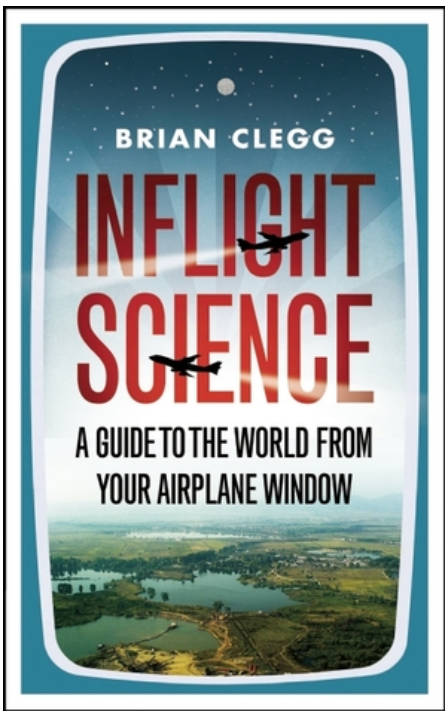


# Inflight Science: A Guide to the World From Your Airplane Window

*Brian Clegg*

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**Inflight Science: A Guide to the World From Your Airplane Window** Brian Clegg
“With this book in hand, we have all we need to set off on our next flight with our eyes open to the sheer wonder of what is involved.” —Alain de Botton, author of *A Week at the Airport,* in the *Mail on Sunday*

“Imagine Leonardo da Vinci seated next to you on an airplane. . . . Brian Clegg attempts to restore something of the lost wonder of air travel . . . even as Leonardo, so fascinated by science, might have done . . . leav[ing] his readers improved for the journey and filled with a renewed sense of curiosity toward the wonders out their window.”—*Wall Street Journal*

“An eye-spy book for adults . . . fitting into that publishing niche somewhere between hard science and *Schott’s Miscellany* that was so successfully exploited by books such as *The Cloudspotter’s Guide.”*
—London *Times* Book of the Week

Every moment of your airplane journey is an opportunity to experience science in action—*Inflight Science* will be your guide. Brian Clegg explains the ever-changing view from your window seat and suggests entertaining experiments to calculate how far away you are from distant objects and the population of the towns you fly over. You'll learn why the coastline is infinite in length, the cause of thunderstorms, and why there's absolutely no chance of getting stuck on an airline vacuum toilet!

Packed full of amazing insights from physics, chemistry, engineering, geography, and more, *Inflight Science* is a voyage of scientific discovery perfect for any journey.

**Brian Clegg** is the author of several popular science titles, including *Before the Big Bang* and the forthcoming *How to Build a Time Machine* (2011), both from St. Martin's Press.

## Inflight Science: A Guide to the World From Your Airplane Window Details

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| ISBN | : | 9781848312418 |
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**Brian Clegg**

# From Reader Review Inflight Science: A Guide to the World From Your Airplane Window for online ebook

### John Sperling says

This is a fun book that uses science to explain many different aspects of aviation. Brian Clegg, a consummate scientist, explains everything from cloud, lightning, mountain, and river formation, the physics of flight, the jet stream, time travel and relativity, turbulence, why you'll never get a decent cup of tea aloft (the temperature at which water boils decreases with altitude), why the law of conservation of momentum shows that Earth is slowing in rotation while the moon is speeding up, why you're not actually sitting on your chair but are in reality floating above it due to the repulsive force of negative electrons, et al. This book is full of mind-blowing stuff and has lots of cool experiments too.

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### Unit of Raine says

Middle-school level science discussion over a very wide-range of topics with an odd focus on relativity. That said, I would recommend to a middle schooler to demonstrate the many every day applications of science & math.

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### Lars Williams says

This book goes for breadth rather than depth, providing a GCSE-level answer to almost every annoying question your children might ask you on a flight, from 'why is the sky blue?', to 'what is that funny smoke coming out of the engine?'. The science-nerd in me enjoyed it tremendously, though I felt it was stronger on geography (why do rivers look like they do, etc) than physics (not a great explanation for what lifts the plane into the sky and keeps it there). I thus prepared myself for the children's questions, but they never came. So I interrupted their immersion in electronic diversions by boring them with unwanted science facts until they fell asleep - result!

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### Kiri says

I love the premise of this book: taking the experience of commercial flight, which has become rather ho-hum, and spicing it up with a discussion of the science (and technology) that surrounds you. I appreciate authors who open our eyes to what's happening around us and enrich it with extra information. (This is one reason I love to walk through botanical gardens, where the plants have LABELS.) Unfortunately, in this case, I found the execution to be... rather boring. A lot of the discussions are very mundane (who doesn't know that rubbing things together creates static electricity, or that a folded paper airplane flies farther than a "scrumpled up" ball of paper?). I found myself glazing over in parts. However, there are other bits that I did find insightful and thought-provoking, like the claim that today's dog is a bit of human-sculpted "technology." A real gem is the discussion of Einstein's theories of special and general relativity, which are not the easiest subjects to convey, yet Brian Clegg does an admirable job - I found his examples quite illuminating.

I found a lot of the tidbits about how planes fly and how pilots control them to be very interesting, but almost certainly because I'm a pilot myself. I think I would have glazed over on those parts if I weren't. Which to me says that the book misses its target a bit, since it's aimed at a general audience. That isn't to say that the content isn't fascinating; it just isn't told in a very interesting way, and it rambles around so much that it becomes a bit hard to keep up with. For example, one chapter delves into how airplane toilets work and then jumps to what you can see outside the window, like Venus and the Milky Way. Whiplash!

Overall, I'm glad I read the book, but I see it more as a good skim, slowing down for parts that pique your interest, rather than a cover-to-cover read. Perhaps it would have been more engaging if told as a narrative with a character who is investigating and learning about each of the aspects Clegg wanted to share.

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### John Pennycook says

Inflight Science basically explains (in simple terms) some of the science that one is likely to encounter whilst travelling by air. Here are some examples of the things I learnt about: how the X-Ray scanners in terminals work; why Einstein’s theory of relativity needs to be accounted for when using GPS; how different clouds form; and what would happen if a plane were to be struck by lightning.

My only real problem with the book was that it expected me to be flicking through it much quicker than I was — almost as though it would have preferred I was: i) not paying much attention and ii) on a really short flight. By the time I reached the chapter starting “by now you are probably being taxi’d onto the runway” I had already been in the air for about 20 minutes or so — and I missed my chance to check out some of the ground science. I also wish I had had a window seat and been surrounded by friends/family (so I could have tried out some of its inflight experiments without looking like a dick), but this is hardly the book’s fault.

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### Reading Reader says

I thought this book would be an easy win -- how could a light aviation-themed science book go wrong? I'm still not entirely sure how Inflight Science missed the mark so badly, but it did.

Very little of this book is actually related to anything about flight. Clegg meanders through a variety of earth-science topics seemingly without any organization, and makes only half-hearted attempts to connect them to aviation.

Most of the science in this book falls in the category of things you probably learned in high school, and it seems to be written on about that level. Clegg then suggests experiments to be performed to illustrate his points, but most of them have caveats that they shouldn't actually be attempted.

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### Brendon Schrodinger says

A great book to read on a flight whether you are are scientifically disabled or a scientist like myself. Although I knew most larger concepts, it is always great to experience someone try to explain these concepts in the simplest way possible. Great tips for when I may need to explain these concepts.

I guess it was the engineering and technology side where I learnt the most. Lots of interesting facts on commercial flying.

If you can, save it for a flight.

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### Simon Howard says

Inflight Science gives a brief tour of some major science concepts set loosely around the fact that you're supposed to read it on a plane. There are miniature "experiments" to carry out whilst airborne (e.g. throwing a ball of paper in the air and noting that it doesn't fly to the back of the plane).

There's nothing especially wrong with this concept. It's nature means that the explanations are brief, and the science discussed doesn't go much above school-level. Some of the links to being inflight are tenuous at best: syphons are explained because toilets on planes don't use them, for example.

My main complaints about this book are that it's a touch simple, and a touch bland. There isn't all that much about the science of flight, which is disappointing.

All-in-all, it's a so-so book that whizzes through a few probably familiar scientific concepts. It might get you through a short flight, but you won't remember much of it once you land, and there are much better things you could be reading.

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### Julia says

Flugreisen sind ja manchmal ganz schön öde. Spätestens nach dem zweiten Mal ist die Aufregung verflogen* und man schaut nicht mal mehr auf, wenn bei den Sicherheitshinweisen um Aufmerksamkeit gebeten wird. Doch eigentlich kann Fliegen ganz schön spannend sein, denn immerhin geht es hier um angewandte Wissenschaft: Wie kann dieses tonnenschwere Flugzeug überhaupt fliegen? Was können wir alles aus dem Flugzeugfenster beobachten? Was geht mit dem Körper vor, wenn wir Langstreckenflüge unternehmen? Kann ein Jetlag tatsächlich eine politische Krise auslösen? Und was hat das jetzt mit dem schlecht schmeckenden Tee auf sich?

Es ist tatsächlich ein rechtes Sammelsurium, das Clegg hier zusammengetragen hat. Er vermischt munter Physik, Geologie, Astronomie und einiges mehr – dabei herausgekommen ist ein unterhaltsames Buch, bei dem sicherlich noch jede etwas lernen kann. Es gibt sogar Experimente, mit denen man das eben Gelesene überprüfen kann. Dieses Buch ist ein schönes Beispiel dafür, dass sogar ein bisschen wissenschaftliche Kenntnis ausreichen kann, um viele Phänomene des Alltags – denn dazu gehört das Fliegen ja mittlerweile für viele Menschen – zumindest ansatzweise zu verstehen und vielleicht sogar die Neugier zu wecken, sich in die ein oder andere Richtung weiterzubilden.

Ich kann mir vorstellen, dass dieses Buch auch ein schönes Geschenk ist – für alle eure vielfliegenden, wissenschaftsinteressierten Lieben. Oder für euch selbst.

* An dieser Stelle fünf Euro in die Wortspielkasse.

### Theresa says

I loafed around and read this in a day; which is usually a good sign.

I bought this at an airport with the intent to read it on the plane; but just got around to it now, I think maybe three years later? It would have been interesting to read while actually in the air, but I probably got sidetracked by all the free kids' movies that I secretly wanted to see.

Anyway- this book is for regular clowns like me... people who like to warehouse Jeopardy-grade trivia. Not actual flight-engineer types, which seemed to disappoint some other reviewers. The scope of information is broad and the science parts simple. I was finally able to be proud of myself for "already knowing" (yay) some of the facts.

Also, this taught me the origin of the term "on cloud 9" which I plan to use to impress the ladies.

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### Oktober says

Vollkommen willkürliche Themenzusammenstellung, die teilweise nicht mal entfernt was mit Fliegen zu tun hat. Öde.

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### Nikki says

I should've figured that this book would be rather below my level -- I was an RAF cadet as a teen and was rather interested in the long classes we had on stuff like the priciples of flight. So this book didn't teach me much, being very accessible and basic. If you know very little about flight, it could be quite interesting -- if you were ever a cadet long enough to have flown a Vigilant glider or a Grob Tutor plane, chances are there's nothing new for you!

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### M.G. Mason says

Ever wondered how the science behind our airlines work? How can something heavy like a 747 even get off the ground, let alone stay up there, let alone again fly us halfway around the world? This book will tell you how and hopefully answer most of the questions you might have about the flights you take.

We cover everything from the gate numbers to the security checks, why aircraft use so much fuel taxiing to the runway and how weight affects lift off. All the little features of taking a flight have interesting facts behind them. There are also little experiments you can do while on the plane, and also some that you shouldn't (while explaining what would happen if you did), things like:
Why is an aircraft particularly safe when in the middle of a storm?
Why aren't aircraft doors locked, and why don't we need to lock them?
What would happen if we smashed an aircraft window?

What does "on cloud 9" mean?

This isn't just about flying either, there are other things we might want to know, about the landscape, about our towns and cities, weather patterns, water, topographical features, borders, coastlines and curious buildings we spot as we're coming in to land or just taking off.

The book follows a logical pattern; starting from the check in desk, through security, to our gate, onto the plane, into the air and landing at the other end. In this way, it is told very much in a story format. This makes it work well and feeling less like other popular science books which tend to follow themes in order to best understand each concept before moving on to the next one.

Clegg's style is simplistic and easy on the eye which will appeal to most people. Unfortunately, the tone sometimes comes across as a little dumbed down and underwhelming, but I guess that's a trade off some readers will be happy to take. If you're into geography and landscapes then it's possible you'll come across little that will be new to you for much of the book. Similarly, if you already know much about flying then this half of the book may be tempting to skip.

It does a good job of encouraging appreciation for the science of flight and the landscape features we see when flying, but it isn't particularly taxiing.

See more book reviews at my blog

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### Andrew says

I will admit that I have a soft spot for what is sometimes referred to as "popular science books" these are the books that try and make science interesting and accessible and most importantly FUN. Don't get me wrong they do not trivialise or patronise science and technology but rather make it more fun and exciting and which in turn can capture someones imagination and fire them up to want to learn more.
Anyway back to the book - this is basically the aim of this title - with the added twist it is to be read and in several cases acted upon in flight - so part educational part distraction. Now maybe I have read too many of these types of books but I felt that a lot of the information in this books has been covered else where and with more depth while at the same time - I felt there was not enough science present if that is possible. I guess the author is trying to cover off as many topics as possible seen from the aircraft seat but at the same time I felt it was a little lacking - great idea and I suspect to someone else they may find it totally engrossing and have it achieve its goal.

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### C.Y. Chong says

I enjoyed reading it, the book really explains well how an airplane works, makes the flying experience that much more interesting. I learnt many things including understanding for the first time what are the 'mechanics' makes a 'full moon', 'half moon', etc. Also, it's interesting to be reminded that our galaxy has at least 100 billion stars and that from that part of the universe that we see, that there are at least 150 billion galaxies...

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