

July 2010

Experimental Aircraft Association Chapter 33

A monthly publication of the Dr. Alexander M. Lippisch Chapter of the Experimental Aircraft Association, Cedar Rapids, Iowa.

Editor: David Koelzer

EAA Chapter 33 Officers

President: David Miles
585-703-2485
david.miles@mchsi.com

Vice President: Denny Hodge
319 373-3465
dennyhodge@mchsi.com

Secretary & Newsletter Editor:
David Koelzer
319-373-3257
david.koelzer@mchsi.com

Treasurer: Larry Wood
319-395-9348
elwood140@aol.com

Flight Advisors:
Dave Lammers 319-377-1425

Technical Counselors:
Tom Olson 319-393-5531
Ron White 319-393-6484
Marv Hoppenworth 396-6283

Young Eagles:
John Anderson 319-310-7089
Connie White 319-393-6484

Board of Directors:
Tom Olson
Randy Hartman
Tom Caruthers

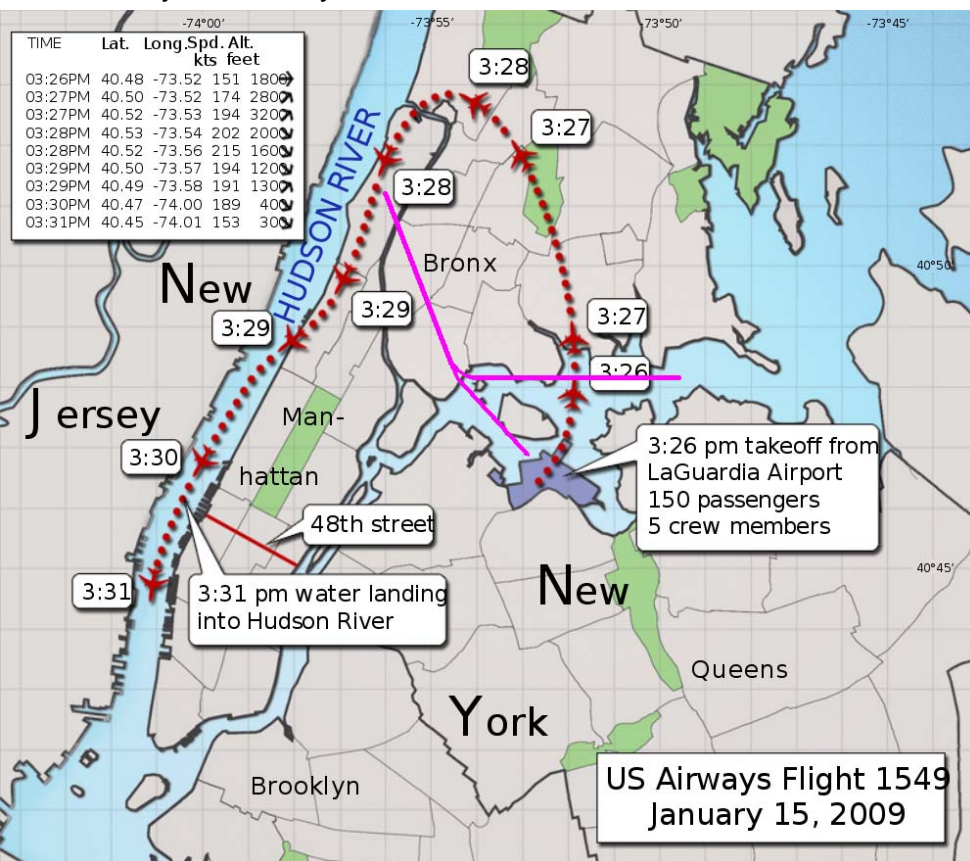
www.eaa33.org

Read Back - Fly By Wire

By Jim Meade

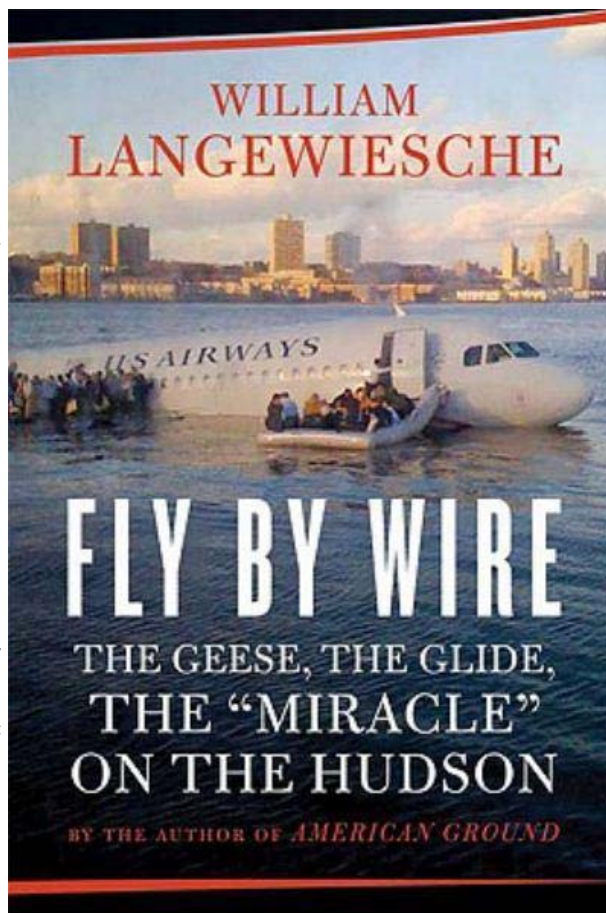
This book may confuse you, make you mad, educate you or introduce you to a different view of the world. William Langewiesche (pronounced:long-gah-vee-shuh) is a writer and pilot with six books to his credit. He is a former professional pilot with more than 10,000 hours who is reported to fly his own Husky A-1B bush plane. (A recent search of the FAA data base does not show him owning a Husky, but he is listed as owner of a Beech G33, 9479Q.) Previously the international editor of Vanity Fair, he lives in France. His father, Wolfgang, wrote the classic Stick And Rudder, which Williams says he has never read.

Fly By Wire, The Geese, The Glide, The Miracle On The Hudson, to give its full title, was published by Farrar, Straus and Giroux, New York, in 2009. It is 193 pages of nice sized type with wide spacing, so it's easy for old eyes to read. The book is divided into three



parts: Gear Up, which introduces the scenario and key persons and takes us as far as the beginning of the glide, Fly By Wire; which talks at length about the control features of the A320 Airbus, and Survival; which focuses on crew resource management, Sullenberger's decision making process, the scene in the passenger cabin and the escape.

Langewiesche makes it clear that he believes Sullenberger flew the plane nearly perfectly. He attributes that to Sullenberger's personality, training and experience. At the same time, he debunks the idea that Sullenberger is a hero. Langewiesche claims that Sullenberger doesn't believe he is a hero and within the airline and charter jet community many pilots feel they could and would have flown as well. (In a book about the World Trade Center, Langewiesche also debunks the idea that the New York Fire Fighters were heroes with some exceptions, so his assessment is consistent.) In fact, he praises Sully more for what he did not do based on his decision making process than for his piloting actions. In spite of the fact that in some circumstances, simulated recreations of the flight could land back at LaGuardia, Langewiesche believes that Sullenberger made the only acceptable choice to land on the Hudson. He makes the case that Sullenberger is a very self-controlled and calculating individual. He points to Sully's careful choice of words in his public appearances and testimony and his welcoming of income opportunities related to the incident. He observes that many airline pilots have or are seeking additional income.



One part of the book that I personally disliked was the several occasions of what I consider gratuitous vulgarity. I'm not talking about quoting people in distress or even rough talking people going about their lives. I mean that in making a point, Langewiesche uses some of what I consider very vulgar language for no reason that I can see other than shock effect. Do some people think this is how the rest of the world talks? After a career in the U.S. Army, I've heard nearly all and used quite a few bad words but I don't expect to see them drop out of the air in the middle of what seems at first to be a serious book about an air crash. Maybe I'm old and out of touch, but I'm not changing. I was dismayed but not shocked at the language but I was offended at where and in what context I found it.

The main focus of the book is Langewiesche's discussion of the fly by wire control features of the A320 Airbus. He writes of the design philosophy differences between Airbus and Boeing - differences that fundamentally reflect how the companies think of the pilot as ultimate decision maker and authority. Langewiesche believes that the best pilot is dutiful and functional with the characteristics of an avid golfer or hobbyist who painstakingly restores antique cars. A pilot must be able to suspend belief and trust implicitly in instruments in a way we instrument rated pilots have been trained to do. Given this view, it is not surprising to this reader that Langewiesche agrees with the Airbus philosophy of computers that override pilots.

If there was a miracle over the Hudson, Langewiesche believes it is the design of the A320 control system, which he says was overseen by an engineer, former French test pilot and fighter pilot named Bernard Ziegler. The A320 will not allow the pilot to exceed certain parameters. For example, if you sharply pull up on the side stick, which has no tactile feedback, the airplane will rapidly pitch up but to no more than 2.5g. If you force the stick forward, the plane will nose down but not exceed 15 degrees negative or -1 g before gently lifting. Engine control is tied to some aspects of the flight envelope, so if you were flying slowly, nose up and the plane wanted to nose down to avoid a stall but you kept the stick back, the engines would add thrust. The system is designed not to overcome expert pilots such as Sullenberger, though it will, but to prevent mistakes by inexperienced or poorly trained pilots. The case of the Canadian turboprop that stalled in Buffalo, New York, killing 50 people is cited. It is claimed the pilot misinterpreted stick shaker indications and applied the wrong control inputs.

According to Langewiesche, Airbus and fans of fly by wire were hurt by Sullenberger's apparently deliberate avoidance of discussion of the effects of the airplane control features in his testimony and public discussions. The author implies that Sully would not find it financially rewarding to deflect any hero worship from him and give it to an airplane that many despised.

In an interview I read, William Langewiesche considers himself a writer first and a pilot second. I wonder to what extent his journalistic goals and ambitions affect how he puts his aviation skills to work in his writing? The book at first appeared to me to be a pastiche, a literary term for a jumble or hodgepodge. What my mother would have called a dog's breakfast, which means a mess or muddle. Then, I thought that it was a thrown together assortment of perspectives influenced by the magazine style of the author, that is, short pieces pulled out because they were individually interesting rather than because they made any sense together. Kind of like watching the news on TV - you see a lot of sound bites but when it's all taken together all you get is indigestion. On reflection and after looking at some of Langewiesche's other writing, I think he sees the book as a metaphor for life. He sees that some exceptional people can fly on their own but others need limits and constraints to keep them out of trouble or save them if they get themselves into trouble. Part of the book, in my view, reveals Langewiesche's disdain for popular American culture and its anti-intellectualism. It's preference for the Jimmy Stewart character of Chesley Sullenberger over the eminence grise of Bernard Ziegler. Americans have a distrust of unseen "know-it-all" authority as evidenced by the man behind the curtain in *The Wizard of Oz*. However, every recent U.S. fighter plane design relies on and could not fly without fly-by-wire technology and philosophy.

If you are looking for a different, eye-opening perspective on the miracle on the Hudson, I recommend this book, especially if you will use it as a point of departure for more research. If you are offended by bad language or don't want to see the emperor with no clothes, then don't bother. If you read it, you are likely to be irritated with the author, interested in the A320 design and still appreciative of Captain Chesley Sullenberger, whether you believe he is a cool, manipulating personality or a modest, superb pilot. I still have mixed feelings about the book as a piece of literature, but Langewiesche did make me think about how airplanes are designed and flown. But, if he likes the Airbus, why is he flying a Husky?

For more background on William Langewiesche, including a short interview he provided on his views on the incident, see *Vanity Fair* magazine which has a number of further links to explore. If the following link does not work, search in *Vanity Fair* under his name.

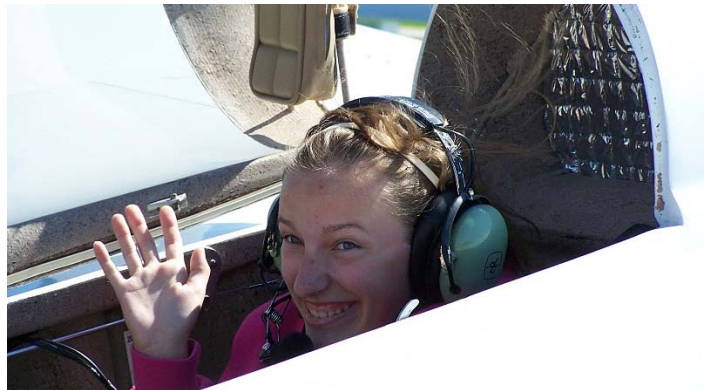
<http://www.vanityfair.com/search?query=langewiesche&qt=dismax&sort=score+desc>

Young Eagles Washington Airport - June 6th, 2010

By Denny Hodge

<http://picasaweb.google.com/N288RV/YoungEaglesWashington20100606#>





FOR SALE - N2771L 1967 Skyhawk - \$32,500

Contact: Dave at 585.703.2485

(email: N2771L@mediacombb.net)



Airframe TT: 3922

Engine SMOH: 821.6

Annual: due May 2011

Transponder/Altimeter
check: due May 2011

Complete set of
logbooks

Based at CID

- > Rebuilt Continental O300D Engine by **America's Aircraft Engines** – Overhauled to **NEW** fits and limits SMOH: 821.6
- >Unleaded Auto STC for airframe and engine
- >Custom interior by AirPlains
- >Panel mount Garmin GPS 150XL
- >Avionics Master Switch added
- >Garmin GMA 340 Audio Panel
- >King DME
- >King KT76A Transponder
- >New Digital Super Clock(SC-5) by Electronics International
- >Wings completely stripped, primed and painted. Corrosion protection.

Last Meeting

Due to a last minute schedule conflict we were not able to visit Dave Lammer's RV-10 project. We hope to reschedule again soon. In stead we met at the CID admin building and got a briefing on the current constructions project taking place over the summer at the Cedar Rapids Airport. We also got to listen to Don Thompson talk about his experiences flying B-17's during WWII. It was a real treat expercially with the upcoming Aluminum Overcast visit to Cedar Rapids.

Next Meeting – Family Cookout

Our July meeting will be held at the Marion Airport on July 9th, from 6:30 to 8:30. We are inviting everyone to bring your family, enjoy an evening of hangar flying, maybe review a project or two and make some new friends. Members are encouraged to bring their own drinks and a dish to share – the chapter will provide meat and buns and the airport will provide the grills and picnic tables. Hopefully some of you will fly over so we have some planes to look at. So that we can get a tentative count for meat, please RSVP to dennyhodge@mchsi.com.

Living History Coming to Cedar Rapids

July 20 and 21 EAA's restored B-17, Aluminum Overcast, will be on the PS Air tarmac at the Eastern Iowa Airport. There are less than 12 of these historic B-17s still flying. Don't miss this opportunity to see and touch a piece of history. Ground tours will be available each afternoon for \$5 (\$15 per family). Flights are available also with discounts for EAA members. You can schedule your flight by calling 1-800-359-6217 or visit www.b17.org. For more details, or if you'd like to help by volunteering at the event, call Denny Hodge at 373-3465 or email at dennyhodge@mchsi.com.

Message from President - David Miles

I regret to inform everyone, I am going to step down as president effective July 31st. That is the expiration date of my EAA membership. I am not sure if I am going to renew it or not. I actually took over Todd Millard's 2 year term which actually expired Dec, 2009 so I have been acting president since then. I have some other things going on in my personal life that need my attention. I am also putting my aircraft up for sale. I've owned it for 11 years but its time to move on. I am sure am going to miss it.

Current Vice President, Denny Hodge, has agreed to take over the duties of president subject to approval from the Chapter membership. We will hold a special election at the July meeting.

[Editor's Note] Many thanks are due to Dave Miles for his work for the Chapter as President. And I am sure I speak for all when I wish him good luck in his new endeavors and hope things work

Fly Market

FOR SALE the Lycoming engine I use to have in my Long ez is up for sale. It is a 0290 G 125 HP with 1900 hours on it The engine is short a fuel pump and Mags. It has an extra jug with piston and rings ready to install. It has a new set of rings for the overhaul and logs with the specs when first built and history while in the Long-ez. Asking \$1000 or best offer. Ron White phone 319-393-6484

Chapter 33 Calendar

July 09 6:30pm - 8:30pm Chapter Meeting: Family day and cook-out Location: Marion Airport

July 10 Zangger Vintage Airpark (2VA), Fly-in supper, Events begin 2pm Supper 5 p.m. – 7 p.m. Larchwood, Iowa

July 20-21 Chapter 33 will host the B-17 "Aluminum Overcast" at Cedar Rapids

August 03 7-9pm Tuesday Chapter Meeting: Speaker CarolAnn Garratt, Flight Around the World, Alexis Park Inn and Suites 1165 S. Riverside Drive, Iowa City



In The July 2010 Issue...

Read Back - Fly By Wire, Young Eagles KAWG



Experimental Aircraft Association
Alexander M. Lippisch Chapter 33
c/o David Koelzer
2930 Baker Street
Marion, IA 52302
david.koelzer@mchsi.com