



# THE FUTURE OF **MISSILE** **DEFENSE**

CSIS EXECUTIVE  
EDUCATION

CSIS | CENTER FOR STRATEGIC &  
INTERNATIONAL STUDIES | MISSILE DEFENSE  
PROJECT

TIME	DAY 1	DAY 2	DAY 3
8:30 AM	REGISTRATION	BREAKFAST	BREAKFAST
9 AM	Welcome & Introduction	Program Overview: Aegis, THAAD, PAC-3, LRDR, IBCS	Missile Defense and Space
	Missile Strike & Defense: History and Strategy		
10 AM	BREAK	BREAK	
	The Air & Missile Threat Spectrum	Program Overview: Standard Missiles, Patriot, GMD, SBX	BREAK
11 AM	BREAK		
	Missile Defense Fundamentals	LUNCH	
12 PM	LUNCH	Building a Defense: Operational Considerations	LUNCH
	Offense-Defense Integration		
1 PM	BREAK	BREAK	
	U.S. Government Perspectives	Interactive Exercise: NATO Air Defense	
3 PM	BREAK		
	International Cooperation & Alliance Relationships		
4 PM			
5 PM		Networking Reception	



## COURSE OVERVIEW

Designed for working professionals, *The Future of Missile Defense* course takes participants through the complex set of issues that affect missile defense policy and programs. After beginning with the fundamentals of ballistic and cruise missile technology and general proliferation trends, participants explore the evolving roles that active air and missile defenses have played over time and how changing policy decisions inform and shape today's program of record.

The course also considers new approaches to countering missile threats, including a mix of active and passive measures, offense-defense integration, defeating missiles left-of-launch, non-kinetic technologies, and emerging challenges from hypersonic glide vehicles.

Hosted by the world's top think tank for defense and national security, participants will benefit from instruction and interaction with a cadre of lecturers from the Center for Strategic and International Studies (CSIS) and guest lecturers with decades of experience working missile defense issues in the Pentagon, Congress, the U.S. military, and industry.



## SEMINARS

### **MISSILE STRIKE & DEFENSE: HISTORY AND STRATEGY**

An introduction to missile strike and defense, including an historical overview of their role in U.S. national security and how air and missile defenses relate to the National Defense Strategy, Nuclear Posture Review, and other strategy documents.

### **THE AIR & MISSILE THREAT SPECTRUM**

A description of the emerging air and missile threat spectrum, including technologies, flight characteristics, and effects.

### **MISSILE DEFENSE FUNDAMENTALS**

An introduction to missile defense basics: physics, policy, geography, and operations.

### **OFFENSE-DEFENSE INTEGRATION**

Participants learn about the advantages and challenges of defeating missile threats before they launch, and the prospects for tighter coordination between strike and defense forces in the battlespace.

### **U.S. GOVERNMENT PERSPECTIVES**

A discussion featuring U.S. officials and their perspective on developing, deploying, and maintaining air and missile defenses.

### **INTERNATIONAL COOPERATION & ALLIANCE RELATIONSHIPS**

Drawing on the perspectives of non-U.S. partners and allies, this session addresses the place of missile defense in alliance relationships, as well as cooperative development programs.

### **AEGIS, THAAD, PAC-3, LRDR, IBCS, STANDARD MISSILES, PATRIOT, GMD, SBX**

Discussions on current programs of record, relations with government stakeholders, and future possibilities.

### **BUILDING A DEFENSE: OPERATIONAL CONSIDERATIONS**

Moving to the operational and tactical levels, this class focuses on how military operators would employ long-range fires and missile defenses in combat. Consideration will be given to conflict against both rogue states and major powers.

### **MISSILE DEFENSE AND SPACE**

An overview of potential future missile defense operational concepts in the space domain, including space-based sensors and interceptors, counterspace weapons, and arms control.

### **FUTURE DEFENSE CONCEPTS**

Turning to the future, this class includes an overview of developing missile defense technologies, including directed energy and hypersonic velocity projectiles.

## WORKSHOPS

### **NATO AIR DEFENSE EXERCISE**

Participants create their own lower-tier air and missile defense architecture in a NATO-centric wargame. A subsequent debrief will reflect on the strengths and weaknesses of each team's architecture.

### **RESOURCE ALLOCATION EXERCISE**

If you were in charge of the U.S. missile defense enterprise, what would you do? This final workshop is designed to demonstrate what participants have learned over the conference to build their own missile defense budget.



## TESTIMONIALS

***Diverse forum of speakers and participants** on a challenging and evolving topic. Love everyone's perspective.*

***Very relevant topics, discussions, and mix of subject matter experts.***

*Some of the **sessions were great refreshers, others challenged me** – well done!*

*More than anything, the **opportunities to meet top experts and industry people** was very valuable.*

## REGISTER

*The Future of Missile Defense* takes place twice a year in the Fall and Spring. For information on the next available dates and to complete the registration form visit: [www.csis.org/future-missile-defense](http://www.csis.org/future-missile-defense).

**TUITION:** \$3,500 per person

**DURATION:** Three days

**LOCATION:** CSIS Headquarters in Washington, D.C.

**CONTACT:** Shaan Shaikh at [sshaikh@csis.org](mailto:sshaikh@csis.org)

## ABOUT THE MISSILE DEFENSE PROJECT

The Missile Defense Project at CSIS looks at a wide range of policy, program, and strategic issues related to missile defense. Technological and geopolitical factors have driven increased global supply and demand for high-velocity, unmanned, missile-based weapons and their corresponding counters. Besides more recognized cruise and ballistic missile threats, global missile proliferation now consists of a spectrum including precision-guided rockets, anti-ship missiles, air defenses, hypersonic delivery systems, and counterspace weapons.

Within the International Security Program and directed by Senior Fellow Thomas Karako, the project's research considers the most pressing problems of the day, such as homeland missile defense, integrated air and missile defenses for U.S. forces and allies abroad, offensive strike capabilities, and investments in high technology to defeat missile threats through new and innovative means. The project also hosts a variety of events to shape the debate about policy, budgets, legislation, and both current and future programs.

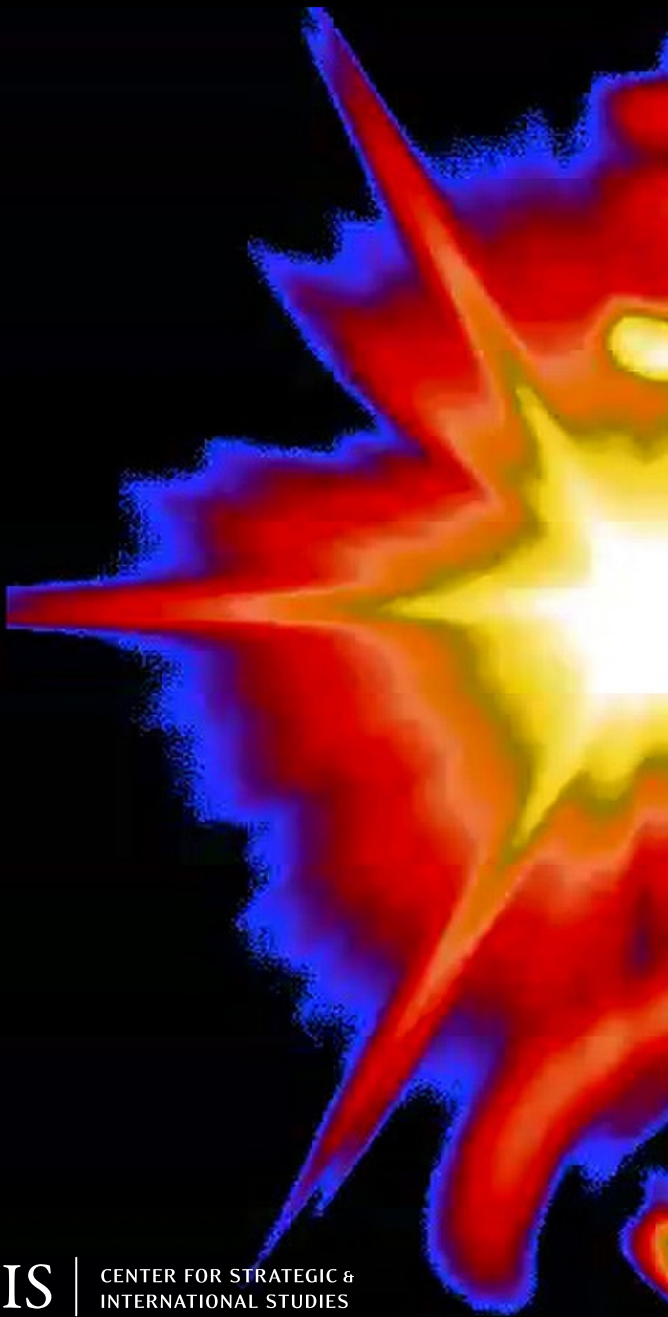
See Missile Defense Project publications and activities at:  
<https://missilethreat.csis.org/>.

## ABOUT CSIS

The Center for Strategic and International Studies (CSIS) is a bipartisan, nonprofit organization headquartered in Washington, D.C. founded by David M. Abshire and Admiral Arleigh Burke in 1962. For over 50 years, CSIS has been dedicated to developing practical solutions to some of the world's greatest challenges. Voted the world's number one defense and national security think tank for the past eight years, CSIS has become one of the preeminent international policy institutions focused on defense and security, regional stability, and transnational challenges ranging from energy and climate to global development and economic integration. Tom Pritzker, executive chairman of Hyatt Hotels Corporation and chairman and CEO of the Pritzker Organization, became chairman of the CSIS Board of Trustees in November 2015. Former senator Sam Nunn (D-GA), who served as chair for 16 years, remains on the Board as chairman emeritus. John J. Hamre became the Center's president and chief executive officer in April 2000.

*Infrared view of Ground-based Midcourse Defense flight test (FTG-11) on March 25, 2019.*

PHOTO / **LISA SIMUNACI**



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1616 Rhode Island Ave NW  
Washington, DC 20036