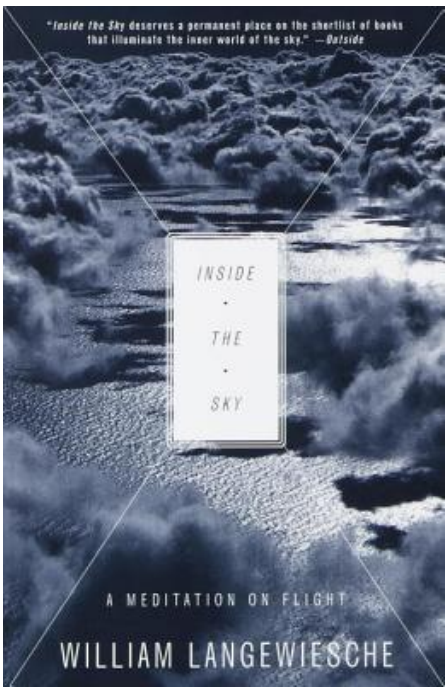

Inside the Sky: A Meditation on Flight

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William Langewiesche's life has been deeply intertwined with the idea and act of flying. Fifty years ago his father, a test pilot, wrote **Stick and Rudder**, a text still considered by many to be the bible of aerial navigation. Langewiesche himself learned to fly while still a child. Now he shares his pilot's-eye view of flight with those of us who take flight for granted--exploring the inner world of a sky that remains as exotic and revealing as the most foreign destination.

Langewiesche tells us how flight happens--what the pilot sees, thinks, and feels. His description is not merely about speed and conquest. It takes the form of a deliberate climb, leading at low altitude first over a new view of a home, and then higher, into the solitude of the cockpit, through violent storms and ocean nights, and on to unexpected places in the mind.

In Langewiesche's hands it becomes clear, at the close of this first century of flight, how profoundly our vision has been altered by our liberation from the ground. And we understand how, when we look around, we may find ourselves reflected in the grace and turbulence of a human sky.

Inside the Sky: A Meditation on Flight Details

Date	:	Published June 29th 1999 by Vintage (first published 1998)
ISBN	:	9780679750079
Author	:	William Langewiesche
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Genre	:	Aviation, Nonfiction, Writing, Essays, Science, Technology, Travel

From Reader Review Inside the Sky: A Meditation on Flight for online ebook

Anna says

50% wonky stuff about the technical aspects of flight, 50% details about plane crashes = i loved it

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Jo says

Picked this up on a whim at a library book sale & enjoyed it immensely. While it is offered as a meditation on flight, about airplanes, pilots and air travel, I found much of it applicable to daily life. The chapter on our inability to feel the bank/turn struck me particularly as a metaphor for our inexplicable inability to know when we are making harmful choices or taking a painful turn in our personal/social lives. Other areas of Langewiesche's investigation were also illuminating. So, yes, it's a fascinating and well-written book about flight, full of history, information, theory and practice. Also thought provoking at other levels.

Jim says

Fans of books about flying and flight should reach unhesitatingly for this collection of meditations on the art and science of those magnificent men in their flying machines. Which sometimes crash and burn in a fairly scary way, as some of these articles relate.
Written with precision by a journalist and pilot, I dropped the book a star because the subjects and the narrative are a bit patchy from article to article. Some are gripping and informative while others had me stifling a yawn and wishing the author would move things on a bit. But, I think, in my Top Ten list of books about flying, I think this collection would get a listing. (And I am really looking forward to read Langwiesche's account of the airliner that hit a bird strike and made an emergency landing on the Hudson!)

Cathi Davis says

Interesting, as always, providing beautifully written descriptions of modern air flight, but descending into a battery of chapters on aviation disasters. But he makes a point not often seen in the press, flying is inherently easy and mundane and mistakes are constantly being made and adjusted for. He upends Murphy's Law, telling us that it is wrong--and that what actually happens is that what can go wrong usually goes right. And that when this happens there is "a collective relaxation of technical standards...the normalization of deviance". That leads people to accept greater and greater risk. In fact, to not even recognize it as "risk". (FYI Paul Kedovsky wrote a fascinating New Yorker article on deviance normalization as it related to the VW emission brouhaha.). Anyhow, I enjoyed the book, and Langewiesche can write about dirt and I'd probably read it.

Andrea says

This book was absolutely fascinating! I would caution however this is not a book for those who have a fear of flying. I love going on airplanes so for me this was a great book and all of the information was of great interest to me. I love this particular quote "Flight's greatest gift is to let us look around." I think that the author who has been a professional pilot wrote about it with a heart and a depth that only someone who has experienced the sheer passion of flying can write about it. I have one other quote that really applies to more than just taking flight " There is such a thing as being too careful. If you give into your fears, if you don't gently push against them, you will turn around too soon. And the next time you fly you will turn around sooner. Eventually you will turn around before takeoff, which is the unhappy fate of some pilots: to choose finally to never fly again." (p.126-127) Amazing how we can apply this to our whole lives. A Meditation On Flight, becomes a meditation on life and how we live it! I now want to spread my wings and fly! I will be reading more of Langewiesche's books. I have read articles he wrote for Vanity Fair and I am so glad that I read this.

Jacob Maurer says

Yes, just finished this last night!
Two of my favorite things right here; American Airlines and Contemplation.
But, in all seriousness this book was so lovely and written all in all,
Through a very spirited and dynamic motion.
I really did feel like I WAS there. It was so fluent too understand,
even though my dad (being the pilot he is) had to explain a few things...
Just awesome, made me realize I have passion for more than what's inside my own comfort zone.

Lara says

I started reading this on the airplane last time we flew out to San Diego, so it's taken me awhile to get through it. It consists of a number of essays about flight, and partly I found it really interesting and beautifully written, while partly I feel like Langewiesche has a tendency to go on longer than necessary, and I almost always found myself losing interest before he got to the end of each essay. But I mostly enjoyed this, and would be interested in trying a full-length book of his at some point.

Dana Stabenow says

Langewiesche (son of the author of Stick and Rudder) explores the art and craft of flight in first person from the left seat, the view, aviation history, banking, accidents, weather, the FAA, and the tower. "Flying at its best is a way of thinking," he writes. "Because of that, once having left the earth's surface, people never again quite return to it."

On banking, he illustrates an integral movement of flight by using analogies anyone can understand

> The bank is a condition of tilted wings, and the turn is the change in the direction which results. The connection between the two is inexorable: The airplane must bank to turn, and when it is banked it must turn...The miraculous part of the maneuver is that the turn has an important balancing effect on the bank that causes it. The same effect, in cruder form, steadies cars on banked roadways, and bobsleds on the vertical walls of icy tracks. The difference in airplanes is that as the bank angle increases, the turn also quickens and by doing so automatically delivers a balance that is perfect. Bicycles react similarly: When they start to topple, they turn and thereby keep themselves up. Airplanes are even steadier. They operate in three-dimensional space and do not rely on tires to keep from sliding to the side They will never capsize no matter how steeply they are banked.

On aviation history

> the first detailed account of the Wrights' success appeared not in the New York Times or the Scientific American, but in Gleanings in Bee Culture, a little magazine for beekeeprs published in medina, Ohio.

I immediately cut-and-pasted that into an email to Laurie King, saying "Perhaps Holmes subscribes?"

On the crash of a Boeing 747 one night in Bombay

> I refuse to turn away from the thought that the airplane's lights illuminated the ocean's surface at the last instant that the surface appeared to surge at the airplane from somewhere above, and that the flight engineer flinched as the water exploded through the cockpit. It does not help to be polite about these details. The tangible consequence of any serious failure in flight can be just such an unstoppable insider's view.

I think all good pilots are unflinching realists.

Langiwiesche the pilot tests his skills by flying through storms. On purpose.

> the secret of good storm flying is to stay low, in slow and vulnerable airplanes, and to resist the pursuit of performance. By the standards of practical transportation, therefore, it is an artificial problem. Mother weather lies within the first 20,000 feet of the ground, where gravity compresses the atmospheric mass into a dense soup, and above which the airlines for economic reasons as well as safety and comfort must climb and cruise. Engineers have designed away the storms, leaving professional pilots to fret about the kind of unimportant turbulence that startles their most anxious passengers.
>
> That is the allure of storm flying. There is no graduation from the experience, only an end to each flight. The techniques we practice involve a certain calmness under pressure.

Good for Langewiesche (and Sullenberger, who spent his off-time flying gliders). I'm happy at 39,000 feet, myself, at least in the big planes where I don't know the pilots.

He gives us a vest-pocket history of meteorology

> Pity the forecasters. Of all the sciences, theirs is the most public. Here is a short version of its evolution. Emergence from the sea came first, followed by speech, followed by talk about the weather. Then came sacrificial rites, followed by the idea that peasants might pay a tithe to priests to keep the sky in order. Aristotle...wrote Meteorologica, the first unified weather theory, around 340 BC. Two thousand years later Rene Descartes doubted his methods and applied new rigor to the ignoring of God...Credit Galileo with the thermometer, his student Torricelli with the barometer, and French intellectuals in general with the discovery that atmospheric pressure rises and falls with weather and altitude. Acknowledge various Europeans for their wind and humidity instruments, for their discoveries in physics, then jump to the mid-1800s, to places like Ohio, where the telegraph suddenly allowed news about the weather to travel faster than the weather itself.
>
> National governments now set up weather services to collect observations and issue forecasts. At last a modern relationship could develop between the weather wizards and the public they served. It was a terrible shock...

I am reminded of Doris Kearns Godwin's Team of Rivals, where Lincoln has hired all the men who ran against him for office, all of whom are doing their level best to stick it to him in one way or another. He would have been well justified in blasting the hair back on any or all of them, but the only man in his administration he looses his temper with is...the Army meteorologist.

In chapter 6, "Slam and Jam," he writes about controllers, which is alarming and reassuring by turns

> On a mechanical level, the most pressing issue that controllers face is a surge in air traffic without a commensurate expansion of runway availability."
>
> but then concludes
>
> > The resulting complications are measure in wasted fuel, money, and time -- but not in lives lost or even in levels of danger.
>
> Reassuring. Inside the Sky ends with a chapter on the 1996 Valujet crash in Florida, a calm examination of the cascading series of errors that cause it.
>
> In conclusion, Langewiesche writes
>
> > Flight's greatest gift is to let us look around, and when we do we discover that the

> world is larger than we have been told and that our wings have helped to make it so.

I'm an Alaskan, born and bred. I like to say I was on a plane before I was in a car, which is an exaggeration but not by much. Flying is basic transportation to Alaskans. I was raised in Seldovia, a tiny village on the south shore of Kachemak Bay. There is no road.

This forced familiarity with flight can lead non-pilots to regard small planes as nothing more than taxies. This book informs us otherwise.

Laurie R. King
Highest Duty: My Search for What Really Matters
Team of Rivals: The Political Genius of Abraham Lincoln

Steven Hull says

Langewiesche is an author, pilot, and journalist-correspondent. He is also a gifted storyteller. At first glance Inside The Sky appears to be a collection of seven essays on different aspects of aviation, each independent of the others and capable of being read and understood individually. It becomes clear to the reader early on that these are not mere essays, however, but rather personal devotionals to Langewiesche's true love—flight.

The author's style is reminiscent of Ernest Gann, particularly as Gann displays it in Fate Is The Hunter. Flight for both authors transcends gravity and the mundane lives of those who have never experienced the spiritual, perspective-broadening aspects of sojourns through the lower heavens. The essays introduce the reader to odd and attractive eccentrics, like John Jackson. Born to wealth and privilege, Jackson served honorably in combat in World War II, eventually settling in La Cienega, New Mexico. There he divested himself of privilege, wrote, worked menial jobs and generously gave of his time and money to the community. Flight for him was an awakening of the spirit, essential for understanding his fellow human beings and the wonders, and limits, of modern life.

Throughout the book Langewiesche's storytelling style, combined with the subject matter, pleasurably and

thoughtfully engages the reader. Not surprisingly there are bouts of the flight life sprinkled with catastrophe and fear, but the author is clear—on balance flying is liberating and not inherently dangerous. In the essay entitled “The Turn” he meticulously shows, for example, that the natural human reaction to poor visibility is to become disoriented and crash rather than rely on instruments to drive the flying. Ultimately this lesson is learned over time after much experimentation, the development of new technologies, and loss of life. Though still threatened by human hubris and disbelief, faith in technology over instinct in this instance has given humans the ability to fly in most conditions of visibility.

In “Inside An Angry Sky” Langewiesche best describes the joy of flying as he and his friends purposefully chase bad weather across the United States in a small private plane. Common sense, pre-planning and weather research make this type of flying exciting and not insurmountably dangerous, as one might first surmise.

The last two essays are devoted respectively to the man-made deficiencies found in the regulatory model that drives U.S. aviation and the tragic results of systems failures. In the first, the FAA is depicted as an overly bureaucratic, efficiency-driven political entity that values safety only slightly ahead of the condition of the carpet down a commercial airliner’s port aisle. In the second essay, the consequences of airline, human, FAA, and complex system failures lead to the May 1996 loss of ValueJet flight 592 and 110 souls—needlessly. This loss at first seems to be the result of obvious human mistakes that should have been avoided—mismarking hazardous materials and failure to follow simple maintenance procedures. Closer scrutiny reveals that the complex systems operating airlines are ‘complex’ beyond human understanding and control and therefore vulnerable to unpredictable events that may lead to destructive, unanticipated conditions. Every situation cannot be regulated or anticipated in the interest of flight safety—or any other ‘master’ be it efficiency, comfort, or profit. Individual common sense, curiosity, competence, loyalty to one’s responsibilities, and the instinct to survive are the most effective and ultimately the likely difference between flight catastrophe and survival.

Throughout these essays, Langewiesche’s love of flight remains undiminished. His effort to educate the reader about the beauty and inherently safe nature of flight are mostly successful. Despite the hard facts of the ValueJet incident, this book brings the uninitiated into the inner sanctum of flight. The prose flows smoothly and the author’s unshakeable optimism in the importance of flight for every person is convincing. Inside The Sky is a short, pleasurable journey into the world of flight and is just about the right length to be fully read and appreciated during a transcontinental flight.

Rayfes Mondal says

A wonderful collection of essays related to flying planes. Starts off with some early history and what it feels like to fly and ends with detailed analysis of some flying disasters including the space shuttle Columbia. Highly recommended for anyone that enjoys aviation

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Wayne says

Great Book...Meditations on/of negotiating through the sky in good and difficult times...as well as some issues that pop up in life. Interesting perspective from an experienced pilot and his thoughts along the way.

Lots of technical issues as well as some problems associated with humans travelling through the air and life....well worth reading.

Eric_W says

Langewiesche, one of my favorite technology writers, and author of the fascinating dissection of the ValueJet crash in Atlantic several months ago, is in love with flying. Inside the Sky is his attempt to convey that passion to non-pilots. He disdains commercial flight, which has reduced the experience of flying to being squeezed into tiny little seats, eliminates any sensation of flying, and suppresses the beauty of being able to see the world from a different vantage.

He's a little crazy, too. He and friends make a fetish of flying into storms, testing their ability to read the weather, avoid ice conditions, and to push the envelope, trying to gain an accumulation of experience. He has critics, of course. "I have always understood their concern. But the pursuit of such weather is an internal act, not a public one, and it is neither as reckless nor as arbitrary as it first may seem. It involves dangers, of course, but to a degree unimaginable to the critics, those dangers are controllable" His chapter recounting one such flight is fascinating, but a trip I prefer to make via page turning, never having been a fan of airsickness.

He writes about the business of air traffic controllers, noting that their job is not so much to prevent collisions - although that's the mystique that has grown up around them - but to get the most efficient use of airspace, which means actually getting planes as close together as possible. Since deregulation and the more prevalent use of hubs, airports have become extremely crowded. Helping the airlines to stay on time is a primary responsibility of the controllers. His comments on the antagonism between controllers and the FAA should be read by everyone. It may exp lain why your next plane is late.

Langewiesche analyzes several accidents to reveal certain basic lessons about flying. The crash of an Air India 747 several years ago resulted from the pilot's misreading of an instrument. Despite other instruments that gave him correct information, he flew the plane into the ground. The pilot relied too much on the instrument, failing to remember that "the cockpit's automated warnings, horns, and flashing lights provide largely just the appearance of safety and that for a variety of practical reasons no amount of automation can yet relieve pilots of the old-fashioned need to concentrate and think clearly in times of trouble." The planes themselves are incredibly strong and the traveler's fear of turbulence is misplaced. Planes are the most weather-worthy of vehicles, stronger than even pilots can imagine.

Alex says

Solid book, good prose. Definitely more mediations and ruminations than flying "war stories". Reflects on geography, society, risk, through lens of flight.

Joseph Gendron says

Although the subject of this book is not one that I would normally seek out, I picked the book up because I had read some extremely interesting articles in The Atlantic in 2002 by this author titled "Amercian Ground:

Unbuilding the World Trade Center". This book did not diaappoint and is a very fascinating insight into various aspects of flying and aviation. I learned a lot from the book and when I take a cross-country commercial flight in the coming week, it will be with a broader awareness and perspective.

Ryan Murdock says

We have become creatures of the air, and flying has changed the way we see the world. That aerial view — of orderly houses in neat little rows, of farmland being swallowed by urban growth, of congested highways and abandoned factories — allows us to see ourselves in context.

It is a story of human geography written across the landscape in a narrative as obvious as any book. You don’t need statistics to interpret the growth of office parks, the division of farms, and the inflated architecture of large houses on small lots to see the conclusion of New Jersey farm life when flying up the Eastern seaboard, for example.

Langewiesche writes of the beauty and solitude of flight, but he tempers his observations with a clear examination of the risks. He provides a fascinating pilot’s-eye-view of the inner workings of air traffic control, describes in vivid detail what it’s like to fly through extreme weather, and pauses to examine those rare instances of bad luck when, despite our best efforts, the entire careful system of checks and balances fails.

We now take air travel for granted. We fixate on speed, delays, and the boredom of long confined hours spent with strangers. We focus our attention on the distractions of crossword puzzles, bland meals on plastic trays, and the canned “entertainment” of a TV screen. Aloft, with it’s precise lucid prose, urges us to look outward to read our own human story as it unfolds across the land far below.
