

including effects on crisis stability, deterrence, and nuclear arms races. Such issues are still important today with regard to US relations with Russia and China. Readers will have to turn to other sources to develop a more complete understanding of missile defense and the history of SDI.

Hey's most valuable contribution is the array of interesting tidbits he gleans from his interviews of important figures, information about either their own actions and motivations or important meetings at which they had been present. Relying heavily on conversations with Robert (Bud) McFarlane, Reagan's national security director; Gerold Yonas, SDI's first chief scientist; Herbert Meyer, special assistant to CIA Director William Casey; and a dozen other national security officials, the book sketches out how SDI was conceived and the differing motives behind it. Interviews with leading Soviet scientists such as Evgeny Velikhov and Roald Sagdeev provide details about early Soviet laser programs and insights into the debates that occurred in the USSR after Reagan's 1983 speech. The anecdotes remind readers just how serious and scary the cold war was.

The book starts out a little roughly, bumping from topic to topic. It hits its stride after the first few chapters, though, and is at its best in detailing the interactions among Reagan, the Soviet Union's General Secretary Mikhail Gorbachev, and British Prime Minister Margaret Thatcher. But its style of jumping between topics within each chapter intrudes into the storytelling from time to time.

Hey's central theme is that the power of SDI was in the idea and not the technology; it was a sort of psychological operation. Yonas and McFarlane espouse this view, and Velikhov echoes it to some degree. According to Yonas in 2002, "We were able to convince the Soviets that we could beat the crap out of them, using viewgraphs that made no sense at all." Hey does not examine whether such statements by Yonas and others are ex post facto justifications or reflect what they believed during the SDI days. Reagan seemed to appreciate the power of the idea but also believed that US ingenuity might someday be able to make it work.

Perhaps most interesting in Hey's account is the complex picture it reveals of Reagan as a leader and his motivations for pursuing SDI. Reagan abhorred both nuclear weapons and the mutual hostage situation that the US found itself in with the Soviet Union

(see the article, "The Challenge of Nuclear Weapons," by Sid Drell in *PHYSICS TODAY*, June 2007, page 54). He also hated communism and the "evil empire," and he was determined to bring it down as quickly as possible by exploiting its weaknesses. Thus the idea of a missile defense shield was a perfect solution for Reagan: It played to US technical strengths and Soviet technical weaknesses and at the same time held out the promise of neutralizing the Soviet intercontinental ballistic missiles.

By relying on Reagan administration insiders, Hey presents the pro-SDI side. Counterpoints to their arguments make occasional appearances, most often in the words of Velikhov and Sagdeev, and sometimes from US critics. But Hey has the former Soviet scientists and other critics exit stage left too quickly, often before they have a chance to present their case fully. This may be a natural shortcoming for a book that seeks to tell the inside story of the conception, birth, first years, and effects of SDI, but it leaves readers with an incomplete version of the story.

Despite its shortcomings, *The Star Wars Enigma* is worth reading for those who want to learn more about how and why SDI came to be and how Soviet scientists and political leaders reacted to it. Just keep the book's lack of balance in mind.

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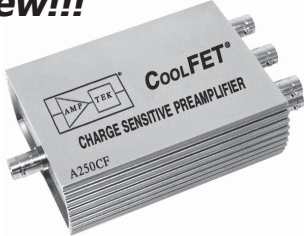
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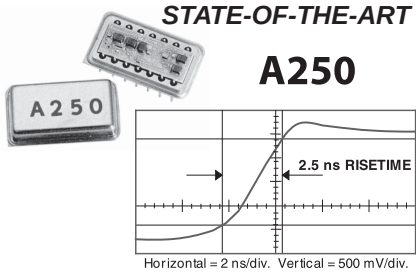
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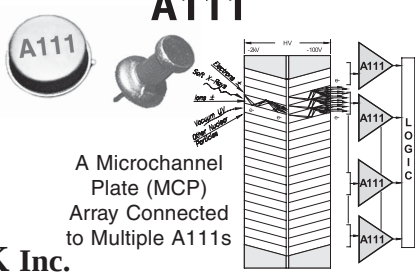


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