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#AMOScon2025 #EMERGEN2025

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EVENT DATE: AMOS Conference - Sept 16-19, 2025
EMER-GEN Conference – Sept 14-16, 2025

LOCATION: Wailea Beach Resort
3700 Wailea Alanui Drive, Wailea, HI 96753

Description: The Advanced Maui Optical and Space Surveillance Technologies (AMOS) Conference is the premier technical conference in the nation devoted to space situational awareness. The cross section of private sector, government, and academic participation helps foster important dialogue and international collaboration. The continued growth in attendance and participating countries at AMOS reflects a growing interest in space sustainability and space commerce initiatives as new actors—national governments, private sector companies, non-governmental entities, and universities—become involved in these activities.

AMOS 2025 will be hybrid with an in-person event complemented by virtual components including livestream.

The call for papers for the 2025 AMOS Conference closed March 3 and anticipates attracting abstracts from over 20 countries. The number and content of the submissions demonstrate the continued evolution and advancements in field of space domain awareness and is reflected in the session topics to be covered this year: Astrodynamics, Cislunar SDA, Conjunction/RPO, Machine Learning for SDA Applications, Satellite Characterization, SDA Systems & Instrumentation, Space-based Assets, Space Debris, Space Domain Awareness; and Atmospherics/Space Weather.

Papers are eligible for publication in the 2025 Journal of Astronautical Sciences as well as a Best Paper and Presentation Award. There is also a Student Award for the best manuscript submitted by a student.

In addition to the Technical Sessions, the AMOS Conference features Keynote Speakers, Policy Forums and Technical Short Courses. The on-site Exhibit Venue is at capacity, providing opportunities for sponsors to showcase new technologies and services as well as encourage networking. There will also be virtual access to posters and networking rooms.

This will be the eighth year of the **EMER-GEN program**, designed especially for young professionals and students (35 and under) enthusiastic about careers in space. The program will be in-person with three webinars pre-event to prepare the cohort.

Presenter: This event is presented by the **Maui Economic Development Board**, a 501(c)(3) not-for-profit corporation established in 1982 with a mission to diversify Maui County's economy, building pathways to innovation, jobs and opportunities for our residents. Through partnerships with the public and private sector, MEDB undertakes projects that assist growth industries with navigating and thriving in our county, educates and trains residents for new careers, and engages our community in forums that determine future economic directions.

AMOS CONFERENCE FAST FACTS – continued

Technical Chairs

Paul Kervin, AFRL/RDSM retired
Daron Nishimoto, Consultant, EO Solutions

2025 Session Topics and Chairs

Astrodynamics

Laura Pirovano, Northstar Earth & Space
Sam Wishnek, BAE Systems

Atmospherics/Space Weather

Tzu-Wei Fang, NOAA Space Weather Prediction Center
Shaylah Mutschler, Space Environment Technologies

Cislunar SDA

Jill Bruer, AFRL
Channing Chow, Cloudstone Innovations

Conjunction/RPO

Mariel Borowitz, OSC / Georgia Tech
Keith LeGrand, Purdue University

Machine Learning for SDA Applications

Heather Griffith James, Kitware, Inc.
Justin Fletcher, Odyssey

Satellite Characterization

Sean Allen, U.S. Space Force / SSC / SZ
Heather Cowardin, NASA

SDA Systems & Instrumentation

Jose Miguel Lozano, GMV
Jeff Sherk, Aerospace Corporation

Space-Based Assets

Melrose Brown, UNSW Canberra
Orlando Diaz, NASA Ames Research Center

Space Debris

James Blake, University of Warwick
Zach Gazak, SSC/SZG

Space Domain Awareness

Jeremy Raley, U.S. Space Force
Ayla Reed, AFRL/RDSM

Technical Short Courses

Short courses provide opportunities for working professionals to upgrade their technical job skills and remain abreast of recent developments in their respective fields of interest. The small size of each class gives you an excellent opportunity for personalized instruction. Taught by highly regarded industry experts on a variety of subjects, courses will be scheduled to be presented either in-person on Maui on September 16; or online on September 15.

Ten short courses will be presented in-person on Tuesday, September 16 at the AMOS Conference venue at the Wailea Beach Resort over two sessions. All participation will be in-person with no live streaming available, and no recording. The interactive courses, and the presenters are:

1. **EM Spectrum Operations: Positioning, Navigation and Timing Situational Awareness (PNT-SA)** – Presented by Steven Lewis, JCO
2. **Uncertainty Propagation for Space Situational Awareness** – Presented by Brandon Jones, University of Texas at Austin
3. **Deep Learning & Large Language Methods for Space Domain Awareness** – Presented by Roberto Furfaro, University of Arizona; Richard Linares, Massachusetts Institute of Technology; Weston Faber, L3Harris
4. **AstroTactics: Wargaming Emerging Space Capabilities and Assets** – Presented by Michelle Zhang, Princeton University; Ethan Magistro, Princeton University; Joyce Mo, Princeton Satellite Systems
5. **Astrodynamics for xGEO Space Domain Awareness** – Presented by Aaron J. Rosengren, University of California San Diego; Shane D. Ross, Virginia Tech
6. **Introduction to Event-Based Sensing for SDA: A Hands-On Tutorial** – Presented by Brian McReynolds, U.S. Air Force; Gregory Cohen, Western Sydney University; Rachel Oliver, Cornell University; Michal Zolnowski, Remote Observatories for Asteroids and Debris Searching; Zachry Theis, AFRL Space Vehicles
7. **Panchromatic, Multi-spectral, Spectroscopy, and Polarimetry Data Collection and Image Processing for Non-resolved Object Characterization** – Presented by Francis Chun, USAF Academy; Benjamin Roth, US Air Force Academy; Timothy Giblin, i2 Strategic Services LLC; David Strong, Strong EO Imaging, Inc.; Anil Chaudhary, Applied Optimization; Phillip Fishbein, Applied Optimization, Inc.
8. **Observing and Characterizing Space Debris** – Presented by Thomas Schildknecht, Astronomisches Institut Universität Bern
9. **Space Domain Decision Intelligence: Reasoning Under Uncertainty for Orbital Security and Sustainability** – Presented by Moriba Jah, GaiaVerse Ltd.
10. **Telescopes and Optics: An Introduction to Ground-based Optical SDA** – Presented by Peter Zimmer, J.T. McGraw and Associates, LLC (JTMA)

Five technical short courses will be presented virtually on Monday September 15. The presentations are “live,” (no recording) and participants will have the ability to interact with the instructor and attendees in real-time.

- A. **Introduction to Data Driven Analytics and Applications to SSA** – Presented by Jeff Cornelius, Parsons; Kevin Daly, Parsons
- B. **Alphabet Soup: How GNC, FD, FSW, GSW, and M&S interact with SDA** – Presented by Mark Muktoyuk, Astroscale U.S.
- C. **AI for Space Domain Awareness: a Hands-on Course** – Presented by Shadi Mohagheghi, MathWorks; Reece Teramoto, MathWorks; Thomas Kelecy, The Aerospace Corporation
- D. **Optical Modeling and Simulation for SSA/SDA** – Presented by Patrick North, Ansys Government Initiatives (AGI)
- E. **Data Assimilation for the Space Environment** – Presented by Jeffrey Steward, Orion Space Solutions; Junk Wilson, Orion Space Solutions; Rachel Stutz, Orion Space Solutions

AMOS CONFERENCE FAST FACTS – continued

2025 Sponsors

Po’okela (working together) KBR

Kokua (to help and support)

Comspoc

L3 Harris

The MITRE Corporation

Laulima (working together)

Anduril

ExoAnalytic Solutions

Northrop Grumman

BAE Systems

Kratos

SpaceNav

EO Solutions

Maxar

Lokahi (collaboration and unity)

Amazon Kuiper

Lockheed Martin

Astroscale

LSAS Tec

AV

Parsons

Boeing

Raytheon

CACI

Secure World Foundation

General Atomics Electromagnetic Systems

Slingshot Aerospace

Johns Hopkins Applied Physics Laboratory

Voyager

Leolabs

Kupa’a (loyal and committed)

Hawaii Technology Development Corporation

Space Foundation

MDA Space

SpaceMap

SAIC

Telesat Government Solutions

Malama (to care for)

a.i. solutions

Kayhan Space

SEAKR Engineering

Advanced Scientific Concepts

Lipoa

SpaceFlux

Advanced Space

NEC Aerospace Systems

Teledyne

Astro Haven Enterprises

Nokomis

The Aerospace Corporation

ATIK Cameras

Officina Stellare

Toptica Photonic

Celestron

Planewave Instruments

Trusted Space

GMV

Rocket Lab

USRA

Hart Scientific Consulting

Sea West Observatories

Exhibitors

a.i. solutions | Advanced Scientific Concepts | AFRL | Astro Haven Enterprises
ATIK Cameras | BAE Systems | Celestron | COMSPOC | EO Solutions
General Atomics Electromagnetic Systems | GMV | Hart Scientific Consulting
JHU Applied Physics Laboratory | Kayhan Space | KBR | Kratos | LeoLabs | Lipoa | LSAS Tec
MAXAR | MDA Space | Nokomis | Officina Stellare | Planewave Instruments
Rocket Lab | Sea West Observatories | SEAKR | Slingshot Aerospace | SpaceFlux
SpaceMap | SpaceNav | Teledyne | The Mitre Corporation | TOPTICA Photonics

How did the conference come to be on Maui?

Maui has some of the most diverse and highly capable optical telescopes (AEOS), instrumentation (adaptive optics, spectrometers, photometers, radiometers, etc.) and processing capabilities (MHPCC) centralized into one location on the planet earth.

The AMOS Conference began in 1999 as an AFRL initiative, executed by the Maui Economic Development Board (MEDB). At that time, the focus of the conference was as a users' conference and to promote the Air Force Maui Optical and Supercomputing Site (AMOS) which has provided the U.S. Department of Defense (DoD) with space situational awareness (SSA) capabilities for over 65 years (since 1951).

In 2006, MEDB assumed ownership of the AMOS Conference from the Air Force, and proceeded to build upon early success by evaluating and adding elements to the conference that bring value to the SSA/SDA (Space Domain Awareness) Community. In the 19 years since, MEDB's intent in presenting the AMOS Conference is still to support the Air Force's mission on Maui which, in turn, supports MEDB's mission of economic diversification.

What are the various activities of the AMOS Conference?

For the AMOS Conference to continue to be of benefit to the Air Force, it must also be of benefit to the SSA/SDA Community at large. The conference has expanded from solely technical sessions to include exhibition and sponsorship opportunities; SSA Policy sessions that explore international issues; keynotes by international SSA thought leaders; invited workshops that promote international collaboration and cooperation on SSA/SDA topics; and technical short courses. Evening receptions provide informal opportunities to network and build connections.

New this year will be the use of **digital touch screen monitors** for displaying posters, replacing the printed versions. Select poster presenters will be scheduled to give an 8-minute overview of their poster during the Wednesday and Thursday's poster receptions.

How are presenters selected for the Technical Sessions?

A [Call for Papers](#) is announced at the beginning of the year with submissions closing March 3. Papers are reviewed and selected by Technical Chairs that have been selected to moderate the specific sessions noted to be in high demand by the submissions.

Papers that are not accepted for an oral presentation may be invited to present a poster. To expand the number of opportunities to present at AMOS, virtual posters are offered with select presenters invited to present in-person. All presenters, oral or poster, are required to submit a final paper by August 29 in order to present at the AMOS Conference.

AMOS CONFERENCE FAQ – continued

Where are the Technical Papers published?

Final papers are collated into the Proceedings for the year and available for purchase 8-10 weeks post-Conference. The Conference also maintains an archive of individual technical papers presented at the AMOS Conference since 2006 which is searchable online as a resource to the SSA technical community <https://amostech.com/archives/>.

In 2025, relevant papers will be considered for publication in the 2025 AMOS Collection in the Journal of Astronautical Sciences, an archival publication devoted to the sciences and technology of astronautics. Articles are published which present significant new results, important insights, or state of the art surveys in all areas of astrodynamics, celestial mechanics, atmospheric flight mechanics, navigation and guidance, and space-related sciences.

What awards are associated with the AMOS Conference?

For the eighth year, the Space Surveillance Technical Committee of the American Astronautical Society (AAS) and AMOS Conference will present a Student Award for the best manuscript submitted and presented by a student. The winner receives a \$3,000 stipend, as well as free registration for both the AMOS Conference and EMER-GEN.

All presentations are eligible for an overall Best Paper that will be presented end of the Conference. Poster presenters are also in the running for awards – Best Poster, Most Creative, Best Newcomer and Best Poster Pitch Presentation.

What is the AMOS Policy Forum?

The AMOS Policy Forum (previously called SSA Policy Forum), coordinated in collaboration with Secure World Foundation, explores international issues related to Space Situational Awareness in a panel format. Held at the start of each day of the 3-day AMOS Conference, Wednesday to Friday, the sessions are preceded by a relevant keynote presented by an invited SSA thought leader. Bringing together the developers and implementers of SSA capabilities and the architects of SSA policy provides a forum to interact at a time when the landscape is rapidly changing. This year's topics are:

1. International Military SDA Sharing
2. U.S. China – Space Safety Information Sharing – Exploring Need and Possibilities
3. SSA Needs for Novel Space Activities

How will the virtual conference experience be for attendees?

A robust virtual platform provided by X-CD technologies will allow attendees to attend the live plenary sessions and participate in Q & A via a chat function. The platform will include a poster venue and the opportunity to network with fellow attendees. Technical sessions will be on-demand, and all presentations will be recorded for later access by those registered unable to attend the live streaming.

A virtual exhibit hall will have a collection of resources (links and downloads) provided by sponsors. In the poster venue, attendees can view pre-recorded 3-minute presentations of the posters and post questions to the presenters via the discussion board.

AMOS CONFERENCE FAQ – continued

Who attends?

Along with United States representatives from military, government, academia and commercial sectors, the number of countries that have attended over the history of AMOS Conference is 42 – Australia, Austria, Belgium, Brazil, Bulgaria, Canada, Chile, China, Czech Republic, Egypt, Finland, France, Germany, Hong Kong, India, Iran, Ireland, Israel, Italy, Japan, Kazakhstan, Netherlands, New Zealand, Pakistan, Panama, Philippines, Poland, Portugal, Republic of Korea, Russia, Singapore, Slovakia, South Africa, Spain, Sweden, Switzerland, Taiwan, Thailand, Turkey, Ukraine, United Arab Emirates, and United Kingdom.

A sampling of companies, universities, and government organizations that have attended AMOS can be [viewed/downloaded](#).

What is EMER-GEN and what do you expect to achieve?

The EMER-GEN program is a joint initiative of the AMOS Conference and the Space Generation Advisory Council (SGAC). Designed especially for young professionals and students (35 and under) enthusiastic about careers in space, the original 2+ day program has grown to include webinars before the main event with a focus on fostering innovation and entrepreneurship among the cohort. Through the whole program, participants are challenged to solve/hack a problem to create new opportunities for space-based technologies.

With the help of advisers from industry, government, academia and NGOs, the EMER-GEN experience offers the experience offers

- Mentoring with renowned space specialists from the public sector (military and civil), private sector, and non-governmental organizations
- Networking with other young professionals
- Technical Short Course presented by a specialist in space situational awareness
- Professional Development sessions to enhance your effectiveness in a global environment

The partnership with SGAC provides an opportunity to extend the reach of the AMOS Conference and to contribute to the professional development of the upcoming space generation.

Scholarships are available to Hawaii-based residents.

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2025 AMOS CONFERENCE PRESS RELEASES

(latest to earliest)

Contact: Annette Lynch, Director of Communications, Maui Economic Development Board
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FOR IMMEDIATE RELEASE

Space Leaders to talk Policy at AMOS 2025

Kihei, Maui, Hawaii, August 19, 2025 – The 26th annual AMOS Conference will have a full-house again September 16-19 at the Wailea Beach Resort, Maui. Chief of Space Operations, General B. Chance Saltzman, headlines a three-day program that brings together policymakers and experts from the private sector, academia, the military, and government agencies.

Each morning features the AMOS Policy Forum, a collaboration with Secure World Foundation, that brings together the developers and implementers of SSA capabilities and the architects of SSA policy to discuss a landscape that is rapidly evolving.

Following General Saltzman’s keynote, a panel will discuss the “*International Military SDA Sharing.*” In 2019, NATO released its first space policy as an institution and released in June 2025 a commercial space policy similar to the commercial utilization strategy that both DoD and USSF put out last year. As it is formalizing its space strategies and as other NATO members strengthen their military space capabilities, it is increasingly a possible platform for sharing SDA data. Similarly, the rise of the Quad (US, Japan, India, and Australia) also lends itself to serving as a way in which to share SDA data amongst military partners.

This panel will discuss pathways for sharing SDA data, goals for doing so, identify possible gaps from the various SDA systems to find ways in which new SDA producers can fill niches, and look at how the commercial SSA sector can best work with military SDA actors.

Moderator Victoria Samson, Chief Director, Space Security and Stability at Secure World Foundation will be joined by Group Captain Nick Bewley, UK Space Command; Barbara Golf, Strategic Advisor for Pivot SDA, USSF/SSC; Gp Cpt Rex Harrison, Director SDA, Defence Australia; and Lt Col Amandeep Singh, Officer Commanding, SDA, The Indian Army, Ministry of Defence.

DAY 2

Aarti Holla-Maini, Director, UN Office for Outer Space Affairs (UNOOSA) will kick off Day 2 with a keynote presentation. The British lawyer, economist and space expert maintains responsibility for UNOOSA management and administration, provides strategic guidance to its work and ensures that it is implemented in accordance with the mandates of the General Assembly, the Committee on the Peaceful Uses of Outer Space (COPUOS), and the established policies of the United Nations.

Ms. Holla-Maini serves as the senior advisor to the Secretary-General and represents the SG at meetings and conferences on matters relating to the peaceful exploration and use of outer space. She also discharges the Secretary-General's obligations under the UN treaties and principles on outer space.

The keynote presentation will be followed by a Policy Forum discussion titled "*U.S. China - Space Safety Information Sharing - Exploring Need and Possibilities.*" The two most prolific space actors today - in terms of number of operational spacecraft - are the United States and China. Amid a tense geopolitical relationship there is operational need for exchange of space safety information and building of operator-to-operator coordination channels for basic operational safety and stability in the space environment.

This panel, moderated by Ian Christenson, Senior Director, Private Sector Programs at Secure World Foundation, will discuss the extent of existing physical interactions between U.S. and Chinese constellations and the need for coordination, and from there explore what prospects may or may not exist for practical exchange of information between the two communities.

Christenson will be joined onstage by Siamak Hesar, Co-Founder & CTO, Kayhan Space, Josef Koller, Head of Space Safety and Sustainability, Amazon Project Kuiper; and Audrey Schaffer, Vice President of Strategy and Policy, Slingshot Aerospace. Kristin Burke, Senior Space & Counterspace Researcher at China Aerospace Studies Institute will join the panel virtually, and Peng Zhang, Director of Solutions, Galaxy Space, Ltd. will provide remarks.

Christenson commented, "As operations in the space environment become more complex, finding means to ensure space safety information is shared between US and Chinese civil and commercial space operators is a key challenge that must be addressed. We look forward to sharing perspectives on this challenge through this panel."

DAY 3

The final day of AMOS will kick-off with a Fireside Chat titled "Reflections on the Evolution of U.S. Policy for Space Traffic Management Policy" with a bipartisan group of former U.S. Executive branch officials: Richard DalBello, Diane Howard, and Kevin O'Connell. All three have served at the U.S. Office of Space Commerce (OSC), starting with O'Connell taking on the Director role 2018-'21. Howard joined the office in 2019 to serve as Chief Counsel until 2021. DalBello took over as OSC Director from 2022-2024. Howard also served as Director, Commercial Space Policy at National Space Council during 2021-2024.

This anticipated lively discussion will set the stage for the panel that will follow, "SSA Needs for Novel Space Activities." A number of areas of novel space activities are now seeing operational commercial missions increase in scope and pace. These include return and reentry activities; rendezvous and proximity operations, including satellite servicing and active debris removal; and cislunar and lunar surface missions. These activities offer both new needs for SSA information and new challenges for collecting SSA data.

Brian Weeden, Systems Director, The Aerospace Corporation, will moderate the panel with speakers Alberto Águeda, Director of Space Surveillance and Traffic Management, GMV; Mariel Borowitz, Director of International SSA Engagement, Office of Space Commerce; Tahara Dawkins, Director of Policy, Astroscale; Pascal Faucher, Chairman EU SST, Defense and Security, CNES; and Carolin Frueh, Associate Professor, Purdue University.

The panel will discuss the role of SSA in enabling and supporting these novel commercial space activities and seek to identify gaps and opportunities for improvement in current capabilities. It will also discuss how national space traffic coordination systems would support this mission and how SSA information might support improved licensing practices for novel space activities.

In addition to the keynotes and policy discussions, the conference features technical sessions, exhibit and poster sessions, fourteen technical short courses plus featured presentations. This year's featured presentations include Colonel Jonathan Whitaker, Chief of Staff and Director of Space Operations, NATO Combined Force Space Component Command (CFSpCC); Dr. Kelly Hammett, Director, Space Rapid Capabilities Office; Colonel Barry Croker, Commander of Mission Delta 2; and Mrs. Barbara Golf, USSF, Strategic Advisor for SDA, SSC/SZ.

Colonel Richard Beckman, Air Force Research Laboratory (AFRL) /RV Space Vehicles Directorate, and Mr. Enrico Jeantete, Deputy Director, Innovation and Acquisition Prototyping Delta, Space Systems Command (SSC); will give a joint presentation on “*SDA Support to Next-Generation Space Mobility and Logistics*.” This talk will highlight the decades-long collaboration between the AFRL and SSC in developing and deploying innovative space solutions. Both organizations are at the forefront of novel space domain technical challenges.

View the full agenda at <https://amostech.com/agenda/>

Presented by Maui Economic Development Board (MEDB), the AMOS Conference will be hybrid, offering livestreaming of all presentations. In-person registration has been sold out for months with many placing value on the numerous networking opportunities provided. In anticipation of numbers and limited seating, the conference will be streamed live to an overflow room and to the virtual platform and mobile app. Virtual tickets are still available providing access to all presentations as well as online networking and the exhibit hall.

The 2025 AMOS Conference is sponsored by a.i. solutions, Advanced Scientific Concepts, Advanced Space, Amazon Kuiper, Anduril, Astro Haven Enterprises, Astroscale, ATIK Cameras, AV, BAE Systems, Boeing, CACI, Celestron, COMSPOC, EO Solutions, ExoAnalytic Solutions, General Atomics Electromagnetic Systems, GEOST, GMV, Hart Scientific Consulting International, HTDC, JCO, JHU Applied Physics Laboratory, Kayhan Space, KBR, Kratos, L3 Harris, LeoLabs, Lipoa Investments, LLC, Lockheed Martin, LSAS Tec, Maxar, MDA Space, Mitre, NEC Aerospace Systems, Nokomis, Northrop Grumman, Officina Stellare, Parsons, Planewave Instruments, Raytheon, SAIC, Sandia National Lab, Sea West Observatories, SEAKR, Slingshot

Aerospace, SpaceFlux, SpaceMap, SpaceNav, Teledyne, Telesat, The Aerospace Corporation, TOPTICA Photonics, Trusted Space, University of Colorado Boulder, USRA, and Voyager. Learn more at <https://amostech.com/>

PHOTOS:



CAPTION: Aarti Holla-Maini, Director, UN Office for Outer Space Affairs will speak on Day 2 of the 2025 AMOS Conference.



CAPTION: Victoria Samson, Chief Director, Space Security and Stability at Secure World Foundation will moderate a panel of the AMOS Policy Forum

Breaking News: Keynote announcement for 2025 AMOS Conference

Kihei, Maui, Hawaii, July 10, 2025– The AMOS Conference announced a major change to their program today revealing that General B. Chance Saltzman will now be delivering the keynote speech on Day 1. After speaking here in 2023, the U.S. Space Force Chief of Space Operations made a point of returning to Maui for the premier technical conference in SDA.

As Chief of Space Operations, General Saltzman serves as the senior uniformed Space Force officer responsible for the organization, training and equipping of all organic and assigned space forces serving in the United States and overseas. A member of the Joint Chiefs of Staff, he functions as one of the military advisers to the Secretary of Defense, National Security Council, and the President.

Presented by Maui Economic Development Board (MEDB), the AMOS Conference September 16-19 brings together policymakers and experts from the private sector, academia, the military, and government agencies. In addition to keynotes that kick off each of the three days, the program includes the policy forum; featured presentations, technical sessions; poster presentations and an exhibit venue. Technical short courses are also on the program on the Tuesday.

“We are honored to welcome General Saltzman back to Maui,” said Annette Lynch, Director of Communications with MEDB. “It reflects the critical importance placed on space domain awareness and building connections with the leaders in the space community that attend AMOS including international partners.”

Saltzman’s keynote will be followed by a Policy Forum discussion on “International Military SDA Sharing.” As NATO is formalizing its space strategies and as other NATO members strengthen their military space capabilities, it is increasingly a possible platform for sharing SDA data. The rise of the Quad (US, Japan, India, and Australia) also lends itself as a way in which to share SDA data amongst military partners. This panel will discuss pathways for sharing SDA data, goals for doing so, identify possible gaps from the various SDA systems to find ways in which new SDA producers can fill niches, and look at how the commercial SSA sector can best work with military SDA actors.

The conversations will be followed up after a short break with a featured presentation by Colonel Jonathan Whitaker, NATO Combined Force Space Component Command (CFSpCC) Chief of Staff and Director of Space Operations. Based at the Ramstein Air Base, Germany, Colonel Whitaker will present NATO Supreme Allied Commander for Europe and US Space Command perspectives on establishing and prioritizing objectives for space C2 across the 32-member states.

Friday Fireside Chat

The speakers for the Friday keynote have been confirmed with Richard DalBello, Diane Howard and Kevin O’Connell taking to the stage for a fireside chat. Both Dalbello and O’Connell served as Director of Office of Space Commerce in past administrations, and Howard has served as Director of Commercial Space Policy at the National Space Council, and was also a former Chief Counsel for Space Commerce at the Department of Commerce. The anticipated lively discussion will set the stage for the panel on “*SSA Needs for Novel Space Activities.*”

This Policy Forum panel will discuss the role of SSA in enabling and supporting novel commercial space activities and seek to identify gaps and opportunities for improvement in current capabilities. It will also discuss how national space traffic coordination systems would support this

mission and how SSA information might support improved licensing practices for novel space activities.

A full agenda is available at <https://amostech.com/agenda/>. With high demand, registration for in-person attendance at the AMOS Conference is now managed by a waitlist. Virtual tickets are available, giving access to the robust virtual platform where all presentations will be made available via livestream and on-demand. Learn more at <https://amostech.com/>

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PHOTOS:



CAPTION: General Saltzman, Chief of Space Operations, United States Space Force

Short Courses Provide Technical Training Ahead of AMOS Conference

Kihei, Maui, Hawaii, June 16, 2025 - Technical Short Courses for the 2025 AMOS Conference are now open to registration for those attending AMOS in September. The courses offer attendees opportunities to learn and deepen their understanding of cutting-edge technologies and trends related to space situational/domain awareness (SSA/SDA).

Presented by Maui Economic Development Board, the AMOS Conference is renowned for bringing together leading experts, researchers, and practitioners from the fields of space domain awareness. Courses are offered both virtually on Monday, September 15 and in-person on Maui on September 16, preceding the main three days of plenary sessions, networking and exhibit sessions on September 17-19.

“We continue to receive a high number and variety of Short Course proposals that reflect the growth in technology and trends in SDA.” said Annette Lynch, Director of Communications. “This year we welcome a number of new faces instructing the courses, along with several familiar instructors that prove popular and relevant to the AMOS audience.”

The short courses cover diverse topics, from machine learning, event-based sensing and astrodynamics to observing space debris and wargaming. By attending these courses, conference participants gain practical insights and skills that contribute to advancements in optical and space surveillance technologies.

In-person courses

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Virtual Courses

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- B. **Alphabet Soup: How GNC, FD, FSW, GSW, and M&S interact with SDA** - Presented by Mark Muktoyuk, Astroscale U.S.
- C. **AI for Space Domain Awareness: a Hands-on Course** - Presented by Shadi Mohagheghi, MathWorks; Reece Teramoto, MathWorks; Thomas Kelecy, The Aerospace Corporation
- D. **Optical Modeling and Simulation for SSA/SDA** - Presented by Patrick North, Ansys Government Initiatives (AGI)
- E. **Data Assimilation for the Space Environment** - Presented by Jeffrey Steward, Orion Space Solutions; Junk Wilson, Orion Space Solutions; Rachel Stutz, Orion Space Solutions

Full descriptions of all the short courses are available at <https://amostech.com/short-courses>. A separate registration fee is required for each course and courses can be added to new and existing registrations. Places will be limited due to space and to ensure an interactive experience for all.

The AMOS Conference is the premier technical conference in the nation devoted to space situational awareness/space domain awareness. The cross section of private sector, government, and academic participation helps foster important dialogue and international collaboration. The continued growth in attendance and participating countries at AMOS reflects a growing interest in space sustainability and space commerce initiatives as new actors—national governments, private sector companies, non-governmental entities, and universities—become involved in these activities.

In addition to the Technical Short Courses, the AMOS Conference includes Keynote Speakers, SSA Policy Forums, Exhibit Sessions, Technical Sessions and Networking events. Learn more about the program at <https://amostech.com/agenda/>

PHOTO



CAPTION:
Technical Short Courses are a popular addition to the annual AMOS Conference



Thomas Schildknecht, Astronomisches Institut Universität Bern, returns to teach his course *Observing and Characterizing Space Debris*

Program and speakers announced for the 2025 AMOS Conference

Kihei, Maui, Hawaii, June 3, 2025– The 2025 AMOS Conference will kick-off with a keynote by Lieutenant General Douglas A. Schiess the Commander, U.S. Space Forces - Space; and U.S. Space Command's Combined Joint Force Space Component Commander, Vandenberg Space Force Base, California. The 2025 program is taking shape with keynote speakers, policy forum topics, featured presentations, and technical sessions scheduled for September 16-19.

Presented by Maui Economic Development Board, the AMOS Conference is the premier technical conference in the nation devoted to space situational/domain awareness. Bringing together policymakers and experts from the private sector, academia, the military, and government agencies, the conference attracts papers and presentations from the world's foremost scientists and leaders working in SSA.

Lt. Gen. Schiess leads thousands of joint and combined personnel across fifty tactical units with a mission to plan, integrate, conduct and assess global space operations in order to deliver combat relevant space effects in, from, and to space for combatant commanders, coalition partners, the Joint Force and the nation. He plans and executes space operations through two command and control deltas and exercises operational control of assigned and attached U.S. Space Forces including all or portions of six operational deltas.

Additionally, Lt. Gen. Schiess oversees two command and control deltas, and five distinct and geographically dispersed operations centers, including the Combined Space Operations Center at Vandenberg SFB, California; the National Space Defense Center at Schriever SFB, Colorado; the Missile Warning Center at Cheyenne Mountain Space Force Station, Colorado; the Joint Overhead Persistent Infrared Planning Center at Buckley SFB, Colorado; and the Joint Navigation Warfare Center located at Kirtland Air Force Base, New Mexico. [Learn more about Lt. Gen Schiess](#)

Featured Presentations

Speakers confirmed to give Featured Presentations at this year's AMOS Conference include Barbara Golf, Strategic Advisor for Pivot SDA, U.S. Space Force/SSC who will speak on Joint Commercial Operations. The new commander of Mission Delta 2, Colonel Barry Croker will provide a mission brief.

The North Atlantic Treaty Organization (NATO) Combined Force Space Component Command (CFSpCC) Chief of Staff and Director of Space Operations, U.S. Colonel Jonathan Whitaker, will give a presentation on NATO Space operations. NATO recognizes space as a key warfighting domain in alliance defense and has established a new seven-point plan to prioritize modernization initiatives. Based at the Ramstein Air Base, Germany, Colonel Whitaker will present NATO Supreme Allied Commander for Europe and US Space Command perspectives on establishing and prioritizing objectives for space C2 across the 32-member states.

There will also be a featured presentation by leaders of Air Force Research Laboratory (AFRL) and Space Systems Command (SSC) that will highlight the decades-long collaboration between the two organizations in developing and deploying innovative space solutions.

“It is encouraging to see the continued support and interest in the AMOS Conference from all sectors including the military and government sector,” said Annette Lynch, Director of Communications with Maui Economic Development Board, the host of AMOS. “We anticipate

another sold-out conference with the high importance placed on SDA and the opportunities for networking with leaders in the space community.”

Policy Forum

The SSA Policy Forum is a series of paired keynotes and panel discussions that lead each of the three days of the conference and focus on specific policy topics relevant to the AMOS community. A collaboration with Secure World Foundation, the Policy Forum brings together the developers and implementers of SSA capabilities and the thought-leaders of SSA policy to discuss a landscape that is rapidly evolving.

The Day 1 keynote with Lt. Gen. Schiess will be followed by a Policy Forum panel on “*International Military SDA Sharing*.” This panel will discuss pathways for sharing SDA data, goals for doing so, identify possible gaps from the various SDA systems to find ways in which new SDA producers can fill niches, and look at how the commercial SSA sector can best work with military SDA actors.

The Friday session will kick off with a keynote fireside chat among bipartisan former U.S Executive branch officials. Diane Howard, Richard DalBello and Kevin O’Connell have been invited for this anticipated lively discussion that will set the stage for the panel on “*SSA Needs for Novel Space Activities*.”

Further details on the topics and speakers will be announced in the coming weeks.

Technical Sessions

An outstanding number of exceptional abstracts from 24 countries were received for consideration for presentation at this year’s AMOS Conference. Sixty-four presenters will have the opportunity to present their research and work on the main stage in the technical sessions: Astrodynamics, Atmospheric/Space Weather; Cislunar SDA, Conjunction RPO, Machine Learning for SDA Applications, Satellite Characterization, SDA Systems & Instrumentation, Space-based Assets, Space Debris, and Space Domain Awareness.

The remaining accepted presenters have been assigned to poster presentations with all posters appearing in digital form on the virtual platform. This year the AMOS Conference is introducing digital touch screen monitors in the Exhibit and Poster Venue, replacing the large print poster boards. A select number of presenters will be invited to give a 10-minute overview of their poster during one of the two poster sessions scheduled on Wednesday and Thursday of the conference. The monitors will be available for presenters and attendees to access throughout Wednesday and Thursday.

The AMOS conference is hybrid with livestreaming of all oral presentations for those unable to travel to Maui. Virtual attendees have access to all presentations as well as online networking.

The AMOS Conference is preceded by the 8th Annual EMER-GEN® program, a professional development opportunity for young professionals and students enthusiastic about careers in space. A joint initiative with the Space Generation Advisory Council (SGAC) EMER-GEN puts the focus on fostering innovation and entrepreneurship. The program features mentoring sessions with renowned space specialists; networking; technical short courses; and interactive professional development sessions designed to enhance the young professionals’ effectiveness in a global environment.

Registration is open for both events. Learn more at <https://amostech.com/>

PHOTOS:



CAPTION: Lt. Gen. Douglas A. Schiess, Commander, U.S. Space Forces - Space; and U.S. Space Command's Combined Joint Force Space Component Commander, Vandenberg Space Force Base, California will give the opening Keynote for the 2025 AMOS Conference

2025 AMOS Conference to Showcase Advancements in Space Domain Awareness and Related Technologies

Kihei, Maui, Hawaii, May 13, 2025 – Notifications have gone out to notify authors of the acceptance to present their research and technical work at the 2025 AMOS Conference. Now in its 26th year, the Call for Papers attracted a near record-number of abstracts from 24 countries. The premier technical conference in the nation devoted to space domain and situational awareness (SDA/SSA) will be held September 16-19 at the Wailea Beach Resort.

The continued evolution and advancements in field of space domain awareness is reflected in the number and content of the submissions covering the topics: Astrodynamics, Cislunar SDA, Conjunction/RPO, Machine Learning for SDA Applications, Satellite Characterization, SDA Systems & Instrumentation, Space-based Assets, Space Debris, Space Domain Awareness and Space Weather.

The AMOS Conference, presented by the Maui Economic Development Board, will be hybrid with both in-person and livestream components. In addition to traditional oral presentations and in-person posters, the program includes a virtual poster category to showcase the greater body of technical work being produced in this field.

“The AMOS Conference technical committee strives for a program to be of critical and key interest to governments, academia and the commercial sector,” said Annette Lync, Director of Communications for Maui Economic Development Board (MEDB), the host of the AMOS Conference. “All abstract submissions are subject to rigorous evaluation by a panel of reviewers for quality, innovation and relevance to the SDA community. With the high interest in presenting at AMOS the hardest challenge is saying no to authors who are looking to showcase their work in front of such an esteemed audience.”

Thirty-two students have been accepted to present this year and are eligible for the 8th annual AMOS Student Award. The award is presented in collaboration with the American Astronautical Society, along with the Best Paper Award. Students are required to submit their research paper by August 15 to vie for the award which includes an honorarium, complimentary registration to the AMOS Conference and to EMER-GEN® (September 14-16), the program for young professionals enthusiastic about careers in space.

The call for papers also attracted a high number of proposals to conduct short courses at AMOS. The short courses provide an opportunity to upgrade technical job skills and remain abreast of recent developments in fields of interest within SDA. To accommodate more courses, short courses are offered both virtually on Monday September 15 and in-person on Tuesday September 16.

AMOS provides the opportunity to stay on the cutting edge of industry trends while networking and cross-sharing knowledge within the SDA community. In addition to the technical sessions and short courses, the AMOS program features keynote speakers, policy forums, special interest topics, networking receptions and an exhibit venue. Both in-person and livestream attendees will have access to a virtual platform to enable networking and collaboration.

Registration is now open with conference organizers expecting another sold-out conference.

The 8th Annual EMER-GEN program precedes the AMOS Conference fostering innovation and entrepreneurship amongst young professionals enthusiastic about careers in space. The program

features challenges, tabletop exercise, professional development sessions and popular mentoring sessions with renowned space specialists.

Host of the AMOS Conference and EMER-GEN, Maui Economic Development Board (MEDB) is a 501(c)(3) not-for-profit corporation established in 1982 with a mission to diversify Maui County's economy, building pathways to innovation, jobs and opportunities for our residents. Through partnerships with the public and private sector, MEDB undertakes projects that assist growth industries with navigating and thriving in our county, educates and trains residents for new careers, and engages our community in forums that determine future economic directions.

Learn more at <https://amostech.com/> and EMER-GEN at <http://www.emer-gen.com> .

Call for Papers for AMOS 2025 – Due March 3

Kihei, Maui, Hawaii, January 5, 2025 – The 2025 AMOS Conference is now accepting submissions for technical papers related to space domain awareness with the launch of Call for Papers. The 26th annual AMOS Conference, presented by Maui Economic Development Board, is scheduled to take place September 16-19, 2025.

Recognized as the preeminent scientific conference in the field of space situational/domain awareness (SSA/SDA), the AMOS Conference is attended by over 1,000 scientists, engineers and space experts from around the globe and across industry, government, military, and academic sectors.

The four-day event features technical short courses and more than 150 presentations in the fields of astrodynamics, cislunar SDA, satellite characterization, machine learning and more. The conference also features high-level presentations and panel discussions by key stakeholders in space policy.

AMOS 2025 is an in-person event with virtual attendance options. All presenters must present in-person. Select poster presentations may be designated as pre-recorded virtual-only presentations in order to accommodate a greater technical body of work for the SSA/SDA community. The AMOS Technical Committee reviews all submissions from the annual Call for Papers and selects those that best meet the scientific and technical standards of the conference. Submissions are encouraged from international, undergraduate and graduate students pursuing a STEM degree at an accredited college or university. International and student participants receive a reduced conference fee.

Please visit <https://amostech.com/cfp/> for all the details on submitting an abstract. Proposals for special sessions, such as panels and featured oral presentations are also considered.

Publication in the Journal of Astronautical Sciences

The AMOS Conference, in conjunction with the American Astronautical Society (AAS), is delighted to provide participating authors the opportunity to be published in a peer-reviewed journal. The Journal of the Astronautical Sciences is an archival publication devoted to the sciences and technology of astronautics. Invitations to be peer-reviewed and considered for publication in a special AMOS Conference issue of the Journal of Astronautical Sciences will be extended upon conclusion of the Conference. [Learn more.](#)

Awards

In collaboration with the Space Surveillance Committee of the American Astronautical Society (AAS), the AMOS Conference recognizes outstanding efforts in the field of Space Situational Awareness by presenting a series of awards at the close of the annual conference. Award criteria and details are available online at <https://amostech.com/awards>.

The Student Best Paper Award provides funding assistance in the form of a stipend. Once accepted into the conference, the deadline for submission of the completed manuscript is August 15.

Short Course proposals

Proposals are also being solicited for half-day Short Courses. Short courses will be presented and attended in-person. A select number of courses may be designated for virtual instruction and participation.

The short courses are always well attended, offering opportunities for participants to acquire an introductory knowledge on conference topics. Focus topics of broad interest from excellent instructors are encouraged. Short courses are solicited from all technical areas within SSA/SDA subject areas.

The deadline for all submissions to be included in the 2025 AMOS Conference program is March 3. A full list of key dates as we countdown to September can be found at <https://amostech.com/amos-speakers/>

The AMOS Conference is presented by the Maui Economic Development Board, a 501(c)(3) not-for-profit corporation established in 1982 with a mission to diversify Maui County's economy, building pathways to innovation, jobs and opportunities for our residents. Through partnerships with the public and private sector, MEDB undertakes projects that assist growth industries with navigating and thriving in our county, educates and trains residents for new careers, and engages our community in forums that determine future economic directions.