

Chatham House Report | Executive Summary

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Too Close for Comfort

Cases of Near Nuclear Use and Options for Policy

Executive Summary

Nuclear weapons have not been detonated in violent conflict since 1945. The decades since then are commonly perceived – particularly in those countries that possess nuclear weapons – as an era of successful nuclear non-use and a vindication of the framework of nuclear deterrence. In this narrative, the fear of massive retaliation and a shared understanding and set of behaviours are believed to have prevented the use of nuclear weapons. Yet the decades since 1945 have been punctuated by a series of disturbing close calls. Evidence from many declassified documents, testimonies and interviews suggests that the world has, indeed, been lucky, given the number of instances in which nuclear weapons were nearly used inadvertently as a result of miscalculation or error.

A shared belief in nuclear deterrence is not the only plausible explanation for this avoidance of nuclear war. Rather, individual decision-making, often in disobedience of protocol and political guidance, has on several occasions saved the day. Whereas the popularized image of the ‘Moscow–Washington hotline’ gives the illusion that vital communication in times of crisis is possible, these incidents reveal the reality that those who possess nuclear weapons will continue to be distrustful of one another and remain reliant on data transmitted by systems that are vulnerable to error or misjudgment, particularly when leaders have to respond too quickly to be able to make fully informed decisions.

Historical cases of near nuclear use resulting from misunderstanding demonstrate the importance of the ‘human judgment factor’ in nuclear decision-making. In addition to cases from the Cold War, recent incidents, such as the 2009 collision of French and UK submarines, along with cases of misconduct in the US Air Force revealed in

2013, suggest cause for concern regarding current laxity in safety and security measures and in command and control. Incidents similar to those that have happened in the past are likely to happen in the future. A study of cases of near nuclear use can thus address a number of important questions. What chain of events led to these incidents, and what prevented nuclear weapons from being used? How might past instances improve assessment of contemporary risks? When and how have measures taken in order to prevent inadvertent use failed? What additional measures can be taken now?

In answering these questions, this study applies a risk lens, based on factoring probability and consequence, applied to a set of cases of near nuclear use spanning the Cold War to the 21st century. The primary finding of the study is that, since the probability of inadvertent nuclear use is not zero and is higher than had been widely considered, and because the consequences of detonation are so serious, the risk associated with nuclear weapons is high. We offer explanations for why these risks are higher than previously thought and recommendations for mitigating them.

For as long as nuclear weapons exist, the risk of an inadvertent, accidental or deliberate detonation remains. Until their elimination, vigilance and prudent decision-making in nuclear policies are therefore of the utmost priority. Responses that policy-makers and the military should consider include buying time for decision-making, particularly in crises; developing trust and confidence-building measures; refraining from large-scale military exercises during times of heightened tension; involving a wider set of decision-makers in times of crisis; and improving awareness and training on the effects of nuclear weapons.

Incidents of near nuclear use

Date	Incident	States involved	Cause
October 1962	Operation Anadyr	Soviet Union	Miscommunication
27 October 1962	British nuclear forces during the Cuban missile crisis	United Kingdom	Conflict escalation
27 October 1962	Black Saturday	United States	Conflict escalation and miscommunication
22 November 1962	Penkovsky false warning	Soviet Union	Espionage
October 1973	1973 Arab–Israeli war	Israel	Conflict escalation
9 November 1979	NORAD: Exercise tape mistaken for reality	United States	Exercise scenario tape causes nuclear alert
3 June 1980	NORAD: Faulty computer chip	United States	Faulty computer chip
25 September 1983	Serpukhov-15	Soviet Union	Technical error
7–11 November 1983	Able Archer-83	Soviet Union, United States	Misperception of military training exercise
18–21 August 1991	Failed coup	Soviet Union	Loss of command and control structure
25 January 1995	Black Brant scare	Russia	Mistaken identity of research rocket launch
May–June 1999	Kargil crisis	India, Pakistan	Conflict escalation
December 2001–October 2002	Kashmir standoff	India, Pakistan	Conflict escalation

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