

What's the Worst That Could Happen?: Bad Assumptions, Ignorance, Failures, and Screw-ups in Engineering Projects

Patrick Stakem



Click here if your download doesn"t start automatically

What's the Worst That Could Happen?: Bad Assumptions, Ignorance, Failures, and Screw-ups in Engineering Projects

Patrick Stakem

What's the Worst That Could Happen?: Bad Assumptions, Ignorance, Failures, and Screw-ups in **Engineering Projects** Patrick Stakem

This is a book about the many ways things can go wrong. First we start with a series of expert opinions to guide us. Then, we cover some of the formal analysis tools engineers use to makes sure things don't go wrong, such as the Failure Modes and Effects analysis, Fault Tolerant Design, Redundancy, and Safety Engineering. Then we look at some of the tools applied afterwards, such as Root Cause Analysis. Unfortunately, we learn more from failures than from successes. It can be argued that all failures are human failures. We make errors in judgment, we use the wrong model, we solve the wrong problem, we don't verify our solution. There are, of course, natural disasters.

There is a select group of case studies, from a huge mass of experience. These are some of my favorites. There's room for more in a Volume 2. The case studies span the fields of aerospace, both launch vehicles and spacecraft. The two Shuttles that were lost are discussed, as well as the Soyuz Capsules and the Mir space station fire. Three of the many spacecraft lost near or on Mars are discussed. Then we get to aviation incidents, and nuclear weapons incidents. This is followed by some cases from road and rail transportation, and the maritime environment. We discuss incidents involving infrastructure, such as bridges and pipelines.

What rarely gets done is a good post-mortem report, particularly covering lessons learned, what went right, and what went wrong. We take a quick look at some valuable lessons learned from Hurricane Sandy.

Now, if you want to stop reading here, I will understand, but the next topic is failures in medical devices, then a select cases of being injured or killed by safety equipment.

Light-heartedly, we look at San Diego's Big Bay Boom, an amusing, yet safe, incident involving fireworks. As a wrap up, we look at the Carrington Event, and cover Extinction Events in general.

Enjoy, and don't worry. What's the Worst that could happen?

Download What's the Worst That Could Happen?: Bad Assumptions, I ... pdf

Read Online What's the Worst That Could Happen?: Bad Assumptions, ...pdf

Download and Read Free Online What's the Worst That Could Happen?: Bad Assumptions, Ignorance, Failures, and Screw-ups in Engineering Projects Patrick Stakem

From reader reviews:

Jeffrey Thibodeaux:

The book What's the Worst That Could Happen?: Bad Assumptions, Ignorance, Failures, and Screw-ups in Engineering Projects can give more knowledge and information about everything you want. Why then must we leave a good thing like a book What's the Worst That Could Happen?: Bad Assumptions, Ignorance, Failures, and Screw-ups in Engineering Projects? Wide variety you have a different opinion about book. But one aim which book can give many information for us. It is absolutely right. Right now, try to closer with your book. Knowledge or info that you take for that, you may give for each other; you are able to share all of these. Book What's the Worst That Could Happen?: Bad Assumptions, Ignorance, Failures, and Screw-ups in Engineering Projects has simple shape nevertheless, you know: it has great and big function for you. You can look the enormous world by available and read a publication. So it is very wonderful.

Jorge Eaton:

Reading a book tends to be new life style on this era globalization. With reading through you can get a lot of information that will give you benefit in your life. Having book everyone in this world can easily share their idea. Publications can also inspire a lot of people. A great deal of author can inspire their own reader with their story or even their experience. Not only situation that share in the books. But also they write about the ability about something that you need case in point. How to get the good score toefl, or how to teach your young ones, there are many kinds of book which exist now. The authors in this world always try to improve their ability in writing, they also doing some research before they write on their book. One of them is this What's the Worst That Could Happen?: Bad Assumptions, Ignorance, Failures, and Screw-ups in Engineering Projects.

Jo Villegas:

Many people spending their time frame by playing outside with friends, fun activity along with family or just watching TV 24 hours a day. You can have new activity to invest your whole day by reading through a book. Ugh, do you consider reading a book can really hard because you have to accept the book everywhere? It all right you can have the e-book, getting everywhere you want in your Touch screen phone. Like What's the Worst That Could Happen?: Bad Assumptions, Ignorance, Failures, and Screw-ups in Engineering Projects which is having the e-book version. So , try out this book? Let's see.

Joshua Atkins:

A lot of publication has printed but it is unique. You can get it by internet on social media. You can choose the very best book for you, science, comedian, novel, or whatever by searching from it. It is called of book What's the Worst That Could Happen?: Bad Assumptions, Ignorance, Failures, and Screw-ups in Engineering Projects. You can add your knowledge by it. Without leaving the printed book, it could add your knowledge and make a person happier to read. It is most crucial that, you must aware about book. It can

bring you from one destination to other place.

Download and Read Online What's the Worst That Could Happen?: Bad Assumptions, Ignorance, Failures, and Screw-ups in Engineering Projects Patrick Stakem #SLQ1M23AXWU

Read What's the Worst That Could Happen?: Bad Assumptions, Ignorance, Failures, and Screw-ups in Engineering Projects by Patrick Stakem for online ebook

What's the Worst That Could Happen?: Bad Assumptions, Ignorance, Failures, and Screw-ups in Engineering Projects by Patrick Stakem Free PDF d0wnl0ad, audio books, books to read, good books to read, cheap books, good books, online books, books online, book reviews epub, read books online, books to read online, online library, greatbooks to read, PDF best books to read, top books to read What's the Worst That Could Happen?: Bad Assumptions, Ignorance, Failures, and Screw-ups in Engineering Projects by Patrick Stakem books to read online.

Online What's the Worst That Could Happen?: Bad Assumptions, Ignorance, Failures, and Screw-ups in Engineering Projects by Patrick Stakem ebook PDF download

What's the Worst That Could Happen?: Bad Assumptions, Ignorance, Failures, and Screw-ups in Engineering Projects by Patrick Stakem Doc

What's the Worst That Could Happen?: Bad Assumptions, Ignorance, Failures, and Screw-ups in Engineering Projects by Patrick Stakem Mobipocket

What's the Worst That Could Happen?: Bad Assumptions, Ignorance, Failures, and Screw-ups in Engineering Projects by Patrick Stakem EPub