



Crystal Clear: The Struggle for Reliable Communications Technology in World War II

Richard J. Thompson Jr.

Download now

[Click here](#) if your download doesn't start automatically

Crystal Clear: The Struggle for Reliable Communications Technology in World War II

Richard J. Thompson Jr.

Crystal Clear: The Struggle for Reliable Communications Technology in World War II Richard J. Thompson Jr.

Quartz crystal-a technology that changed the tide of World War II

Some of the defining leaps in technology in the twentieth century occurred during the Second World War, from radar to nuclear energy. Often left out of historical discussions are quartz crystals, which proved to be just as pivotal to the Allied victory-and to post-war development-as other technologies. Quartz crystals provided the U.S. military, for the first time, with reliable communication on the front lines, and then went on to become the core of some of the most basic devices of the post-war era, from watches, clocks, and color televisions, to cell phones and computers.

In *Crystal Clear*, Richard Thompson relates the story of the quartz crystal in World War II, from its early days as a curiosity for amateur radio enthusiasts, to its use by the United States Armed Forces. It follows the intrepid group of scientists and engineers from the Office of the Chief Signal Officer of the U.S. Army as they raced to create an effective quartz crystal unit. They had to find a reliable supply of radio-quality quartz; devise methods to reach, mine, and transport the quartz; find a way to manufacture quartz crystal oscillators rapidly; and then solve the puzzling "aging problem" that plagued the early units. Ultimately, the development of quartz oscillators became the second largest scientific undertaking in World War II after the Manhattan Project.

Bringing to light a little-known aspect of World War II, *Crystal Clear* offers a glimpse inside one of the most significant efforts in the annals of engineering.

 [Download Crystal Clear: The Struggle for Reliable Communica ...pdf](#)

 [Read Online Crystal Clear: The Struggle for Reliable Communi ...pdf](#)

Download and Read Free Online Crystal Clear: The Struggle for Reliable Communications Technology in World War II Richard J. Thompson Jr.

From reader reviews:

James Sandifer:

Reading a reserve can be one of a lot of pastime that everyone in the world enjoys. Do you like reading book so. There are a lot of reasons why people fantastic. First reading a publication will give you a lot of new details. When you read a publication you will get new information mainly because book is one of various ways to share the information or even their idea. Second, reading a book will make a person more imaginative. When you examining a book especially fiction book the author will bring you to imagine the story how the character types do it anything. Third, you may share your knowledge to others. When you read this Crystal Clear: The Struggle for Reliable Communications Technology in World War II, it is possible to tells your family, friends and also soon about yours publication. Your knowledge can inspire the mediocre, make them reading a reserve.

William Perrotta:

Playing with family in a park, coming to see the ocean world or hanging out with close friends is thing that usually you will have done when you have spare time, then why you don't try point that really opposite from that. A single activity that make you not experiencing tired but still relaxing, trilling like on roller coaster you have been ride on and with addition info. Even you love Crystal Clear: The Struggle for Reliable Communications Technology in World War II, you may enjoy both. It is great combination right, you still need to miss it? What kind of hang-out type is it? Oh occur its mind hangout people. What? Still don't have it, oh come on its identified as reading friends.

David Burch:

Crystal Clear: The Struggle for Reliable Communications Technology in World War II can be one of your basic books that are good idea. Most of us recommend that straight away because this book has good vocabulary that may increase your knowledge in terminology, easy to understand, bit entertaining but nonetheless delivering the information. The article writer giving his/her effort to place every word into pleasure arrangement in writing Crystal Clear: The Struggle for Reliable Communications Technology in World War II nevertheless doesn't forget the main place, giving the reader the hottest and also based confirm resource details that maybe you can be among it. This great information can certainly drawn you into brand new stage of crucial considering.

Elizabeth Black:

In this period of time globalization it is important to someone to obtain information. The information will make someone to understand the condition of the world. The fitness of the world makes the information easier to share. You can find a lot of referrals to get information example: internet, magazine, book, and soon. You can observe that now, a lot of publisher that will print many kinds of book. The particular book that recommended for you is Crystal Clear: The Struggle for Reliable Communications Technology in World

War II this e-book consist a lot of the information on the condition of this world now. This particular book was represented how does the world has grown up. The words styles that writer use to explain it is easy to understand. The particular writer made some research when he makes this book. That's why this book ideal all of you.

**Download and Read Online Crystal Clear: The Struggle for
Reliable Communications Technology in World War II Richard J.
Thompson Jr. #8M70TIQFLEK**

Read Crystal Clear: The Struggle for Reliable Communications Technology in World War II by Richard J. Thompson Jr. for online ebook

Crystal Clear: The Struggle for Reliable Communications Technology in World War II by Richard J. Thompson Jr. 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 Crystal Clear: The Struggle for Reliable Communications Technology in World War II by Richard J. Thompson Jr. books to read online.

Online Crystal Clear: The Struggle for Reliable Communications Technology in World War II by Richard J. Thompson Jr. ebook PDF download

Crystal Clear: The Struggle for Reliable Communications Technology in World War II by Richard J. Thompson Jr. Doc

Crystal Clear: The Struggle for Reliable Communications Technology in World War II by Richard J. Thompson Jr. Mobipocket

Crystal Clear: The Struggle for Reliable Communications Technology in World War II by Richard J. Thompson Jr. EPub