

National Institute FOR Deterrence Studies

T H I N K D E T E R R E N C E

Deterrence for Industry Workshop

This two-day workshop, with an optional one-day table-top exercise (a third day), is designed to provide industry participants with a broad understanding of the nuclear deterrence mission in support of talent retention and executive education. The workshop serves as an opportunity for those unfamiliar with the nation's nuclear deterrent to gain an overview of core elements and the threats facing the nation in support of industry efforts to increase the retention of key staff and help them understand and appreciate their own contribution to national security. With the nuclear deterrent serving as a foundational element of national security, it is important for the national security workforce to understand this contribution to the nation.

Agenda

Day 1

0800-0850 Introduction to Nuclear Physics

· This module offers a basic overview of nuclear fission, nuclear fusion, and nuclear weapons design.

0900-0950 Introduction to Nuclear Weapon Effects

· This module explains the primary effects generated by a nuclear detonation and how they differ from a conventional explosion.

1000-1150 Deterrence Theory

· This module provides an overview of the major theories of deterrence.

1100-1150 Nuclear Deterrence Forces and Operations

· This module describes the nuclear triad's three legs and how those legs are commanded and controlled. It includes the role of the Department of Energy.

1200–1300 Lunch

1300–1350 Nuclear Decision-making

· This module lays out the presidential decision-making process and how the various nuclear command, control, and communications pieces work together.

1400–1450 Deterrence Policy and Strategy

· This module offers an overview of current nuclear policy and strategy within an historical context of post policy and strategy.

1500–1550 The Cost of the Arsenal in Context

· This module discusses the cost of the nuclear enterprise and offers comparisons to other spending priorities, demonstrating the cost effectiveness of deterrence.

Day 2

0800–0950 Russian Capabilities and Strategy

· This module discusses the nuclear capabilities of Russia and their employment and use doctrines.

1000–1150 Chinese Capabilities and Strategy

· This module discusses the nuclear capabilities of China and their employment and use doctrines.

1200–1300 Lunch

1300–1350 The Politics of Nuclear Weapons and Deterrence

· This module discusses the political process and the key government players in decision-making.

1400–1450 Group Discussion of Contribution

· This block is an instructor-led discussion in which participants discuss the role their specific contributions play in supporting deterrence and national security.

1500–1550 Practical Exercise

· Workshop participants are presented with a scenario in which they are called on to write an elevator speech, meet with the President, or explain to a relative how deterrence works. This block is designed to apply the material from the first two days.

Day 3 (Optional)

The workshop also has an optional third day that allows participants to take part in a three-move table-top exercise where they play the role of the United States, South Korea, Japan, or Australia and must decide how their nation responds to a Chinese attack on Taiwan. Across the exercise's three moves, nuclear weapons are employed against allied assets, requiring players to think through the implications of nuclear weapons use and how to continue operating in an uncertain environment where conflict has the possibility of continued escalation.

The table-top exercise is structured to facilitate discussion and debate about just what it means to fight a regional conflict where tactical nuclear weapons are used against American assets and the threat of general nuclear war is ever present. For the engineers, program managers, and others who participate in the exercise, they should walk away with a firm understanding of the plausibility of escalation to nuclear use in conflict between nuclear peers—underscoring the importance of their own contribution.

If you are interested contact us at: nids@thinkdeterrence.com – Subject: Deterrence Workshop