The Return of the Doomsday Machine?

Though the Cold War has ended, Putin recently decided to reactivate regular strategic flights of nuclear bombers. Even though this has made the nuclear landscape slightly icier again, after a thaw of one decade, the bad news is that what was in place during the Cold War, may still be active today, despite political messages to the contrary. And amongst these nightmare nuclear scenarios, is the biggest of all: the existence of the Doomsday Machine.

"The nuclear doomsday machine." It's a Cold War term that has long seemed obsolete. Back then, the "doomsday machine" was regarded as a scary conjectural fiction. Not impossible to create - the physics and mechanics of it were first spelled out by US nuclear scientist Leo Szilard - but never actually created, having a real existence only in such apocalyptic nightmares as Stanley Kubrick's Dr. Strangelove.

In Strangelove, the doomsday machine was a Soviet system that automatically detonated some 50 cobalt-jacketed hydrogen bombs pre-positioned around the planet if the doomsday system's sensors detected a nuclear attack on Russian soil. Thus, even an accidental or (as in Strangelove) an unauthorized US nuclear bomb could set off the doomsday machine bombs, releasing enough deadly cobalt fallout to make the Earth uninhabitable for the human species for 93 years. No human hand could stop the fully automated apocalypse.
An extreme fantasy? According to a book called Doomsday Men and several papers on the subject by US analysts, it may not have been. According to these accounts, the Soviets built and activated a variation of a doomsday machine in the mid 1980s. And there is no evidence Putin's Russia has deactivated the system.

Instead, something was reactivated in Russia in late August 2007: regular "strategic flights" of nuclear bombers. These twin developments raise a troubling question: What are the United States' and Russia's current nuclear policies with regard to how and when they will respond to a perceived nuclear attack? In most accounts, once the president or Russian premier receives radar warning of an attack, they have less than 15 minutes to decide whether the warning is valid. The pressure is on to "use it or lose it" - launch our missiles before they can be destroyed in their silos. Pressure that makes the wrong decision more likely. Pressure that makes accidental nuclear war a real possibility.

In the Strangelove film, the Soviet ambassador tells the president and generals in the US war room that the device was designed to deter a surprise attack, the kind of attack that might otherwise prevent retaliation by "decapitating" the Soviet command structure. The automated system would insure massive world-destroying retaliation even if the entire Soviet leadership were wiped out - or had second thoughts. As a result, some referred to it as the "dead hand" doomsday device.
It is Dr. Strangelove himself, the madman US nuclear strategist played by Peter Sellers, who

detects the flaw in this plan. After being apprised of the system's existence by the Soviet ambassador, and the likelihood of its being triggered by a US bomber on an unauthorized mission to nuke its Soviet target, Dr. Strangelove exclaims: "Yes, but the ... whole point of the doomsday machine ... is lost ... if you keep it a secret! Why didn't you tell the world, eh?" In other words, a doomsday machine kept secret is no good for deterrence, only for retaliation by extinction.
Did the Soviets actually design a variation on a doomsday device and not tell us about it? And could an accidental or terrorist nuclear attack on Putin's Russia (by Chechens, for instance) trigger an antiquated automated dead-hand system and launch missiles capable of killing tens, maybe hundreds, of millions at unknown targets that might include the United States?

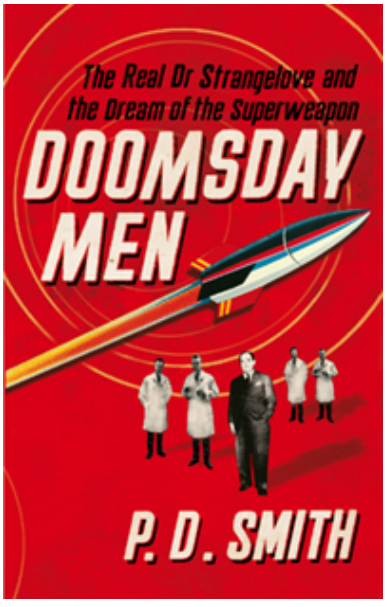
On August 10, 2007, the London Times Literary Supplement ran a review of book "Doomsday Men: The Real Dr. Strangelove and the Dream of the Superweapon" by nuclear-age historian P.D. Smith of University College London.
The TLS reviewer, Christopher Coker asserted that the book demonstrates that "only after the Berlin Wall had been breached and ... the Cold War began to thaw did military analysts realize the Russians had actually built a version of the [doomsday] device. The details of this top-secret Soviet system were first revealed in 1993 by Bruce G. Blair, a former American ICBM launch control officer, now one of the country's foremost experts on Russian arms. Fearing that a sneak attack by American submarine-launched missiles might take Moscow out in 13 minutes, the Soviet leadership had authorized the construction of an automated communication network, reinforced to withstand a nuclear strike. At its heart was a computer system similar to the one in Dr. Strangelove. Its code name was Perimetr. It went fully operational in January 1985. It is still in place."

In the endnotes of Smith's book, there are references to a further description of the Perimetr system in a 2003 Washington Post op-ed by Bruce G. Blair, the former Minuteman ICBM launch control officer who first revealed the existence of the program. The op-ed offers a far more detailed and chilling picture of Perimetr than the brief mention devoted to it in the book and review.
"Die-hard [U.S.] nuclear war planners actually have their eyes on targets in Russia and China, including missile silos and leadership bunkers. For these planners, the Cold War never ended. Their top two candidates [i.e., targets] in Russia are located inside the Yamantau and Kosvinsky

mountains in the central and southern Urals.
Both were huge construction projects begun in the late 1970s, when U.S. nuclear firepower took special aim at the Communist Party's leadership complex. Fearing a decapitating strike, the Soviets sent tens of thousands of workers to these remote sites, where U.S. spy satellites spotted them still toiling away in the late 1990s."

Blair sources his information on these command bunkers to "diagrams and notes given to me in the late 1990s by SAC [Strategic Air Command] senior officers," men in charge of targeting our missile and bomber forces.
From them, he paints a Strangelovian picture: "The Yamantau command center is inside a rock quartz mountain, about 3,000 feet straight down from the summit. It is a wartime relocation facility for the top Russian political leadership. It is more a shelter than a command post, because the facility's communications links are relatively fragile. As it turned out, the quartz interferes with radio signals broadcast from inside the mountain."

The the quartz mountain is small in comparison with the Perimetr dead-hand system at Kosvinsky. "Kosvinsky," Blair tells us, "is regarded by U.S. targeteers as the crown jewel of the Russian wartime nuclear command system, because it can communicate through the granite mountain to far-flung Russian strategic forces using very-low-frequency (VLF) radio signals that can burn through a nuclear war environment. The facility is the critical link to Russia's 'dead hand' communications network, designed to ensure semi-automatic retaliation to a decapitating strike."

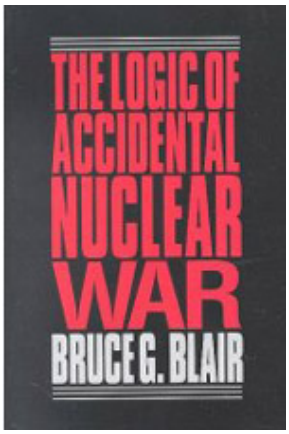


Of course, there's a world of difference between a "semi-automatic" doomsday device and the totally automatic - beyond human control - doomsday device in Strangelove, something that Blair is careful to note. The Soviet facility does require a human hand for the final fatal push of the button. But Blair believes that the human brain behind that hand has not been programmed to

suddenly turn peacenik. And the details of the device are far from reassuring.
"This doomsday apparatus, which became operational in 1984, during the height of the Reagan-era nuclear tensions, is an amazing feat of creative engineering." According to Blair, if Perimetr senses a nuclear explosion in Russian territory and then receives no communication from Moscow, it will assume the incapacity of human leadership in Moscow or elsewhere, and will then grant a single human being deep within the Kosvinsky mountains the authority and capability to launch the entire Soviet nuclear arsenal.

"Kosvinsky came online recently," Blair wrote in 2003, "which could be one explanation for U.S. interest in a new nuclear bunker buster." Blair also suggested that the Bush administration's recurrent interest in funding the development of nuclear "bunker buster" bombs was at least in some respects designed to give them the capacity to destroy the dead-hand device buried deep in a Kosvinsky bunker, an argument that, if true, would suggest the dead-hand doomsday device was still thought to be operational.
Blair, who has written previously on the extremely rickety structure of presidential nuclear decision-making, believes that the current US contingency plan is itself a "doomsday strategy":

President Bush's nuclear guidance doubtless instructs the Pentagon to plan the destruction of Yamantau and Kosvinsky, along with 2,000 other targets in Russia and hundreds more in China. But such targeting requires very high-yield weapons, typically 10 to 100 times more destructive than the bombs dropped on Japan in 1945. Hundreds of millions of people would die in this doomsday scenario.
But there is some ambiguity in Blair's use of "doubtless". Does it imply that Bush's "nuclear guidance" includes only one all-out, 2,000-target response, or "merely" the capability of it? But shouldn't we know at least that in a genuinely "doubtless" way?



Blair's primary recent concern is not the prospect of a deliberate, ideological, Cold War-type nuclear war, but accidental war caused by the continued deadly presence of all-too-easily triggered Cold War arsenals. In four fascinating papers on the subject, Blair describes the "launch on

warning" bias built into the nuclear command structure, and foresees the possibility of a doomsday that results from the US attempt to pre-empt their doomsday plan, all of which might be touched off by accident, mistake, or malfunction on either side.
Blair is not a wild-eyed Cassandra raising unsupported suspicions. Colleagues in his field regard him as a serious and cautious scholar raising real questions. Stephen M. Meyer, an expert on the Russian military at MIT, told the Times that Blair "requires of himself a much higher standard of evidence than many people in the intelligence community."

Blair's troubling papers, along with his book "The Logic of Accidental Nuclear War", serve as a reminder that the illogic, irrationalities, and vulnerability to catastrophic error of our Cold War nuclear war command and control mechanisms were never resolved or fixed, just forgotten when the Cold War ended. His analysis suggests that during the Cold War, we may have escaped an accidental nuclear war by luck rather than policy.
It was Blair who pointed out, in congressional testimony, another continuing problem with nuclear launch posture, this one involving the much-ballyhooed "de-targeting" - a process by which the United States and the former Soviet Union purportedly reduced the risk of accidental nuclear war by insuring that their missiles were - after the fall of the Soviet Union - not still targeted at each other. Blair told Congress that, especially on the Russian side, detargeting was only "cosmetic and symbolic," and easily reversible, implemented in name only.

So much focus has been placed - in film, fiction, and non-fiction - on the supposedly "failsafe" barrier to a lone-madman launch. We are told that to launch a missile, two keys must be inserted simultaneously into their slots by two separate launch officers, and that the slots for the keys were located at a sufficient distance from each other that one madman couldn't shoot the other crewman and then use both his arms to twist both the keys simultaneously.
But the missile crewmen have told journalists and others that they had figured out a way to defeat that impediment with a spoon and a string. Not that they were planning to do it, but that they knew

someone could do it. You just shoot the other guy and "rig up a thing where you tie a string to one end of a spoon, and tie the other end to the guy's key. Then you can sit in your chair and twist your key with one hand while you yank on the spoon with the other hand to twist the other key over." Truth is sometimes stranger than fiction...