for Jan 31 next year...everyone is welcome to come (details and photos on the Golden Eagles website)!

After six years of teaching the B-737 Type Ratings and ATP CTP, I have retired from this rewarding job for good. I really enjoyed teaching military and general aviation pilots and getting them spooled up for an airline career. But time is getting short, and need to do more travel with family and friends. To that end, we have four cruises booked for 2022!

On our website, there are continuous updates weekly. Recently the PHOTOS/ VIDEOS ARCHIVES under the HOME menu tab has been completely updated. A major section was added called the CAL ARCHIVES, that includes many CAL documents and photos, along with several historical articles and books on the history of Continental Airlines. All this material was donated by Golden Eagles member Ken Lawrence. Everyone go check this out!

On the Golden Eagles finances front, our bank account as of November 12 has \$42,509 on the books, and all our bills are paid up. Our largest expenditure lately was our Hill Country Reunion, at \$1600.

NEW and RE-JOINED GE MEMBERS: (July 17, 2021 thru Nov 12, 2021)

Barbara Gardner
Ken Voss
Jack Banas
Ernie Greuling
Jerry Owen
Walter Johansen
Barry Borella
Paul Haas
William Cooper
Robert Raymond

"Welcome Aboard!"

Everyone have a great Holiday season!

Bruce



www.thegoldeneagles.org
email: brucesprague@mac.com

NEW PASSWORD: *notam* (all lower case)

- > You **DO NOT** need this password to *login* to our website!
- > It is **only** needed for the "Roster", "Golden Contrails", "Officer Documents", and the "Archived Blast Emails".
- > The password changes three times a year.

Ed. This letter is reproduced with Mr. Lawrence's permission. It is informative into the efforts put forth to preserve some memorabilia of Continental in the United Training Center and the Denver Public Library. We have uploaded a majority of the scanned images to the website www.thegoldeneagles.org

September 17, 2021

Dear Gary,

A number of years ago I worked with Captain Bill Leeper in his quest for Continental Airlines memorabilia and as a consequence have electronically archived a fairly large number of Continental memorabilia items provided by Captain Bud Battley's widow. She sent Captain Bill Leeper three large boxes of photos, and other material that Bud Battley rescued from being discarded in Houston.

Probably none of the material will ever be put on public display so Bill Leeper and I felt that electronic copies of archived material should be "portable", usable on computers other than mine. To achieve this I created Archive Workbooks in Excel, and scanned image files, mostly JPEG. I have other material that I have not included in this missive that may or may not be of interest. I can provide information regarding the other material.

The enclosed flash drive and DVD contain copies of the Excel Workbooks and scanned images.

In addition to this project I helped Bill Leeper, and a group of volunteers put together displays of Continental memorabilia in the "F" building at the United Training Center. I think that I might have sent you pictures of the displays sometime in the past. These displays were dismantled while UA conducted a massive Training Center construction project.

Before "our" displays were dismantled Bill Leeper's deteriorating health dictated that he take a less and less active role in these endeavors so he started thinking about what could or should be done with donated material. Ultimately, as it seemed that no one wanted to take possession of the "Battley" material he donated the entire collection to the Denver Public Library. I have enclosed a description of the Denver Public Library's program. The donated material is available to researchers and or historians. Bill was always on the lookout for donations of memorabilia and was instrumental in returning the dedication bronze plaque from the Los Angeles facility to the appropriate individual(s).

The UA construction project has been completed and the United Airlines Heritage Foundation (UAHF) has completed a new group of displays. An ex-Continental employee, Judy Schwepe, is very active in the UAHF. She has been very active in creation of the new displays. I have not had the opportunity to see the new displays so will make the trek to the Training Center on Thursday September 23.

I "celebrated" my 90th birthday on September 4. So, since I am in the latter portion of my "Golden Years" I decided that I had better start working to find out if anyone is interested in these Continental memorabilia.

If you have any questions or comments please contact me.

Very Truly Yours,



Kenneth Lawrence kenlawrence@q.com

TOOLS EXPLAINED

DRILL PRESS : A tall upright machine useful for suddenly snatching flat metal bar stock out of your hands so that it smacks you in the chest and flings your beer across the room, denting the freshly-painted project which you had carefully set in the corner where nothing could get to it.

WIRE WHEEL: Cleans paint off bolts and then throws them somewhere under the workbench with the speed of light. Also removes fingerprints and hard-earned calluses from fingers in about the time it takes you to say, 'AAAHHH!'

DROP SAW: A portable cutting tool used to make studs too short.

PLIERS: Used to round off bolt heads. Sometimes used in the creation of blood-blisters.

BELT SANDER: An electric sanding tool commonly used to convert minor touch-up jobs into major refinishing jobs.

HACKSAW: One of a family of cutting tools built on the Ouija board principle... It transforms human energy into a crooked, unpredictable motion, and the more you attempt to influence its course, the more dismal your future becomes.

WISE-GRIPS: Generally used after pliers to completely round off bolt heads. If nothing else is available, they can also be used to transfer intense welding heat to the palm of your hand.

OXYACETYLENE TORCH: Used almost entirely for lighting on fire various flammable objects in your shop. Also handy for igniting the grease inside the wheel hub out of which you want to remove a bearing race.

TABLE SAW: A large stationary power tool commonly used to launch wood projectiles for testing wall integrity.

HYDRAULIC FLOOR JACK: Used for lowering an automobile to the ground after you have installed your new brake shoes, trapping the jack handle firmly under the bumper.

BAND SAW: A large stationary power saw primarily used by most shops to cut good aluminum sheet into smaller pieces that more easily fit into the trash can after you cut on the inside of the line instead of the outside edge.

TWO-TON ENGINE HOIST: A tool for testing the maximum tensile strength of everything you forgot to disconnect.

PHILLIPS SCREWDRIVER: Normally used to stab the vacuum seals under lids or for opening old-style paper-and-tin oil cans and splashing oil on your shirt; but can also be used, as the name implies, to strip out Phillips screw heads.

STRAIGHT SCREWDRIVER: A tool for opening paint cans. Sometimes used to convert common slotted screws into non-removable screws and butchering your palms.

PRY BAR: A tool used to crumple the metal surrounding that clip or bracket you needed to remove in order to replace a 50 cent part.

HOSE CUTTER: A tool used to make hoses too short.

HAMMER: Originally employed as a weapon of war, the hammer nowadays is used as a kind of divining rod to locate the most expensive parts adjacent the object we are trying to hit.

UTILITY KNIFE: Used to open and slice through the contents of cardboard cartons delivered to your front door; works particularly well on contents such as seats, vinyl records, liquids in plastic bottles, collector magazines, refund checks, and rubber or plastic parts. Especially useful for slicing work clothes, but only while being worn.

ADJUSTABLE WRENCH: aka "Another hammer", aka "the Swedish Nut Lathe", aka "Crescent Wrench". Commonly used as a one size fits all wrench, usually results in rounding off nut heads before the use of pliers. Will randomly adjust size between bolts, resulting in busted buckles, curse words, and multiple threats to any inanimate objects within the immediate vicinity.

YOU PIECE OF CRAP TOOL: Any handy tool that you grab and throw across the garage while yelling 'You piece of Crap!' at the top of your lungs. It is also, most often, the next tool that you will need.

When Engineers die

An engineer dies and reports to the Pearly Gates. Saint Peter checks his dossier and not seeing his name there, accidentally sends him to Hell. It doesn't take long before the engineer becomes rather dissatisfied with the level of comfort in Hell.

He soon begins to design and build improvements. Shortly thereafter, Hell has air conditioning, flush toilets and escalators. Needless to say, the engineer is a pretty popular guy.

One day, God calls Satan and says: "So, how are things in Hell?"

Satan replies: "Hey, things are going great. We've got air conditioning, flush toilets, and escalators.

And there's no telling what this engineer is going to come up with next."

"What!" God exclaims: "You've got an engineer? That's a mistake - he should never have been sent to Hell. Send him to me."

"Not a chance," Satan replies: "I like having an engineer on the staff, and I'm keeping him!" God insists: "Send him back or I'll sue."

Satan laughs uproariously and answers: "Yeah, right. And where are you going to get a lawyer?"

Near future game show!



"Sorry Arthur, your answer was actually correct, but Paul shouted his opinion louder so he gets the point. And an extra bonus point also goes to Sue as she was offended by your answer".

Why The Former Frontier Airlines Ceased Operations

This past summer marked 35 years since the United States legacy carrier, Frontier Airlines, ceased operations. Thousands of passengers were left stranded after the carrier's parent shut down the operation, leading to bankruptcy on August 28th, 1986.

Frontier Airlines was a commercial aviation powerhouse for much of the second half of the 20th century.



A rich history

Frontier Airlines is still a familiar name in US aviation. The title can be seen on the livery of an ultra-low-cost carrier's aircraft. There have been various carriers adopting the monicker over the decades. The current low-cost outfit based in Denver, Colorado, was launched in 1994 by two workers of the veteran Frontier Airlines that operated from 1950 for 36 years.

The preceding airline ceased flights eight years before the current operation. Leaving such a legacy on the aviation industry, why did the carrier terminate its services?

The Stapleton International Airport-based company traced its operations back to June 1st, 1950, after a merger between Monarch Airlines, Challenger Airlines, and Arizona Airways.

The firm conducted flights on routes across the Rocky Mountains with a dozen Douglas DC-3 aircraft. It added additional aircraft in the form of the Convair CV-340 and CV-440 before its first decade of operations was complete.

The experimental approach with planes continued into the 1960s, as the company became the first carrier to deploy the Convair 580 Allison turboprop edition of the Convair airliner. Airline Files notes that this aircraft became the staple of the fleet until the service entry of the Boeing 737-200. The de Havilland Canada DHC-6 would also support routes to smaller markets.



Frontier Airlines expanded with nonstop flights to the likes of Albuquerque with its Convair units.

Further developments

Focus cities for Frontier included Dallas/Fort Worth, Kansas City, Salt Lake City, and St. Louis. The expansion to Fort Worth was helped by the purchase of Central Airlines in October 1967, which also bolstered the airline's fleet further.

The carrier's growth was also supported by clever deals with airlines, such as its interchange flight agreement with Hughes Airwest, which helped connect passengers between the likes of Burbank and Orange Country with Denver.

A critical moment

A major turning point for Frontier was in February 1980. This was when the company's president, Al Feldman left to become chief executive of Continental Airlines. This move would prove to be a catalyst in the downward spiral of the airline for the remainder of the decade.

Glen Ryan took the helm, and in the next few years, staff members started to accept lower pay and fewer benefits to keep the operation going. In an effort to shake things up, the business launched a low-cost subsidiary, Frontier Horizon. However, this branch was heavily opposed by workers, and it lasted for over a year between January 1984 and April 1985. Notably, it was purchased by Skybus Airlines.

Many veteran airlines struggled following deregulation in 1978, which ramped up competition in the market. Moreover, industry pressures following the early 1980s recession also increased concerns.

Many passengers of Frontier Airlines praised the carrier's inflight service.



Change of ownership

The employees' union coalition tried to steer the airline in the right direction but did not succeed. Thus, in the fall of 1985, People Express Airlines purchased Frontier for \$300 million. This low-cost airline was only launched in 1981 and was based in Newark, New Jersey, but saw rapid expansion by launching in the new market climate. The new parent ran its acquisition as a separate entity. Regardless, losses continued to mount for Frontier.

There were serious reports of Frontier being sold to United Airlines for as much as \$146 million. Yet, there were disagreements. Importantly Frontier's 550 unionized flight



crew would have to accept lower pay than what was given at the time to United's pilots.

There was havoc on August 24th, 1986, as People Express shut down Frontier Airlines' services at Stapleton International.

No outright buyer

In the end, People Express CEO Donald C. Burr shared that no parties were willing to make an offer for Frontier "as a whole." He added that Frontier was the victim of "an unresponsive and inflexible pilot union."

Subsequently, Frontier filed for Chapter 11 bankruptcy protection. People Express hoped to sort out the serious financial mess that Frontier was in with this move. "United had agreed to buy Frontier for \$146 million. It did not do so but did acquire some of Frontier's prime assets such as gates, slots and hangars at its hub at Stapleton International airport. Pessimistic Outlook Under Chapter 11, a company is protected from its creditors while it tries to work out a plan to restore its health. But some airline analysts said that with the transfer of those assets to United and considering Frontier's debts, there is little left to reorganize at Frontier," The New York Times reported on August 29th, 1986.

"The filing will end much of the financial drain that People Express suffered. The low-cost carrier expanded substantially but imprudently when it bought Frontier last November. Frontier has had losses of about \$10 million a month. It was the drain on People's cash that caused the parent to shut the airline last Sunday and send home its 4,700 workers and ground its fleet of 42 planes."

The rest is history

On October 24th, 1986, Continental Airlines acquired People Express. The new acquisition, along with Frontier, merged into the Continental fold on February 1st, 1987. Several other airlines were also merged into the operation.

Continental Airlines would go on to merge with United Airlines in 2012.

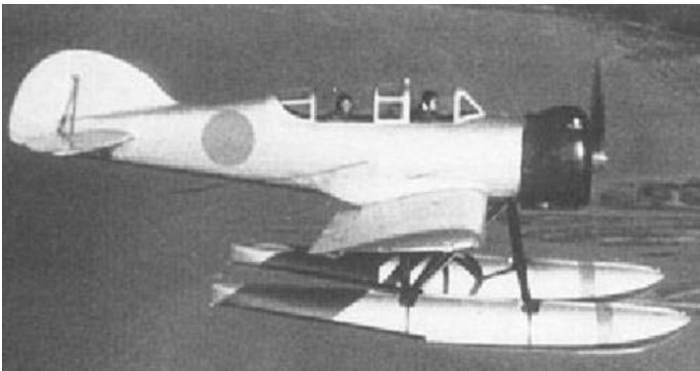


I asked my 91-year-old father, "Dad, what were your good old days?"

His thoughtful reply: "When I wasn't good, and I wasn't old."

WWII - The Japanese used submarines to carry aircraft

September 9, 1942, the I-25 class Japanese submarine was cruising in an easterly direction raising its periscope occasionally as it neared the United States Coastline. Japan had attacked Pearl Harbor less than a year ago and the Captain of the attack submarine knew that Americans were watching their coast line for ships and aircraft that might attack our country. Dawn was approaching; the first rays of the sun were flickering off the periscope's lens. Their mission; attack the west coast with incendiary bombs in hopes of starting a devastating forest fire. If this test run were successful, Japan had hopes of using their huge submarine fleet to attack the eastern end of the Panama Canal to slow down shipping from the Atlantic to the Pacific. The Japanese Navy had a large number of I-400 submarines under construction. Each capable of carrying three aircraft. Pilot Chief Warrant Officer Nobuo Fujita and his crewman Petty Officer Shoji Okuda were making last minute checks of their charts making sure they matched those of the submarine's navigator.



The only plane ever to drop a bomb on the United States during WWII was this submarine based Glen.

September 9, 1942: Nebraska forestry student Keith V. Johnson was on duty atop a forest fire lookout tower between Gold's Beach and Brookings Oregon. Keith had memorized the silhouettes of Japanese long distance bombers and those of our own aircraft. He felt confident that he could spot and identify, friend or foe, almost immediately. It was cold on the coast this September morning, and quiet. The residents of the area were still in bed or preparing to head for work. Lumber was a large part of the industry in Brookings, just a few miles north of the California Oregon state lines.

The aircraft carried two incendiary 168 pound bombs and a crew of two.



Aboard the submarine the Captain's voice boomed over the PA system, "Prepare to surface, aircrew report to your stations, wait for the open hatch signal" During training runs several subs were lost when hangar door were opened too soon and sea water rushed into the hangars and sank the boat with all hands lost. You could hear the change of sound as the bow of the I-25 broke from the depths, nosed over for its run on the surface. A loud bell signaled the "All Clear." The crew assigned to the single engine Yokosuki E14Ys float equipped observation and light attack aircraft sprang into action. They rolled the plane out its hangar built next to the conning tower. The wings and tail were unfolded, and two 176 pound incendiary bombs were attached to the hard points under the wings. This was a small two passenger float plane with a nine cylinder 340 hp radial engine. It was full daylight when the Captain ordered the aircraft to be placed on the catapult. Warrant Officer Fujita started the engine, let it warm up, checked the magnetos and oil pressure. There was a slight breeze blowing and the seas were calm. A perfect day to attack the United States of America. When the gauges were in the green the pilot signaled and the catapult launched the aircraft. After a short climb to altitude the pilot turned on a heading for the Oregon coast.



The "Glen" was launched via catapult from a I-25 class Japanese submarine.

Johnson was sweeping the horizon but could see nothing, he went back to his duties as a forestry agent which was searching for any signs of a forest fire The morning moved on. Every few minutes he would scan low, medium and high but nothing caught his eye.

The small Japanese float plane had climbed to several thousand feet of altitude for better visibility and to get above the coastal fog. The pilot had calculated land fall in a few minutes and right on schedule he could see the breakers flashing white as they hit the Oregon shores.

Johnson was about to put his binoculars down when something flashed in the sun just above the fog bank. It was unusual because in the past all air traffic had been flying up and down the coast, not aiming into the coast. The pilot of the aircraft checked his course and alerted his observer to be on the lookout for a fire tower which was on the edge of the wooded area where they were supposed to drop their bombs. These airplanes carried very little fuel and all flights were in and out without any loitering. The plane reached the shore line and the pilot made a course correction 20 degrees to the north. The huge trees were easy to spot and certainly easy to hit with the bombs. The fog was very wispy by this time.

Warrant Officer Fujita is shown with his Yokosuka E14Y (Glen) float plane prior to his flight .



Johnson watched in awe as the small floatplane with a red meat ball on the wings flew overhead, the plane was not a bomber and there was no way that it could have flown across the Pacific, Johnson could not understand what was happening. He locked onto the plane and followed it as it headed inland.

The pilot activated the release locks so that when he could pickled the bombs they would release. His instructions were simple, fly at 500 feet, drop the bombs into the trees and circle once to see if they had started any fires and then head back to the submarine.

Johnson could see the two bombs under the wing of the plane and knew that they would be dropped. He grabbed his communications radio and called the Forest Fire Headquarters informing them of what he was watching unfold. The bombs tumbled from the small seaplane and impacted the forests, the pilot circled once and spotted fire around the impact point. He executed an 180 degree turn and headed back to the submarine . There was no air activity, the skies were clear. The small float plane lined up with the surfaced submarine skies were clear. The small float plane lined up with the surfaced submarine and landed gently on the ocean, then taxied to the sub. A long boom swung out from the stern. His crewman caught the cable and hooked it into the pickup attached to the roll over cage between the cockpits. The plane was swung onto the deck, The plane's crew folded the wings and tail, pushed it into its hangar and secured the water tight doors. The I-25 submerged and headed back to Japan.

This event ,which caused no damage, marked the only time during World War II that an enemy plane had dropped bombs on the United States mainland. What the Japanese didn't count on was coastal fog, mist and heavy doses of rain made the forests so wet they simply would not catch fire.



This Memorial Plaque is located in Brookings , Oregon at the site of the 1942 bombing

Fifty years later the Japanese pilot, who survived the war, would return to Oregon to help dedicate a historical plaque at the exact spot where his two bombs had impacted. The elderly pilot then donated his ceremonial sword as a gesture of peace and closure of the bombing of Oregon in 1942.

Garmin Autoland

During this first-ever autoland for me, nothing felt terribly out of the ordinary until the final 100 feet or so when it finally sunk in that in a few seconds we would be hitting the pavement and no one had their hands on the yoke.

But just as briefed, the airplane “decrabbed” from the 10-knot left crosswind and soon plunked us down just left of center on Runway 18 at New Century AirCenter in Olathe, Kansas, and then quickly tracked us back to the centerline. A few seconds later we rolled to a stop. I looked left at Eric Sargent, Garmin flight test pilot, who smiled broadly from the left seat of the Piper M600.

“What do you think?” he asked.

“Stunned,” I said. “That’s pretty amazing.”

And such was my introduction to Garmin’s new autoland system, a first in general aviation.

The system is the newest addition to a family of automated flight technologies that Garmin has dubbed Autonomi. After the introduction over the past few years of the two other parts of Autonomi; Emergency Descent Mode (EDM) and Electronic Stability and Protection (ESP), autoland is the next logical step.

Combined with autoland, the three form what is basically a digital parachute for the pilot and passengers. If a pilot becomes incapacitated or disoriented, the systems take over either automatically or when activated by the pilot or a passenger, and first stabilize the airplane and if necessary land it.

ESP debuted several years ago and is basically an always-on autopilot that only kicks in when the pilot attempts to stray outside the flight envelope or if the pilot does not respond to keep the airplane flying safely inside the envelope. It will gently nudge the flight controls to keep the airplane out of over- or underspeed situations and to limit bank angle. If a pilot fights ESP for a period of time, as one might if disoriented in the clouds, the system turns on the Level mode of the autopilot. If the pilot doesn’t turn it off after a period of time, the new Autoland system turns on and begins the landing sequence. The pilot can deactivate Autoland a number of ways, including by touching the Autopilot button on the autopilot mode controller or by hitting the red autopilot disconnect button on the yoke. If that happens, a message pops up on the multifunction display on how to reactivate the system in case a passenger inadvertently disconnects it.

Meanwhile, EDM kicks in when the pilot hasn’t interacted with the panel or flight controls within a

certain time period. It first poses the question on the cockpit displays: “Are you alert?” If no one touches a button on the panel, it assumes the pilot is incapacitated and descends to a breathable altitude and levels off. In the case of a pressurization problem, it activates immediately. But then what?

Well, now, with certification pending for Autoland on the M600 SLS and shortly thereafter on the Cirrus SF50 Vision Jet, the Garmin panel goes to the next step of beginning an automated sequence of events that results in a safe touchdown on a runway, where it rolls the airplane to a stop, shuts down the engine, broadcasts a message on the local frequency that the airport is closed because of a disabled aircraft on the runway, and plays a video on the multifunction display that instructs the passengers how to open the door and get out. After I hit the Autoland button, the system went through a series of complex calculations and decision-making processes to determine the nearest suitable runway.

Our demo of the system presented a more realistic scenario. We were at about 3,500 feet in the M600 single-engine turboprop flying at about 170 knots indicated airspeed when I—feigning chest pain—lifted the plastic guard on a switch on the panel and then pushed the button underneath. Within a few seconds a message appeared across all three displays in the G3000 panel indicating “Emergency Autoland Active.” The system stripped away all information that would not be useful to a nonpilot, and it displayed the amount of fuel remaining in hours and tenths of an hour and the time and miles until we would be landing, as well as the name of the destination airport—the common name associated with the airport, not necessarily the field name familiar to pilots. Gone from the primary flight display and the MFD were all the complicated engine gauges and the extraneous PFD information except for altitude, airspeed, and attitude. A map page displayed our path to the chosen airport (displayed using an airport symbol as you might see on a highway sign, not as the chart symbol that only pilots might recognize)—including, as required, a holding pattern to allow the airplane to descend and slow down in order to make a stabilized approach.

The displays also reminded the passenger that no action was required on their part.

A video on the MFD explained what was

happening and pointed out that the two touch-screen displays at the bottom of the panel had changed to show large microphones on them. The video instructed the passenger to move the headset microphone to their mouth and that if they wanted to, they could press the screens like a walkie-talkie to speak to ATC and release to listen for a response.

Of course, that is not a requirement because the Autoland system would have already (although not in our demonstration) begun transmitting on the tuned frequency and the emergency frequency of 121.5 MHz a message telling anyone listening that N60HL, in this case, had a possibly incapacitated pilot and that it would be landing at New Century AirCenter in six minutes. It would update and broadcast that message every 30 seconds—listening to make sure that it didn't transmit over any other radio calls. Once near the Class D airspace of the tower, it would have changed one of the radios to the tower frequency and kept the other on the emergency frequency. The system also would have changed the squawk code to 7700, the emergency code.

During those first few seconds after I hit the Autoland button, the system went through a series of complex calculations and decision-making processes to determine the nearest suitable runway based on runway length, width, and surface; fuel remaining; crosswind component; terrain; obstacles; and general weather information. The system requires an RNAV approach, but beyond that, the runway and weather criteria can be decided by the airframe manufacturer.

The system even forecasts its own weather if the nearest suitable runway is a significant distance away, long enough that the current ADS-B or SiriusXM weather may not be valid. It uses the latest weather trend information, for example, to determine if a thunderstorm might move into the runway environment where it intends to land. It will route the airplane around thunderstorms as well as terrain and obstacles, all of which it gets from its internal databases. If en route to a runway it determines, because of changing weather conditions, that another runway is closer or more suitable, it will change its destination. It can even estimate changing barometric conditions and adjust the altimeter—using algorithms. Garmin engineers say the calculated barometric readings are within 0.01 inches of mercury of actual ambient conditions.

The system will work anywhere in the world except a few places in China, Russia, and Central Africa where data isn't available for the system to make landing decisions. Even then, it may be able to fly into an area where there is enough information available to make a landing decision if enough fuel is on board.

In our case, the decision making was easy, as New Century was only a few miles away with multiple runways and approaches. After Autoland made its decision, the autothrottle system actually accelerated the airplane to about 200 knots, getting us to the airport as quickly as possible. At this writing, Piper was expecting that the autothrottle system on the M600 to be for this emergency use only. However, Piper plans to get it certified for all phases of flight. The Vision Jet already has a certified autothrottle system.

Once nearing a fix for the RNAV Runway 18 approach, the airplane began a descent to the initial altitude of 3,100 feet msl, accelerating to 230 knots. Because we were high and fast, it entered a one-turn hold to continue the descent and to slow down, ultimately rolling us out on a perfect final approach course. Upon intercepting the glidepath, it automatically lowered the landing gear and flaps to the Approach setting, the only flap setting it will use on the M600. Winds were 090 at 10, so it crabbed into the wind on the final approach path and adjusted the thrust setting to slow us to 102 knots indicated.

Had the temperatures been nearing freezing, it also would have activated the airplane's anti-icing or deicing systems at the start.

A few hundred feet above the runway, it kicked the nose straight and lowered the left wing to maintain the course—"decrabbing" as Sargent calls it. Just over the runway, the radar altimeter began feeding height information to the flight control system, allowing it to pitch up slightly—a flare. The autothrottle rolled the thrust back to idle and a few seconds later we touched down as the system actuated the servos on the brakes to bring us to a stop. Reverse thrust is not available to the Autoland system.

Look Ma, no hands!

While the notion of an autoland system seems futuristic, Garmin has been quietly working on it since 2011 and conducted its first autoland in a Columbia piston-powered airplane in 2014 and first briefed the FAA on it in 2015. Since then it has conducted some 800 autolands.

The system is not like the autoland systems on airliners and a few models of business jets in that

those systems require a ground-based signal—a Category III ILS—specially trained and certified crews, and dual or triple redundant autopilot systems, among other equipment. Such precise ILSs are available at only a small number of runways.

During initial testing, Garmin created “runways in the sky” and built approaches to those runways, having the system then fly to the runway—at a safe altitude.

Bailey Scheel, senior aviation systems programs engineer and project manager for Autoland, said the company has had some 100 people working on the project over the past five years. She said disciplines from throughout Garmin were leveraged to make it happen. Even the team at Garmin Drive, its automotive GPS division, were consulted on how to best choose routes back to an airport.

Over the years, the company has put dozens of nonpilot staffers into airplanes on company trips and during test flights, asking them what they would want to see and not see if the pilot were incapacitated and Autoland activated. Using the feedback, they dramatically refined the passenger information. In the beginning the engineers wanted to ignore that completely and focus only on getting the aircraft safely on the ground. But after numerous human factors studies and with staff input, the group decided that passenger information was important and necessary.

As it stands the system seems super sophisticated and almost over the top in what it does to keep the passengers informed.

Throughout the flight with Autoland engaged, the MFD constantly updates the position, time to landing, and fuel status and then, for each phase of flight, shows a video to get the passenger ready—showing when and how to fasten seat belts and stow loose objects, how to use the headsets, how to talk to ATC—if desired—and, as noted above, how to open the door and get out.

So if it works so well, why not use it routinely? Not soon, Garmin insists. If the system is activated, the 7700 squawk code will alert ATC to the emergency and the pilot likely will need to explain his or her reason for using it. But certainly on a day when the weather has failed to improve as forecast, fuel is running low, and the pilot is running out of options, Autoland is a viable option, since ceiling and visibility don’t matter. Someday, with more experience and the FAA more comfortable with the notion, perhaps Autoland will be available on any given flight where the pilot doesn’t feel up to the landing.

Meanwhile, it’s a great safety feature. “This will save lives,” said Ron Gunnarson, Piper’s vice president of sales, marketing, and customer support. Once certified, the system will be standard on the 2020 M600 SLS models. The SLS replaces the standard M600 and includes a host of safety, luxury, and service features not available previously—among them Autoland. And while it includes new features, the price will stay the same as the 2019 base price of \$2.9 million. Gunnarson said the new upgrades and equipment have a value of about \$330,000. Typically equipped, an M600 SLS will leave the factory with a list price of about \$3.1 million. For the Vision Jet, which already has autothrottles, the upgrade comes as primarily a software change and the addition of the radar altimeter, according to Matt Bergwall, Cirrus’ director of the Vision Jet product line. Cirrus plans to offer Autoland as a standard feature on the 2020 models.

While Piper puts a guarded Autoland switch on the panel in front of the passenger, Cirrus chose to put a large red recessed button on the cabin ceiling reachable by those in the front seat and those in the middle-row seats. The button is labeled “Safe Return Autoland.” While the Piper system actuates almost immediately upon pushing the button, the Cirrus system waits a few seconds, giving the pilot a chance to override easily if it is accidentally pushed.

For Cirrus, Autoland adds another layer of protection on top of its standard CAPS whole airframe parachute system. Cirrus CEO Zean Nielsen describes CAPS as the “sick airplane, healthy pilot” safety option—the choice when the airplane cannot safely make it back to a runway. Autoland is the “sick pilot, healthy airplane” option—something to be actuated when the pilot is not able to safely land the airplane.

According to Bergwall, if no suitable runway is available to the SF50 once Autoland is selected, the cockpit displays will advise the passenger to utilize the CAPS parachute. A video animation advising how to pull the red T handle nestled in the overhead console will play on the MFD.

While Autoland is currently under development for the G3000 cockpits with the appropriate additional systems, such as autothrottle, radar altimeter, and automatic braking, Garmin says the system may be retrofittable to earlier G3000s, with the final decision in the hands of the aircraft manufacturer.

Meanwhile, Garmin plans to move the capability up to its G5000 panel in higher-end business jets and down to its lower end products such as G1000 and potentially other less integrated panel

systems. The challenge there is the lack of autothrottle; radar altimeter; and, in some models, limited rudder authority, making it difficult to keep the airplane on the runway. But Scheel and other Garmin engineers we spoke to say there may be workarounds. GPS altitude, for example, may be good enough for sensing height above the runway and initiating the flare, obviating the need for a radar altimeter. GPS altitude is the fall-back system should the radar altimeter fail on the G3000 systems. A pilot or passenger may need to be aware enough to make some throttle adjustments, but one could imagine a system that could cut the engine off and use pitch changes to manage descents and speeds, allowing the windmilling propeller to restart the engine as needed to maintain a safe approach speed—similar to how World War I pilots used a blip switch to shut off and restart the engine of early airplanes with limited throttle control. And perhaps the system would only choose runways

long enough to roll to a stop without braking, eliminating need for control of the brakes. Garmin has even contemplated the need to educate other pilots who may hear an Autoland automated message and controllers who may find an Autoland airplane active in their airspace. The company is working with the FAA to amend the Pilot/Controller Glossary to include language about the system. With years of development behind it, Autoland appears very ready for prime time. During our interviews with Phil Straub, Garmin executive vice president and managing director, aviation, and with Cliff Pemble—Garmin president and CEO—the two stressed the need to continue to improve GA safety. Pemble in particular beamed with pride about the work the aviation division has done to bring new levels of safety to general aviation.

Scheel said it most succinctly. "We're here to make pilots safer and give them new options."

When I was a young boy, my mother would send me to the store with only one dollar and I would come back with:

- Five potatoes
- Two loaves of bread
- Three bottles of milk
- A hunk of cheese
- A box of tea
- Six eggs

You can't do that today....too many darn security cameras!

A faith healer in a church called out, "Anyone who wants to be prayed for, come forward to the front."

With that, Steve got in line and when it was his turn the Pastor asked, "Steve, what do you want me to pray for you?"

Steve replied, "Pastor, I need you to pray for help with my hearing."

The Pastor put one hand on Steve's ear, placed his other hand on top of his head, and then prayed and prayed and the whole congregation joined in with much enthusiasm.

After a few minutes, the Pastor removed his hands, stood back and asked: "Steve, how is your hearing now?"

Steve answered, "I don't know. My hearing at the County Court isn't until next Thursday."



"I'm working on pants for old guys. They'll combine the comfort of Dockers, with the protection of Depends. I'll call them Dry Dockers."



Pilots are Picky

By Len Morgan
December, 1990



RECENTLY THIS COLUMN INCLUDED A World War II story that began, "A B-24 in Alaska encountered a Japanese "Betty," a four-engine seaplane ..." which was wrong, of course. The "Betty" was a twin-engine bomber; the seaplane involved was an "Emily." I knew better and so did a lot of readers – so many that the same You're right-I-goofed reply went out as complaints came in.

Nearly all of Flying's readers are pilots, a breed irritated by things that aren't quite right; most of the rest are enthusiasts who keep up with current events and know some history. Reading "United Air Lines" or "Federal Air Regulations" or "Lockheed 12A Electra" in a journal supposedly staffed by knowledgeable writers raises eyebrows as quickly as does a loose fuel cap. An aviation writer's opinion is arguable, but he should get his details right. The slapdash approach to aviation topics seen in the papers and on TV won't do.

My airline was chartered as Braniff Airways, Inc. in 1930 and such was its corporate name for 52 years. Yet to Dallas reporters and newscasters we were always "Braniff Airlines." Dallas was our headquarters for Pete's sake! Do I nitpick? If you're Joe, do you like being called Jim?

As every pilot learns, carelessness about little things can lead to big problems. A BAC One-Eleven crew with the laudable intent of making up time hurried through the checklist and took off, only to discover that the airplane had not been refueled. Miserable with embarrassment, the crew returned to face the music. A 727 crew made the same horrifying discovery midway between stations. They let down at reduced power and made it, but with insufficient fuel left to start the APU.

A ferry crew overlooked pitot heat, climbed into freezing clouds, was disoriented by incorrect flight instrument readings and crashed. Fuel and pitot heat are not details; the subsequent pilot-error verdicts cannot be argued, but it can also be argued that checklists were mitigating factors.

Our 727 checklist included 61 items requiring attention between gate and runway, all in the same size print. These ranged from fuel quantity and pitot heat to cockpit door (locked), rotating beacon (on) and landing lights (as required). Reciting responses exactly as published was emphasized. When the engineer said, "Clocks and altimeters?" the acceptable response was, "Check and Set." and anything else annoyed inspectors.

But it was never stressed that only six of the 61 were crucial. They were fuel, trims, flaps, speed-brakes, flight controls and pitot heat. Get those right and you'd fly; the other 55 were foam on the beer. Another critical item was omitted; were all the fires lit? We taxied out with the outboards to conserve fuel; the center stack of dead gauges could be overlooked when copying a revised clearance while expediting departure. It happened, fortunately in aircraft light enough to lift with two-third of normal takeoff thrust.

Pilots flying the North Atlantic were given several route choices, these "track" being revised every 24 hours. A crew, after studying winds and weather, made their selection and away they went. When they drew within range of ground radar in Scotland, they received a rude shock. They were far off course. Waypoint coordinates had been correctly entered and all three IRS sets had performed normally. One number on the computer flight plan had been overlooked-the date. The crew had flown yesterday's track. Such booby trap in preflight data are not uncommon.

The FAA's predisposition to punish for even minor infractions is enough to warp a realistic sense of priorities. With good name and career at stake, a pilot's concern over staying legal can cloud hi

judgment. He is inundated by irrelevant technical data, inane reminders and ambiguous rules, and he is admonished to go fly by the book.

In fact, the "book" is a small library of aircraft and policy manuals, company and federal regulations, charts, bulletins and checklists, most of them revised weekly. The typical airline equipment manual is disorganized, badly written and loaded with inconsequential. A washing machine comes with better instructions. (The military handbooks I got were superb by comparison.) Company and federal regs are vague and can be interpreted to suit the author. The thrust is less to help pilots operate safely than to help ground people avoid blame when there's trouble. The "book" can be summed up as, "It's your baby, captain."

A "book" writer's priorities differ from a pilot's. For example: by law, every airline cockpit crewmember must have a "readily available flashlight in good working order" (FAR 121.549b), yet I've never seen that mentioned on a checklist. Once you've climbed into a night overcast and suffered a complete loss of cockpit lighting, you'll never regard your flashlight as a detail.

If the half-dozen "killer items" appeared in large red print as final pre-takeoff checks instead of being sandwiched between reminders to turn on transponders and fasten shoulder harnesses, there might be fewer attempted takeoffs with flaps up or trims out of limits.

The "book" is a guide, not a bible. For example, a thinking pilot distrusts warning devices. The 727 manual says that if speedbrakes, stabilizer trim and flaps are improperly set for departure, a warning horn will sound when thrust levers are advanced. He reads that as, "is supposed to sound." The same is true of fire bells, gear horns, speed clackers and flashing lights. The blacks and whites of deskbound technical writers must be translated to apply in a gray world ruled by Murphy's Law.

My crowd of World War II vets endured copilot apprenticeships lasting 16 years. We were well into our 40s before we got the coveted fourth stripe. For all of their frustration, those years gave us an invaluable insight into the real world of flying. Not only were we involved in many thought-provoking situations, we heard a hundred bizarre tales.

Some of our seniors dated back to airmail flying. Their logs included virtually every American military and civil aircraft flown between World Wars I and II. What they remembered, along with our own experiences, molded our philosophy. Hangar flying brought training theories into perspective.

Today's pilot advances too rapidly to acquire such lore. He accepts the "book" at face value and learns its shortcomings as he flies. Study and experience will in time reveal what is important and what in detail.

It is all too easy to become lost in details and lose sight of the overall picture. Pilots intent on completing every nitpicking checklist item have taxied into ground equipment, other aircraft or onto active runways. Absorption with trivial cockpit chores has led others to mistune radios, overshoot altitudes and clearance limits and miss traffic that filled the windshield.

There is a time to fiddle with fine points and a time to concentrate on stick-and-rudder flying. Once the details of every situation are recognized, they can be put on the back burner and maximum attention focused on things that really matter.

It was my good luck to fly with many military and airline skippers, no two of whom approached the job in exactly the same way. They ranged from relaxed to the point of boredom to tense to the point of ulcers. Nearly everyone was a competent airman; the remaining few could drive a saint to drink-if they didn't scare him to death first.

**FOR THE THINKING
PILOT, THE "BOOK"
IS MERELY A GUIDE,
NOT A BIBLE.**

Any pilot with 25 spotless years on schedules obviously had something going for him, no matter how he came across. Despite their diverse natures, the pros shared a fascination with flying. They worked at it and relished its challenges. "It's like bridge," one said. "You play with the same 52 cards but never get the same hand twice." They also shared a keen sense of priorities not based on lavish adherence to the "book." They flew by their own book.

There was a 12-step procedure for smoke in the Convair 340, the last being, "Land as soon as practicable." Now and then during transition my instructor would say, "I smell smoke," and I would rattle off the 12 steps. While doing steep turns we really did smell smoke-the real acrid stuff-and automatically I began the ritual. "Forget that [expletive]!" he yelled, "Let's get this [expletive] back on the ground!" which we did with all due haste. Having saved our skins, we saved our tickets by making sure of the details. An inspector might look at the cockpit to see if we'd done it all by the "book."

Airline pilots: "The Wind The Sand and The Stars"

Antoine St. Exupery

Airline pilots are widely dispersed over the face of the world. They land alone at scattered and remote airports, isolated from each other rather in the manner of sentinels between whom no words can be spoke. It needs the accident of journeying to bring together here or there the dispersed members of this great professional family.

Round the table in the evening at Casablanca, at Dakar, at Buenos Aires, we take up conversations interrupted by years of silence, we resume friendships to the accompaniment of buried memories. And then we are off again.

Thus is the earth at once a desert and a paradise, rich in secret hidden gardens, gardens inaccessible, but to which the craft leads us ever back, one day or another.

Life may scatter us and keep us apart; it may prevent us from thinking very often of one another; but we know that our comrades are somewhere "out there"- where, one can hardly say-silent, forgotten, but deeply faithful. And when our path crosses theirs, they greet us with such manifest joy, shake us so gaily by the shoulders! Indeed we are accustomed to waiting.

Bit by bit, nevertheless, it comes over us that we shall never hear the laughter of our friend, that this one garden is forever locked against us. And at that moment begins our true mourning, which, though it may not be rending, is yet a little bitter. For nothing, in truth, can replace that companion. Old friends cannot be created out of hand.

Nothing can match the treasure of common memories, of trials endured together, of quarrels and reconciliations and generous emotions. It is idle, having planted an acorn in the morning, to expect that afternoon to sit in the shade of an oak.

So life goes on. For years we plant the seed, we feel ourselves rich; and then come other years when time does its work and our plantation is made sparse and thin. One by one, our comrades slip away, deprive us of their shade.

Cockroaches are found to be capable of surviving a nuclear holocaust, yet one swat with a newspaper and it would die.

Shows how toxic the media is.

A father put his 3 year old daughter to bed, told her a story and listened to her prayers which ended by saying,

"God bless Mommy, God bless Daddy, God bless Grandma and good-bye Grandpa."

The father asked, "Why did you say good-bye Grandpa?"...

The little girl said, "I don't know daddy, it just seemed like the thing to do"

The next day grandpa died. The father thought it was a strange coincidence.

A few months later the father put the girl to bed and listened to her prayers which went like this,

"God bless Mommy, God Bless Daddy and good-bye Grandma."

The next day the grandmother died.

"Holy ****" thought the father, "this kid is in contact with the other side."

Several weeks later when the girl was going to bed, the dad heard her say,

"God bless Mommy and good-bye Daddy."

He practically went into shock. He couldn't sleep all night and got up at the crack of dawn to go to his office.

He was nervous as a cat all day, had lunch and watched the clock.

He figured if he could get by until midnight he would be okay.

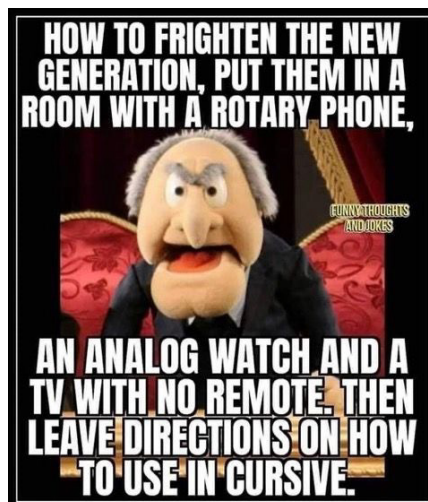
He felt safe in the office, so instead of going home at the end of the day he stayed there, drinking coffee, looking at his watch and jumping at every sound.

Finally midnight arrived; he breathed a sigh of relief and went home.

When he got home his wife said, "I've never seen you work so late. What's the matter?"

He said, "I don't want to talk about it, I've just spent the worst day of my life."

She said, "You think you had a bad day, you'll never believe what happened to me. This morning the mailman dropped dead on our porch."



Airmail Arrows and Beacons

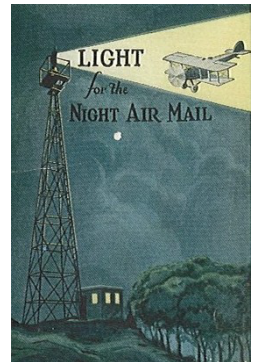
by JL Johnson - airlinereporter.com



Seen in 2019 – an air mail arrow outside Salt Lake City, Utah points to SLC on the San Francisco-Salt Lake route

We aren't ready to fly. Which is a bummer because travel is a large part of our identity. What are sidelined AvGeeks to do to remain connected to our passion? We are all coping with this disaster in different ways. Looking to an aspirationally brighter future (and planning future travel) is certainly one method that holds promise. For my [formerly] frequently-traveled household we have been deep in research and planning for most of the year. As a result, our impossibly long #AvGeekToDoList has grown a great deal since our voluntary pandemic-grounding. One item of low-hanging socially-distanced fruit on our list is getting out and visiting more air mail arrows.

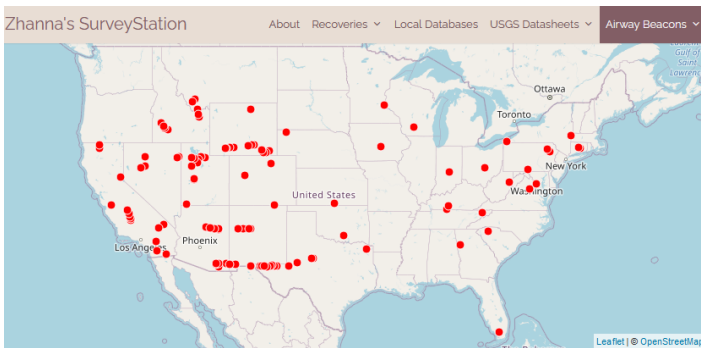
I have long been fascinated with the infancy of U.S. aviation. Keen AirlineReporter readers and AvHistorians alike will know that the modern aviation industry is what it is because of air mail. Indeed, all of the domestic legacies – except Delta – were formed or became successful because of income from air mail. These earliest routes were flown mostly during the day. In the evenings, mail would continue to travel, albeit via train. To further increase the speed of airmail it was determined night flying would be required. Thankfully congress stepped in to fund a vast array of large concrete arrows and beacons which formed the lighted Transcontinental Airway System (TAS.) At its peak the TAS had one concrete arrow roughly every 10 miles along the various routes. The TAS and its air mail arrows provided the infrastructure for the air mail boom which, in time, led to normalization of passenger service.



2016 – An air mail arrow in Clark County, Nevada points to Salt Lake City on the Los Angeles-Salt Lake route

FINDING YOUR OWN AIR MAIL ARROWS AND BEACONS:

Most of the TAS sites no longer exist. After only a few decades of use they simply were no longer needed thanks to the advancement of technology. By the time the U.S. entered World War II, it was clear the giant concrete arrows pointing to major cities were an issue of national security and many were intentionally destroyed. A few dozen air mail arrows and/or their related structures remain sprinkled about the continental U.S. Surprisingly, the few I have visited personally (most in the Southwest) remain in decent condition.



Of the remaining sites, a good number remain on public land an hour or two from major cities or airports. Some are on-site at small airports which are generally happy to invite visitors on pre-arranged visits, and at least one has transformed to the Aviation Heritage Museum in New Mexico. Air mail arrows are found on private property (get permission), right off of major interstates, at the top of mountains and in the middle of deserts. Trips to these sites requires a lot of research and planning. For someone like me, that's where the fun begins because with effort comes rarity of experience.

There are many sites that will aid you on your journey. I suggest looking at a bare minimum the following:

Perhaps the most comprehensive site which has been added to for many years. Go here for lists of sites by state including historical documents which provide background on many of the sites.

- Zhanna's SurveyStation– More information on locations, in some cases with more recent reports on conditions.
- Wyoming PBS- Cowboys of the Sky- A public media produced 27 minute video discussing air mail and other early aviation topics with some emphasis on Wyoming.

CONCLUSION:

There is no better time than now to start researching and planning your own excursion to visit one or more of these sites. Be safe and respect private property, but get out and visit these unique links to aviation's past. For without these arrows, the industry as we know it today would be drastically different.



Farmers Brown & Jones had adjoining farms for years and didn't get along at all.

One night after supper, Farmer Brown knocked on Farmer Jones's door. When Farmer Jones answered the door, Farmer Brown said, "I know we don't talk often, but I wanted you to know that our mule just died today."

Farmer Jones replied, "I'm certainly sorry to hear that, but I am wondering why you came over here to tell me?"

"Because," Farmer Brown said, "you're always supposed to notify the next of kin."

The hero pilots who saved 233 lives in ‘miracle’ belly landing of jet in field

With just seconds to act, two pilots managed to land a disabled Airbus jet in a field near Moscow after a huge birdstrike had stalled its engines – and the heroic moment is already being compared to the 2009 miracle on the Hudson.



Against the odds, Captain Damir Yusupov and First Officer Georgy Murzin managed to land Ural Airlines’ Airbus 321 after it hit a dense flock of birds during take-off from Zhukovsky International Airport, south-east of Moscow. The strike stalled both engines and thrust all on board into a harrowing life-or-death situation.

Yet the pilots’ meticulous and miraculous plan ‘belly-landed’ the plane in a large cornfield, clear of any houses or buildings, and saved all 226 passengers and 7 crew members. Here’s what we know about them.

‘We’re all alive thanks to pilot’: Passengers recall dramatic Ural Airlines’ belly-landing

Damir Yusupov

Born in Siberia, the 41-year-old Yusupov isn’t a typical career pilot with tens of thousands of flight hours under his belt. In fact, he has only racked up about three-thousand hours of flight time. That’s just twice the minimum amount required to become an aircraft commander – yet this proved to be no impediment to him when faced with a crisis.

There were other options and it’s good that we didn’t use them – if we had tried to go back, I don’t know what would have happened.

Rejected from flight school on medical grounds in his teens, Yusupov trained as a lawyer instead. Not content to give up on his dream, he retrained as a pilot later, graduating with honors. His fellow

cadets and colleagues describe him as calm, modest and professional – qualities which no doubt stood in his favor in a moment of peril.

Yusupov explained to reporters at a press conference in Moscow on Thursday that he’d originally wanted to turn the plane around, but when he saw that the second engine had also failed, he knew it was clear that hitting the ground was going to be “inevitable.”

The crew decided to land the plane without the landing gear because there was a risk that the aircraft could “roll over” and the consequences could be much worse. “I tried to land the plane softly so that the touchdown came with a minimum vertical speed,” he said.

“I don’t feel like a hero,” he added, “because I just did what I had to do to save the plane, passengers and crew.”

Georgy Murzin

Yusupov’s 23-year-old co-pilot Georgy Murzin received his license just two years ago. He graduated from St. Petersburg State University of Civil Aviation in 2017 and was hired by Ural Airlines in 2018.

The young pilot had accumulated only 600 flight hours when he found himself in a situation no pilot ever wants to face.

The revolutions were unstable, the thrust was not enough, the height was gradually falling –the commander took control.

‘Textbook emergency landing’

“I take my hat off to the pilots and to everyone on board ... because this was a textbook emergency landing,” aviation security expert Julian Bray told RT.

The pilots “did brilliantly because they were really quite low when the bird strike took place and the engine power dropped away almost completely,” said David Learmont, consulting editor of Flightglobal magazine. “Russia does have a history of having very good pilots, it’s a profession that the Russians are very proud of having,” he said.

Russian media has also lavished praise on the two men and their crew for saving more than 200 lives. The Kremlin has also applauded the "hero pilots" with presidential spokesman Dmitry Peskov promising to award them once all formalities are dealt with.

The incident has naturally drawn comparisons with the 2009 emergency landing involving US Airways Flight 1549 which struck a flock of

geese, lost power in all of its engines and forced hero pilot Chesley Sullenberger to perform a miraculous landing on the icy Hudson River.

Sullenberger was later honored by then-US President George W. Bush for his swift-thinking which saved the lives of all 155 passengers, who were rescued from the wings of the plane by nearby boats.

*** IF MY BODY IS EVER FOUND ON A JOGGING TRAIL JUST KNOW THAT I WAS MURDERED SOMEWHERE ELSE AND DUMPED THERE.**

*** RESPECT YOUR ELDERS. THEY GRADUATED FROM SCHOOL WITHOUT THE INTERNET.**

*** I'VE DECIDED I'M NOT OLD, I'M 45 -- PLUS SHIPPING AND HANDLING.**

*** WHY DO I HAVE TO PRESS "1" FOR ENGLISH? DID AMERICA MOVE?**

*** WE HAVE ENOUGH GUN CONTROL. WHAT WE NEED IS IDIOT CONTROL.**

*** BEHIND EVERY ANGRY WOMAN STANDS A MAN WHO HAS ABSOLUTELY NO IDEA WHAT HE DID WRONG.**

*** BEHIND EVERY SUCCESSFUL MAN STANDS A SURPRISED MOTHER IN LAW.**

*** LET'S STOP SENDING MONEY TO OTHER COUNTRIES AND LET THEM HATE US FOR FREE.**

*** VEGETARIAN: ANCIENT TRIBAL NAME FOR THE VILLAGE IDIOT WHO CAN'T HUNT, FISH, OR LIGHT FIRES.**

*** I LOOK AT PEOPLE AND SOMETIMES THINK "REALLY? -- THAT'S THE SPERM THAT WON?"**

*** IN MY DEFENSE I WAS LEFT UNSUPERVISED.**

*** IF GUNS KILL PEOPLE, THEN PENCILS MISPELL WORDS, CARS MAKE PEOPLE DRIVE DRUNK, AND SPOONS MAKE PEOPLE FAT.**

*** MY DECISION-MAKING SKILLS CLOSELY RESEMBLE THOSE OF A SQUIRREL WHEN CROSSING THE ROAD.**

*** SOME THINGS ARE JUST BETTER LEFT UNSAID -- AND I USUALLY REALIZE IT RIGHT AFTER I SAY THEM.**

*** WE OWE ILLEGALS NOTHING -- WE OWE OUR VETERANS EVERYTHING.**

*** CAMPING: WHERE YOU SPEND A SMALL FORTUNE TO LIVE LIKE A HOMELESS PERSON.**

*** I THOUGHT GETTING OLD WOULD TAKE LONGER.**

The Wisdom of Those Who Fly

1. There is no problem so complex that it cannot simply be blamed on the pilot. ~ Dr. Earl Weiner
2. To invent an airplane is nothing. To build one is something. To fly is everything. ~ Otto Lilienthal
3. Safety second is my motto. ~ Locklear
4. Speed is life, altitude is life insurance.
5. The man who flies an airplane .. must believe in the unseen. ~ Richard Bach
6. There is no excuse for an airplane unless it will fly fast! ~ Roscoe Turner
7. The ships hung in the sky in much the same way that bricks don't. ~ Douglas Adams
8. Aviation is proof, that given the will, we have the capacity to achieve the impossible. ~ Rickenbacker
9. Flying is like sex —I've never had all I wanted but occasionally I've had all I could stand. ~ Stephen Coonts
10. The desire for safety stands against every great and noble enterprise. ~ Cornelius Tacitus (circa AD 56)
11. Aviation in itself is not inherently dangerous. But to an even greater degree than the sea, it is terribly unforgiving of any carelessness, incapacity or neglect.
12. Lady, you want me to answer you if this old airplane is safe to fly? Just how in the world do you think it got to be this old? ~ Jim Tavenner
13. If you are looking for perfect safety, you will do well to sit on a fence and watch the birds; but if you really wish to learn, you must mount a machine and become acquainted with its tricks by actual trial. ~ Wilbur Wright, 1901.
14. The highest art form of all is a human being in control of himself and his airplane in flight, urging the spirit of a machine to match his own. ~Richard Bach, 'A Gift Of Wings'
15. The greatest danger in flying is starving to death. ~ Earl C. Reed of the T-L-R Flying Circus
16. When the weight of the paper equals the weight of the airplane, only then you can go flying. ~ Donald Douglas
17. In flying I have learned that carelessness and overconfidence are usually far more dangerous than deliberately accepted risks. ~ Wilbur Wright, September 1900.
18. I fly because it releases my mind from the tyranny of petty things. ~ Antoine de St-Exupéry
19. Any damned fool can criticize, but it takes a genius to design it in the first place. ~ Edgar Schmued
20. When asked by someone how much money flying takes: Why, all of it! ~ Gordon Baxter
21. The important thing in aeroplanes is that they shall be speedy. ~ Baron Manfred Von Richthofen

22.. The aeroplane will never fly. ~ Lord haldane, Minister of War, Britain, 1907

23. What freedom lies in flying, what Godlike power it gives to men... I lose all consciousness in this strong unmortal space crowded with beauty, pierced with danger. ~ Charles A. Lindbergh

24. It is hard enough for anyone to map out a course of action and stick to it, particularly in the face of the desires of one's friends; but it is doubly hard for an aviator to stay on the ground waiting for just the right moment to go into the air. ~ Glenn Curtiss, 1909.

25. To put your life in danger from time to time... breeds a saneness in dealing with day-to-day trivialities. ~ Nevil Shute

26. Aviation records don't fall until someone is willing to mortgage the present for the future. ~ Amelia Earhart

27. Real planes use only a single stick to fly. This is why bulldozers & helicopters—in that order — need two. ~ Paul Slattery

28. Airplanes are near perfect, all they lack is the ability to forgive ~ Richard Collins

29. The exhilaration of flying is too keen, the pleasure too great, for it to be neglected as a sport ~ Orville Wright

30. The Cub is the safest airplane in the world; it can just barely kill you. ~ Max Stanley, Northrop test pilot

31. The bulk of mankind is as well equipped for flying as thinking. ~ Jonathon Swift

3 friends die and go to heaven

... when they get there, they see St. Peter at the pearly gates. St. Peter greets them and tells them that to enter heaven they must each answer one question, completely honestly.

St. Peter calls the first man up and asks him if he ever cheated on his wife. The man tells St. Peter, "I never cheated on my wife, I loved her everyday of my life." St. Peter then welcomes the man into Heaven and tells him because of his faithfulness he gets to drive a brand new Rolls Royce Phantom in heaven.

St. Peter calls the second man up and asks him if he had ever cheated on his wife. He looks at St. Peter and says "Well honestly, I did cheat on my wife a couple of times, and I've regretted it everyday of my life." St. Peter tells him that he may go into heaven but, because he did cheat on his wife, instead of a Rolls Royce he will only receive a gas powered scooter to drive in heaven.

St. Peter calls up the final man, and asks him the same question. The man looks at St. Peter and says, "St. Peter, I cheated on my wife every chance i got, and I would do the same thing again." St. Peter looks at him and says well you were honest and therefore you may go into heaven but because of your infidelity, you will only get a bike to ride in heaven.

A few weeks later the third man is riding his bike through heaven, and he sees the first man in his Rolls Royce parked on the side of the road. As he gets closer the man sees that he is crying. He stops and asks his friend, "hey buddy, what's wrong? why would you be crying here in heaven? I'm as happy as i have ever been and i only have this bicycle and you have this beautiful Rolls Royce."

His friend looks at him, and tells him "I just saw my wife, and she was riding a tricycle."

The Crew Room

What have you been up to? - Bear Owen

After Continental retirement in 2005, I took a year-long traveling roadtrip vacation around North America with my family. Then I rejoined my real estate brokerage career with RE/MAX. Today I own and manage two moderately successful investment properties in Colorado. I'm again on the verge of semi-retirement from the stresses of the brokerage business to do some consulting and re-embark upon my long-dormant passion for writing.

For several years now I've been authoring our Denver Hangar's monthly reports to the QBs' international publication, "The BEAM" magazine, and doing some book and article editing for other authors. It's high time to finish my long languishing novel about the air war in Vietnam, "Trip Trey" and hopefully get it sold to a publisher before I kick the bucket!

Besides occasional general aviation flying with friends, I've also rediscovered my childhood love of toy trains and model railroading. I'm serving as secretary and board member of the 501(3)C "Colorado Toy Train Foundation" which is dedicated to promoting the hobby and creation of a regional toy and model train museum in the Denver area.

Since losing my beloved wife and life partner of 43 years, Jophie (AKA Joan), to cancer in 2013, I've become active in military and aviation groups such as Quiet Birdmen, Daedalians, Coopers Troopers (Marine and Navy Hospital Corpsmen), and the Broomfield Veterans Memorial Museum Foundation.

I'm unabashedly proud that my grandson, Jason, whom I started to teach to fly when he was three, is now a 767 training captain and check airman at Omni-Air International, a thriving DOD personnel transport contractor and non-sched Part 121 carrier. When he was a DC-10 captain at Omni, he flew some of the same DC-10s that I had flown when Continental owned them!

When this plague pandemic hopefully dies down to a dull roar, I intend to resume some of my past pursuit of world travel, sightseeing and visiting old friends in Australasia and Europe.

Other than that, I really haven't been up to much since I finally parked my "Bob Finley Signature Model Kart-a-Bag" luggage wheels following my GUM-FUK-GUM retirement flight back in 2005. I have a ton of fond memories from my gloriously happy and content 20 years on the Continental flight deck. The only bad memory I harbor from that career was flunking bidding just once which led to a year of commuting to reserve in EWR! But, hey, one bad year out of 20 ain't so bad! Just remember that old saw about the difference between a pilot and a jet engine....the engine stops whining when it arrives at the gate!

Love you all. Thanks for the memories!

Bear

What have you been up to? - Bob Warner

Built a new house on my ranch. My ranch was designated Colorado Centennial Farm/Ranch at the State Fair last month. My church celebrated its Centennial Celebration last month also. My parents joined in 1924. I may be the longest participating member. I'm still operating the ranch with a herd of Angus cattle and raising corn, hay and pasture for the cattle. I serve on the Board of Directors for the National Association of Conservation Districts and as a Trustee for the National Conservation Foundation. We celebrated the 75 Anniversary of the NACD in Chicago in July. I have a collection of antique farm tractors dating back to 1920 and a few antique vehicles including a 1925 Model T, a 1928 Chevrolet, a 1930 Model AA truck, and a 1940 Ford pickup.

What have you been up to? -- Gary Small

I don't normally include my own activities in this section, because I figure you get enough of my "stuff" on other pages in these editions...but I decided to relate my summer excursion to Branson Missouri for a Navy squadron reunion. I had been a member of VRC-50 in the "middle 70's" during the wind-down of the Viet Nam "conflict". The official name was "Fleet Tactical Support Squadron Fifty", and we flew C2s and C1s to the aircraft carriers in the South China Sea in addition to shore stations in Viet Nam and other Southeast Asia locations. The squadron was commissioned in 1964 and was located at various times at Cubi Point NAS in the Philippines, Atsugi Japan and briefly at North Island NAS in San Diego. The squadron was decommissioned following the Mount Pinatubo volcano eruption in 1994 that almost buried the base in volcanic ash, which was described as heavier than sand.

We flew a combination of troops and / or material to and from the carriers and these other locations. Often times, we just carried the mail and small parts, but at other times, jet engines, Seal Team members or Marines into "Hot Spots". A number of "alumni" from this squadron found later employment at Continental, including Gordon Bethune who preceded me, but used to enjoy telling stories of his time there as a mechanic.

There were 5 of us pilots from my "time slice" at this reunion with many more enlisted "shipmates" from various years, with lots of stories of "heroics"... including a few that may have been true...

Branson is a bit different than some of the more cosmopolitan places that we've visited in our careers, but it is noticeably patriotic and supportive of veterans. It was a bit poignant to see these "kids" of yesteryear "all grown up" and retired...but it was a great experience and highly recommended to anyone with a chance to attend a similar reunion.

What have you been up to? - Tony Vandermolen

The great circle of life...flying a C152 working on CFII reinstatement

What have you been up to? - Nancy Novaes

Traveling; charity work; in the garden at our little lake house -- generally having a good time.

Best trip -- so good we went twice -- Antarctica!

Quark is the company to go with. We also traveled to the Arctic with Quark, they are so good.

The Galapagos are pretty nice too, but take the small local ships not the snazzy cruise lines. Petra, in Jordan, is fabulous -- spend the night if you can.

Easter Island was interesting. Our luxury cruise to Tahiti stopped there and also at Pitcairn Island (as in "Mutiny on the Bounty."

So much to see, so little time (left)

The official winner of the "not my job" award.



What have you been up to? - Dick Capp

Just returned from 12-day photo dry-season safari in Botswana under the WWF banner. Name the animal and I saw it (except for Tigers - they're in India). Getting home was 30-hours of travel, 25-hours in airplanes. A-380 gets m.842 @ FL410 with big engines to push that slug, landing cameras show why it can't make a smooth landing. 1500 great photos, terrific food, very competent and knowledgeable guide, luxurious tent encampments -- what a way to travel! You can never have too many elephants...they're wonderful to watch, along with cheetahs, leopards, lions, impalas, African wild dogs, wildebeest, hippos, giraffes, etc.

Turbines are Ruining Aviation

By Cleve Spring -

Editor Emeritus of the RUPANews

We must get rid of turbine engines. They are ruining aviation. We need to go back to big round engines. Anybody can start a turbine, you just need to move a switch from "OFF" to "START" and then remember to move it back to "ON" after a while. My computer is more difficult to start.

Cranking a round engine requires skill, finesse and style. On some planes, the pilots are not even allowed to do it. Turbines start by whining for a while, then give a small lady-like poot and start whining louder. Round engines give a satisfying rattle-rattle, click-click BANG, more rattles, another BANG, a big macho belch or two, more clicks, a lot of good smelling smoke and finally a serious low pitched roar.

We like that. It's a guy thing.

When you start a round engine, your mind is engaged and you can concentrate on the flight ahead. Starting a turbine is like flicking on a ceiling fan: Useful, but hardly exciting. Turbines don't break often enough, leading to aircrew boredom, complacency and inattention. A round engine at speed looks and sounds like it's going to blow up at any minute. This helps concentrate the mind. Turbines don't have enough control levers to keep a pilot's attention. There's nothing to fiddle with during the flight. Turbines smell like a Boy Scout camp full of Coleman lanterns. Round engines smell like God intended flying machines to smell.

I think I hear the nurse coming down the hall. I gotta go!

A text to a neighbor:

Hi, Max. This is Richard, next door. I've been riddled with guilt for a few months and have been trying to get up the courage to tell you face-to-face. When you're not around, I've been sharing your wife, day and night, probably much more than you. I haven't been getting it at home recently. I know that's no excuse. The temptation was just too great. I can't live with the guilt & hope you'll accept my sincere apology and forgive me. Please suggest a fee for usage and I'll pay you. Richard

Max, feeling enraged and betrayed, grabbed his gun, went next door, and shot Richard dead. He returned home, shot his wife, poured himself a stiff drink and sat down on the sofa. Max then looked at his phone and discovered a second text message from Richard.

SECOND TEXT MESSAGE:

Hi, Max. Richard here again. Sorry about the typo on my last text. I assume you figured it out and noticed that the darned Spell-Check had changed "wi-fi" to "wife." Technology, huh? It'll be the death of us all.



During 2021

- **Denotes Golden Eagles Member**

Larry Camden *	Jan 21, 2021	Eugene Dahlquist*- delayed	Oct 7, 2020
Pete Hernandez*	Mar 15, 2021	Joe Rodehorst	July 21, 2021
Barry Levitz	Mar 25, 2021	Ron Bloecher	July 26, 2021
Thomas (Ted) Daniel	Apr 8, 2021	Ken Lakes*	Aug, 2021
Charlie Oligschlaeger	Apr 17, 2021	Jay Purcell	Aug, 2021
Gus Wenzel- delayed	Aug 24, 2019	Paige Seats*	Sept 17, 2021
Robert (Bob) Kinsey*	June 2021	Al Minning*	Sept, 2021
Jack Johnson*	June 3, 2021	Greg Dodson	Oct 7, 2021
John Garrett	July 7, 2021	Jay Barnes	2021
Larry Battersby*	June 27, 2021		

High Flight

by John Gillespie Magee Jr.

"Oh, I have slipped the surly bonds of earth,
And danced the skies on laughter-silvered
wings;

Sunward I've climbed and joined the
tumbling mirth of sun-split clouds -
and done a hundred things You have not
dreamed of - wheeled and soared and swung
high in the sunlit silence.

Hovering there I've chased the shouting wind
along and flung my eager craft through
footless halls of air.

"Up, up the long delirious burning blue
I've topped the wind-swept heights with easy
grace, where never lark, or even eagle, flew;
and, while with silent, lifting mind I've trod
the high un-trespassed sanctity of space,
put out my hand and touched the face of
God."

Golden Contrails

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