

The background of the poster features a dramatic, low-angle shot of several hypersonic missiles being launched from a silo. The missiles are silhouetted against a bright, orange-hued sky, suggesting a sunrise or sunset. The silo structure is visible at the bottom, with multiple launch tubes. The overall aesthetic is high-tech and military-oriented.

HYPERSONIC DEFENSE

**CONFERENCE
AND EXHIBITION**

**HUNTSVILLE, AL, USA
8TH - 9TH NOV 2022**

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Hypersonic Defense 2022

Conference and Exhibition Huntsville, AL, USA | 8th – 9th November 2022

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Confirmed Speakers

- Vice Admiral Jon Hill, Director, U.S. Missile Defense Agency
- Brigadier General Paul Murray, Deputy Director of Operations, North American Aerospace Defense Command
- Garrett Poe, Ph.D., Co-Founder, Executive Vice President of Technology, Blueshift
- Bogusz Madej, Integrated Air and Missile Defence Section, NATO
- Colonel Douglas Ralph, Program Manager – Army Hypersonics, Army Rapid Capabilities and Critical Technologies Office, U.S. Army
- Donald Godfrey, Global Director of Business Development for Aviation and Defense, SLM-Solutions
- Colonel Evangelos Tzikas, Director, Integrated Air and Missile Defence Centre of Excellence
- Jody Singer, Director, NASA Marshall Space Flight Center
- Steven Adler, Plasma Applications Development - Americas, Tekna
- Eric Bouchard, Senior Advisor, Product Line Manager – Systems, Tekna
- Dr. Jeffrey C. Boulware, Technical Director, Joint Integrated Air and Missile Defense Organization (JIAMDO)
- Dr. Eric Marineau, Program Officer, Hypersonic Aerodynamics, Office of Naval Research, U.S. Navy
- Thomas Karako, Senior Fellow, Director, Missile Defence Project, Center for Strategic and International Studies (CSIS)
- Professor Rodney Bowersox, Director, Texas A&M National Aerothermochemistry and Hypersonics Laboratory
- Dr. Phillip Ligrani, Eminent Scholar in Propulsion, Professor of Mechanical and Aerospace Engineering, University of Alabama Huntsville, USA

For more information on how to book your place contact us at:

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Conference Day One – Tuesday 8th November 2022

08.30 REGISTRATION AND NETWORKING

09.00 CHAIRMAN'S OPENING REMARKS

Dr. Phillip Ligrani, Eminent Scholar in Propulsion, Professor of Mechanical and Aerospace Engineering, University of Alabama Huntsville, USA

U.S. MISSILE DEFENSE CAPABILITIES AND DEVELOPMENTS IN HYPERSONIC DEFENSE

09.10 U.S. HYPERSONIC DEFENSE CAPABILITIES

- Overview of the current state of hypersonic defense capabilities across the U.S.
- What is needed during the next development phase?
- Cooperation amongst agencies to speed up process

Invited: Stephanie Possehl, Director, Space and Missile Defense, Strategic, Space and Intelligence Portfolio Management (SSIPM), U.S. Department of Defense

09.50 HYPERSONIC DEFENSE DEVELOPMENTS AND TESTING

- Current hypersonic defense developments since last year
- Testing figures and where the U.S. military stands in hypersonic missile defense capabilities
- Public-Private partnerships
- Lessons learnt to date

Vice Admiral Jon Hill, Director, U.S. Missile Defense Agency

10.30 NETWORKING COFFEE BREAK



11.00 LOCKHEED MARTIN PRESENTATION

Senior Representative, Lockheed Martin

11.40 CROSS-FUNCTIONAL EFFORTS: LOOKING AT ALL DOMAIN AWARENESS, INFORMATION DOMINANCE, AND DECISION SUPERIORITY

- Reviewing Homeland Defense capabilities to counter hypersonic weapons
- Current Aerospace warnings in place and advances
- Importance of creating IAMD systems that can react to hypersonic weapons

Brigadier General Paul Murray, Deputy Director of Operations, North American Aerospace Defense Command

12.20 NETWORKING LUNCH BREAK SPONSORED BY:



13.20 U.S. ARMY HYPERSONIC PROGRAM

Colonel Douglas Ralph, Program Manager – Army Hypersonics, Army Rapid Capabilities and Critical Technologies Office, U.S. Army



14.00 TEKNA PRESENTATION

Steven Adler, Plasma Applications Development - Americas, Tekna
Eric Bouchard, Senior Advisor, Product Line Manager – Systems, Tekna

14.40 NETWORKING COFFEE BREAK

15.10 U.S. ADAPTING TO A HYPERSONIC ERA – ARE WE STILL CATCHING UP?

- Where do the U.S. currently stand in terms of hypersonic development compared to other nations?

- What has been achieved over the past year?

- Developments that are required
Thomas Karako, Senior Fellow, Director, Missile Defence Project, Center for Strategic and International Studies (CSIS)

15.50 IMPORTANCE OF JOINT COOPERATION IN A HYPERSONIC ERA

- Role of the JIAMD as the global integrator for IAMD requirements
- Multi-domain approaches for defending against hypersonic weapons
- Critical attributes for tomorrow's missile defense enterprise

Dr. Jeffrey C. Boulware, Technical Director, Joint Integrated Air and Missile Defense Organization (JIAMD)

16.30 CHAIRMAN'S CLOSING REMARKS

Dr. Phillip Ligrani, Eminent Scholar in Propulsion, Professor of Mechanical and Aerospace Engineering, University of Alabama Huntsville, USA

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Conference Day Two – Wednesday 9th November 2022

08.30 REGISTRATION AND NETWORKING

09.00 CHAIRMAN'S OPENING REMARKS

Dr. Phillip Ligrani, Eminent Scholar in Propulsion,
Professor of Mechanical and Aerospace
Engineering, University of Alabama Huntsville, USA

INTERNATIONAL HYPERSONIC DEFENSE PERSPECTIVES

09.10 NASA ASSISTANCE WITH HYPERSONIC DEFENSE

- NASA Marshall update
 - Launch simulations and assistance
 - Hypersonic missile preparedness
- Jody Singer, Director, NASA Marshall Space Flight Center



**09.50 ENHANCING SERVICE TEMPERATURES OF COMPOSITES
IN HYPERSONIC DEFENSE APPLICATIONS**

Garrett Poe, Ph.D., Co-Founder, Executive Vice
President of Technology, Blueshift

10.30 NETWORKING COFFEE BREAK

**11.00 FRENCH DEVELOPMENTS AND MODERNISATION TO
PREPARE FOR HYPERSONICS**

- Current missile defence capabilities
 - Hypersonic testing facilities
 - Preparing for the hypersonic era
- Senior Representative, French Air and Space Force



**11.40 VALIDATION OF MULTI-LASER PRINTING
TECHNOLOGY FOR ADDITIVE MANUFACTURING**

Donald Godfrey, Global Director of Business
Development for Aviation and Defense, SLM-
Solutions

12.40 NETWORKING LUNCH BREAK

HYPERSONIC TESTING AND SIMULATION UPDATE

**13.40 PANEL DISCUSSION – TESTING AND SIMULATION
DEVELOPMENTS FOR HYPERSONICS**

Moderated by:

- Dr. Phillip Ligrani, Eminent Scholar in Propulsion,
Professor of Mechanical and Aerospace
Engineering, University of Alabama Huntsville,
USA

Panellists:

- Dr. Eric Marineau, Program Officer, Hypersonic
Aerodynamics, Office of Naval Research, U.S.
Navy
- Professor Rodney Bowersox, Director, Texas A&M
National Aerothermochemistry and Hypersonics
Laboratory
- Invited: Dr. Sarah Popkin, High-Speed
Aerodynamics Program
Officer, U.S. Air Force Office of Scientific Research
(AFOSR)

14.40 NETWORKING COFFEE BREAK

NATO PERSPECTIVE ON INTEGRATED MISSILE DEFENSE AND PREPARATION FOR HYPERSONIC THREATS

**15.10 NATO APPROACH TO INTEGRATED AIR AND MISSILE
DEFENSE, INCLUDING DEFENSE AGAINST HYPERSONIC
WEAPONS**

- Current NATO approach to IAMD
 - Current hypersonic threat to NATO
 - Coordinating strategic missile defence systems
- Bogusz Madej, Integrated Air and Missile Defence
Section, NATO

15.50 IAMD TRAINING FOR THE HYPERSONIC ERA

- Overview of the IAMD Centre of Excellence
 - Current training programs based on hypersonics
 - Research being conducted to assist NATO nations
on hypersonic missile defense
- Colonel Evangelos Tzikas, Director, Integrated Air
and Missile Defence Centre of Excellence

16.30 CHAIRMAN'S CLOSING REMARKS

Dr. Phillip Ligrani, Eminent Scholar in Propulsion,
Professor of Mechanical and Aerospace
Engineering, University of Alabama Huntsville, USA

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Synopsis coming soon...



Headquartered in Bethesda, Maryland, Lockheed Martin Corporation is a global security and aerospace company employing approximately 114,000 people worldwide. For more than 60 years, Lockheed Martin has been at the forefront of researching, developing, integrating, demonstrating, and operationalizing hypersonic capabilities, systems and engineering in support of our customer's missions as new threats emerge. By combining our leadership in missile defense, space and advanced materials, Lockheed Martin is uniquely postured to develop and deliver hypersonic strike and defense systems as well as the ability to detect, track and defeat hypersonic threats in every domain.



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