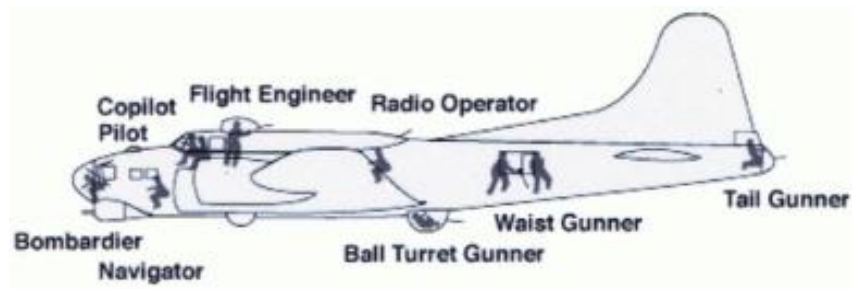


TIME TRAVEL

'THE FLIGHT OF THE NAVIGATOR'



By
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Time Travel: Flight of the Navigator

Time travel has long been a fantasy and a subject of science fiction books and the movies. Most say this time travel is not physically possible, but if you were with me on September 2nd of 2008 you would swear it happened. It all started at Republic Airport in Farmingdale Long Island where an inanimate object, a vintage bomber, reconnected with the flesh and blood memories of a veteran who flew in one during World War II.

THE BOMBER: The Boeing B-17 is a four engine World War II bomber. This B-17 was named in honor of the original one that flew during World War II with the 91st Bomb Group, 323 Squadron. The *Nine-O-Nine* is financed and flown by the Collings Foundation of Stow, Massachusetts. The original *Nine-O-Nine* flew an amazing 140 combat missions, had been repaired over 600 times for battle damage and survived the war only to be cut up for scrap upon its return.



With the capability of carrying up to a 7,000-pound bomb load and bristling with thirteen machine guns, B-17s were nicknamed the 'Flying Fortress'. It was America's first heavy bomber that flew from England bringing the war to the German heartland. These B-17s could take a good amount of 'battle damage' and still fly, but then again, it is more akin to flying in an aluminum can than riding in an armored tank. Their thin aluminum skin offered little protection against even the smallest caliber bullets, let alone 20-millimeter cannon shells or antiaircraft flak that scattered shrapnel when it exploded.

THE CREW & THEIR SURVIVAL: Typically the B-17 had a crew of 10. Completing a mission meant that crew members had to endure long hours in the air at sub-zero temperatures and deal with being shot at by enemy planes and antiaircraft guns. This hostile environment in the sky was so dangerous and costly to the crew members, at one point they had a scant 1 in 4 chance in completing their 25 required missions. During the war, in the Army Air Corps' European Theater of Operations (ETO) alone, over 4,700 B-17s were lost. That's over 47,000 crew members either Killed in Action (KIA), Missing in Action (MIA) or taken Prisoner of War (POW).

THE VETERAN: Edmund Ladendorff, Jr. was born and raised in Butte, Montana. Three weeks prior to graduating from high school he enlisted in the Army Air Forces on May 8, 1943. As Ed explains, "*I always had a fascination with airplanes as a little kid...so rather than wait to be drafted I joined the Army Air Corps; at that time they did not have the Air Force. I went up to the post office in Butte and signed up.*" Soon after graduation he shipped out to Wichita Falls, Texas. After completing extensive stateside training at several locations, which included pre-flight school, navigator's school, gunnery training and countless combat crew training flights, he graduated to become a B-17 navigator. He then was assigned to an Eighth Air Force base in Grafton Underwood, England. While stationed there he flew 29 harrowing combat missions as a navigator for the 384th Bomb Group, 545th squadron over the skies of Europe during the war.

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To give you an idea of the intensity of these missions they were completed in just 60 days before Ed turned the ripe old age of 20. On Ed's final mission to Pilsen, Czechoslovakia on April 25, 1945, he would be the lead navigator in the last group of planes to drop bombs on this, the Eighth Air Force's last strategic mission of the war. He noted in his mission log that the bombs were away at 11:11 am. Ed and his crew were credited with dropping the very last bombs in Europe against Germany during the war. Then, navigating a brand spanking new, never been in the war B-17 back home over the Atlantic at the end of hostilities, this would be Ed's last ride in one until this past September 2nd. Sixty three years, 5 children, 9 grand children, a couple of college diplomas, a successful business career and retirement since last flying in one.



THE COLLINGS FOUNDATION, a nonprofit group, flies this and other planes as sort of living history lessons. Almost 13,000 B-17s were built during the war but the Foundation's *Nine-O-Nine* is one of only twelve flying today. At each of the over 130 stops they make each year, it becomes a pilgrimage for veterans, especially for the ones who flew in them. These stops also attract aviation enthusiasts, current military members and the curious general public. These planes are a poignant reminder of the sacrifices that all of our veterans have made throughout history for this great country. On September 2nd 2008, this B-17 and three other World War II planes flew in from Republic Airfield to Stewart Airport and were on display for the next couple of days to the general public.

Orchestrating this reunion of the plane and navigator were the Collings Foundation and Pacific Aviation International's president, and Ed's son, Mark Ladendorff. Pacific Aviation generously sponsored the stop of these war birds at Stewart near Newburgh, New York. I had the privilege and honor to ride along with Ed and his daughter, Dana Asrejadid, for this special '*Flight of the Navigator*'.

OUR FLIGHT: The day started, as prearranged, by assembling on the tarmac at Republic Airport on Long Island. The flight from Republic Airport would take us over Long Island, Connecticut, up the Hudson River Valley and into Stewart with a total flying time of about one hour on this warm, clear, late summer day. Cruising at about 160 miles per hour and at an altitude of approximately 2,000 feet it would provide a peaceful panoramic view of the countryside below, much different than what Ed and his crew members experienced during the war.



Preparing us for our ride, the Colling's personnel conducted a preflight briefing just outside the plane. Safety issues, the flight plan and other items were discussed. Not needing instructions like the rest of us as to how to enter the plane, Ed was the first to board. Grabbing the top of the waist door opening, he literally launched himself feet first into the plane. This maneuver was given little

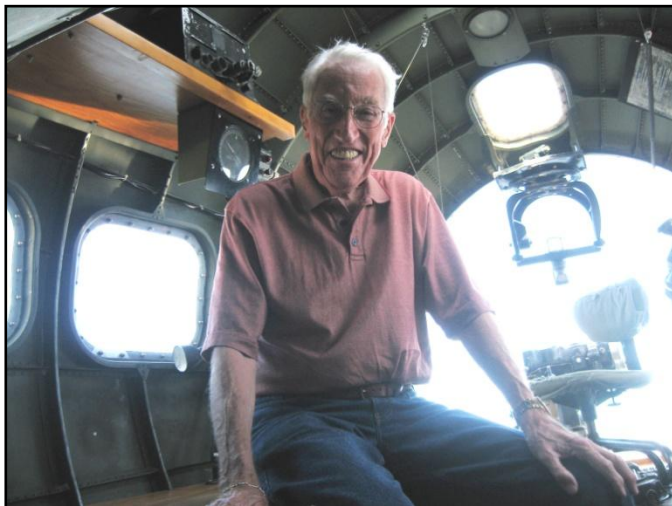
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thought on his part, like he had done many times in the past.

Being a spry 83 years old was only part of reason he effortlessly entered the plane. Before his feet even touched the floor of the plane it seemed like a transformation had taken place, flashing his consciousness back to 1945. Was it adrenalin kicking in, the plane rekindling his long past experience or could it be that he had entered the realm of time travel? There certainly was no wasted motion with him climbing aboard and a huge smile broke out even before he was entirely in the plane. This smile would not leave the entire three days he would be at the event.

Once in the plane the metamorphosis began, you could see it on Ed's face. He had the look of someone who had come home after a long trip, an expression of contentment of being some place that one is accustomed to, somewhere comfortable. Ed's other senses were heightened as well, as he remarked...*"how familiar the smell of aircraft fuel and hydraulic fluid was and that taste of metallic aluminum you get in your mouth from being surrounded by metal was to my senses, like it was just yesterday that I climbed aboard for a mission."* Add to this the roar of the four huge supercharged 1,200 horsepower 9 cylinder Wright Cyclone engines pulling this monster machine, and us, into the air and you can understand the time warp it was having not only on Ed, but all of us with him.

During takeoffs and landings we were required to remain seated and buckled up, but once up in the air we were free to move about the plane. As our flight leveled off Ed wasted no time in making a bee-line to his old position up front on the left side of the plane just behind the Plexiglas nose bubble. Ed, now the energized 19 year old, was crawling effortlessly on his belly through the small opening under the pilot's feet to regain his old battle station.



Up front Ed instinctively took inventory of the equipment and his old environment. The narrow small piece of wood that served as his desk was fixed on the left side at the rear of the nose compartment where it should be, but his chair was missing. It was removed for the sake of carrying passengers on the *Nine-O-Nine*. Although much of this gear was not on board today he was extensively trained to use ones such as the GEE Box, which is a simple (by today's standards) television receiver to acquire navigation signals, the sextant

for celestial navigation, which was the sole method for over the water navigation and the gyro-magnetic compass. After getting the necessary data from these navigational tools on a mission he would hunch over his desk with his E-6B computer (not a computer as

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we know but it is a complicated circular slide rule). With this instrument Ed would calculate dead reckoning computations, wind drifts, conversions for true wind speed & altitude and change statute miles into nautical miles. Then with his maps and charts spread out on the desk he would determine the plane's position and plot the plane's course and radio it to the pilot. Situations could change rapidly and this was a never ending process as the navigator needed to know the exact position of the aircraft at all times. Sitting now up front in his old position Ed felt as if *"I could slip on a set of headphones and give the pilots directions... I didn't appreciate how much this flight would take my memory back to that time... the roar of the engines... like I never left."*

Ed and the bombardier shared this space up front, which is about the size of a small closet, along with the Norden Bombsight, his navigational equipment, the machine guns, their ammunition boxes, oxygen bottles and other equipment. Dressed for battle in protective gear for sub-zero living (layers of clothing including an electric heated suit, a heavy jacket and gloves) as well as a flak jacket and parachute for a mission this space shrinks even more. Surprisingly, it doesn't give one a sense of being confined as you might expect, as the plane's side windows, the front machine gun side windows, the astrodome and the front Plexiglas bubble gives it more of a greenhouse feeling. This greenhouse effect however, had its liabilities, as it gave Ed a front row seat and a view to the violent drama that was played out 25,000 feet in the air. On the floor was the trap door used to exit the plane, either casually after a long mission or in the air where it would serve, if needed, in an emergency situation. On either side of the plane were the two forward facing the 'cheek' 50 caliber machine guns. These were the navigator's responsibility to fire when needed, in combat. Instinctively lifting his eyes up, Ed peered through the small Plexiglas astrodome in the top of the plane where he had done so many times before on his missions. This was, as he explained to his daughter, is how he *"would get celestial reckonings that aided in navigating when landmarks on the ground were obscured as a result of cloud cover or we were over water."*

Hearing some of her Dad's stories growing up, Dana was still not totally prepared for her flight experience. Surveying the space her father would inhabit during his missions she kept thinking *"with the amount of time he was in the plane this is a small space"*, even though Ed never considered it confining or small. Up front the noise of the four engines was nothing like what she had experienced on one of those small commercial commuter planes, *"it was much, much louder."* Finally, she now had a profound understanding why her father *"was hard of hearing because of it."* She was *"overwhelmed watching him... thrilled to be with him on this first flight (since the war)... this is history. It was like an out-of-body experience... I was living vicariously*



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through him, I could feel his excitement... I kept thinking, this is history, this is history.” No doubt, the Father/Daughter bond grew even closer on this day.

What was the war experience like for Ed?

ED PUTS THE NAVIGATOR’S JOB IN PERSPECTIVE: *“We not only had the responsibility to constantly direct the plane but we had to log all mission happenings such as making notes of when and where the flak burst hit, the number and type of flak... type and number of enemy fighters, lost bombers, log weather conditions and making notes of all of the crews observations. We were also responsible for firing the two front cheek machine guns... This made for a busy time... At the end of the mission once on the ground all of the crew would be interviewed by the intelligence officer... but the navigator was key, that’s where the intelligence officer got most of his information... Navigators had to record everything that happened on the mission... we would go to the debriefing room...they would give us a little glass of cognac, I guess to loosen us up a bit.”* Combine all of this with an hour or so in planning and preparing for the mission before the plane even left the ground and it is no wonder that some would say the navigator had the worst strain of all the crew in having to think all the time.

ON HIS WAR EXPERIENCE: *“It was a wonderful experience... Like one of those experiences I will value forever but would not want to do it again. At 18 I graduated from high school, at 19 I was leading bombers over Germany with the biggest responsibility of bringing us home... like my sixth mission to Hannover, it was well-protected and we knew it would be heavy with anti-aircraft flak... we had lost two engines.... we got separated from the formation and flew back alone... Heading into Germany instead of home (England)... we were in a fix, I was in a fix. Everyone in the plane was waiting to hear what I had to say... The navigator was the key person... either you make it home or you didn’t make it home. I was nervous, scared and you know a 19 year old is not really a seasoned person... For the first time I really prayed to God, a personal prayer... If you can help me out of a mess, help me out of this one. Then as I reflected years later I forgot about God, I forgot about everything and I sat down at my desk, laid out my charts and figured out how we would get there, gave the pilots the headings and we started for home... 19 years old, I did not think I was 19, I thought about the job I had to do... it was instant manhood.”*



ON BATTLE FATIGUE: *“At one point we flew 5 missions in 5 days. That was rare. They didn’t put crews under that kind of pressure. I was tired, all of us were tired because... like the last mission we were up for 10 hours... and so of that 10 hours in the air you were on oxygen for 8 or 9 of those hours... things (planes) were not pressurized and oxygen burns up your energy... at 25,000 feet you are on pretty much on pure oxygen.... so physically you can get tired. I didn’t feel anything but physically tired and*

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after the 5th mission, the 5th in a row, the flight surgeon stopped by our tent... we just talked about... everything and anything and after he left word came down we would stand down that day. He judged we did as much as we could do... As for combat fatigue I could see how the ground guys could get combat fatigue but we would have a break. You would go on a mission then have dinner... go to the officer's club or go to the Foxy Cinema for a movie... back to a normal life. That was not true for the ground guys - they were out there all of the time."

HOW DID THE WAR CHANGE HIM? He recounts his experience on February 25, 1945, his very first mission, when their bombs were dropped not on the intended railroad marshalling yards but in the center of the nearby German town of Ulm, probably killing citizens. On return to the base that day Ed thought "Gosh what a *terrible thing war was, killing a lot of innocent citizens... if this war, I don't like it. This is a terrible thing. Well the next day we went to Berlin. Berlin was an infamous for being a difficult target because they put up such heavy flak from the antiaircraft guns to guard the city. We encountered heavy flak and almost took a direct hit... When the shell burst it rocked the plane, you could feel the concussion. The plane did what you call 'tin canning' where the pressure from the exploding shell moves the plane in and out... Lots of pieces of flak hit the plane. A piece of shrapnel (flak) came through the front Plexiglas nearly hitting the bombardier in the head missing him by inches and me by about a foot before*



Ed (standing, left rear) after his final mission to Pilsen, Czechoslovakia

becoming lodged in a heater pipe just above my head... There was a big ragged hole in the Plexiglas with pieces of it all over the plane... After this I did not worry about the missions and killing people. I realized they were trying to kill me so I had to do the reverse. That's war! - Kill or be Killed." Yes, war would change him - the reality of war, a loss of youthful innocence and growing up in a hurry for this 19 year old.

ON DYING: "Kind of shut it out of your mind... Didn't pursue that. Did not dwell on it, did not want to think about people getting killed. You

really did not want think about that every time you went up that you might get killed... you were shot at every time... You knew there was going to be opposition every time you went up and you might get it. Maybe I didn't want to think about getting killed... I don't know why... really didn't even go there."

Hostile fire from the enemy was not the only danger in losing one's life. Many missions put hundreds of planes in the air. Once in the air they had to be organized and flown in close formation for many hours. Mid-air crashes were too frequent events. It put great demands on the navigator to know his job, and as Ed said: "Navigators were busy... *maybe this is the reason I didn't have time to think about other things.*"

Planes heavily laden with the weapons of war brought about another hazard as Ed remembers. "There was one plane called Paula. It had a difficult time getting off the

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ground. I don't know why. It didn't have the power. We flew it one day and it barely got off the ground. The pilot had to bounce it to get it off the ground... we were skimming the tree tops, you could even see them in the dark. A couple of days later another crew was flying in Paula and it did not get off the ground and of course it crashed and killed the whole crew. Dying, you didn't pursue that, didn't have that mentality." It is obvious that the stress associated with facing death on a continual basis needed to be managed to protect one's own sanity.

ON WHAT THIS COUNTRY MEANS TO HIM: *"World War II brought this country together like no other war in history has or probably ever will... It influences your outlook on this country. Most, if not all, of World War II veterans are patriots... When I am in a foreign country and hear the Star Spangled Banner I choke up... When I see the flag I get tears in my eyes... I know what it means, I know what it means, to live in Freedom."*

ON HOLDING ANIMOSITIES TOWARD OUR OLD ENEMIES: *"After the war, I ended up in New Jersey working for a company... I had a friend of German descent... He had a distant relative my age that was moving to New Jersey... We rented a place and three others who were also Germans moved in... us five guys living in the house. One fought in the (German) Navy, one fought in the (German) Army (15 years old), and the other in the Luftwaffe (German Air Force) which managed the anti aircraft guns. I went to Berlin three times and he manned one of those flak guns. We figured out that Andres - that is his name - on one mission he was on duty and in theory and probably much more in practice, he shot at me and I tried to bomb him... ten years later we are living together and to this day he is one of my closest of friends."*

Upon returning from war Ed would land on American soil for the first time at Bradley Field in Hartford, Connecticut on May 29, 1945, his 20th birthday. Since enlisting as a teenager in these few short years that he was away he risked his young life without hesitation for his country, contributed immensely to the war effort and returned as a man. This seasoned navigator would soon return to his home state of Montana known as 'The Big Sky State'. He was home at last after conquering even bigger skies, those violent and hostile ones over Nazi held Europe, having gained maturity beyond his youthful years.



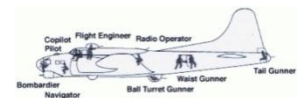
Impressionable young men thrown into the most unimaginable circumstances, the events that surrounded them played a pivotal role in shaping these youths into men. What aspect made a good navigator? A good navigator, given information and data, needs the ability to make sound judgments in a very limited amount of time in a forbidding and hostile environment. Ed's record shows he was a very good and proficient one. Facing these challenges early in his life, beyond what most of us rarely do, he chose to apply these learned lessons to guide his life's journey. Experiencing these horrors of war and seeing its consequences Ed chose not to dwell on them or carry them as baggage later in life. He chose to listen to his own inner voice, his own human spirit. The human spirit to take things, however bad they might be, in his stride and deal with them head on. It is the same spirit that wants to, or strives to make

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things better for one self and those around you. It urges us to keep fighting on no matter how bad the odds are stacked against us. Spend a few minutes with Ed and this spirit is so very apparent. It is obvious that this positive attitude has fostered a basis for living his life. It is not surprising that to this day he is a sought after motivational speaker.

Flying along with Navigator Edmund Ladendorff, Jr. in the B-17 I expected to watch history as these two old friends met again, but instead, I had the distinct feeling I was actually made part of history with them. Not true in the literal sense, but as Ed's memory allowed us mentally to travel back in time; it sure seemed like I was riding along with him, navigating those skies over Europe.

You don't have to ride in a B-17 or walk the battlefields where veterans fought to transport yourself back in time. Just take some time to talk to a veteran. He or she is 'living history' that will vividly paint a picture that will bring their experiences back to life. Intently listening to their stories will start to make you wonder if you have indeed been a time traveler. At the very least you will be enriched with a true sense of this history. My flight with the navigator was over for that day, but I find that as I revisit this experience in my mind, it is hard to imagine that I didn't share some of Ed's experiences first hand. Time is what keeps everything from happening at once but for those moments in flight with the navigator, my present time seemed to collide with his past, and for that I am sincerely thankful to Ed.



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