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84th International Conference on Mass Properties

May 18–23, 2025

The Clyde Hotel, Albuquerque, New Mexico USA





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**Stop by the Career Development Table
at the Conference**



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SAWE President's Welcome



Robert Hundl
International SAWE President
Fluor Corporation

On behalf of the Society of Allied Weight Engineers I want to welcome you to our 84th Annual International Conference here in Albuquerque, New Mexico. Our conference planning committee has assembled a great line up of topics and papers for you. Here is a sample of the many opportunities available:

- Learn about today's latest technologies, techniques, and programs.
- Participate in development and updates of mass properties industry standards.
- Experience problem solving in forum discussions.
- Take advantage of training opportunities taught by experts.
- Meet vendor representatives and get acquainted with products essential to our jobs.
- Talk informally with customers, competitors, and suppliers.
- Review development of the new Mass Properties Engineer Certification Program.
- Learn first-hand about the latest SAWE activities and programs.

SAWE's technical sessions, standards and practices workshops, and forum discussions address the many needs of our members across the military aircraft, commercial aircraft, airline, space, marine, offshore, land vehicles, and allied industries represented by our society.

The conference is designed to enhance your knowledge and technical capabilities in a comfortable and fun atmosphere. While here you will be rewarded with a valuable experience, renewing, and strengthening your understanding of mass properties, and improving your abilities to generate top performance products in a safe, efficient manner.

We're excited you are here!

Thanks for joining us!



Conference Chairs' Welcome



Errol Oguzhan
Conference Co-Chair
Lockheed Martin Corporation
- Retired



Chris Wandell
Conference Co-Chair
Northrop Grumman Corporation

Our SAWE Conference Committee is excited to host this year's 84th International Conference on Mass Properties Engineering. This is the first ever SAWE International Conference in beautiful Albuquerque, New Mexico. Our Conference Committee and the International Executive Committee are committed to providing an outstanding program of technical sessions, Standards & Practices workshops, training, and fun conference events for all attendees.

We encourage you to take advantage of everything the Clyde Hotel has to offer. The hotel is only a few minutes away from shopping, restaurants, and entertainment. There is an indoor restaurant and lounge, and a café serving locally sourced food all conveniently located on the hotel property. The hotel also has a rooftop swimming pool and 24-hour gym facilities.

The technical content for the conference is designed to provide an important exchange of information that can help you improve the efficiency and precision of your work and gain innovative ideas from experts and peers in the mass properties discipline. We wholeheartedly believe that the technical content and exchange of information between you, your colleagues, exhibitors and sponsors provided during this conference will improve your knowledge, expand your network, and help you better tackle your mass properties challenges!

If you need help during the conference, feel free to reach out to any of our officers in-person or by email at conferencesupport@sawe.org.

Welcome!
Enjoy the Conference!



General Schedule Overview

	Sunday May 18	Monday May 19	Tuesday May 20	Wednesday May 21	Thursday May 22	Friday May 23
Morning		National Museum of Nuclear Science and History Tour (Free for Students)	Opening Session & Keynote	Standards & Practices Day Joint Session	Technical Forum	New Mexico Tech Day
Afternoon			Technical Tracks	Industry Workshops	Technical Tracks	
				Luncheon		
			Exhibitor Interaction	Industry Workshops		
Full Day	Training	Training incl. MassTrack/ ShipWeight	Training	Training	Training	
Evening		Welcome Reception			Silent Auction & Awards Banquet	

Notes:

- Detailed schedules for each day are listed later in this program beginning on page 20, and can be quickly found by clicking on the headers in the table above.
- [MassTrack/ShipWeight User Group](#) meets on Monday, May 19, 2025
- Full Professional, Retiree, and Student registrations include conference attendance on Tuesday through Thursday, and the Welcome Reception, Luncheon, Awards Banquet, and Hospitality events. Guest registrations include the Welcome Reception, Awards Banquet, and Hospitality.
- New Mexico Tech Day Trip requires separate event registration and payment.
- Silent Auction items should be dropped off at the Registration Desk as soon as possible.
- Stop by the Registration Desk if you have any questions.



Welcome to Sponsors and Exhibitors



Clint Stephenson
SAWE Vice President Vendor Relations
The Boeing Company

On behalf of the International Society of Allied Weight Engineers, we are excited to welcome our sponsors and exhibitors to this year's conference. Your support makes our conferences possible! During the conference, as an exhibitor, you will have ample opportunities to meet with our attendees to display your products and services and discuss the value of applying your offerings to their mass properties challenges.

Your exhibitor space in the main conference hall will allow you to engage with conference proceedings and provide valuable insight to our members. If you have questions regarding your exhibitor space, exhibit hall provisions, shipping and handling of displays, or anything else please reach out to me at vendor@sawe.org or browse through your Exhibitor's Packet at [SAWE Conference Sponsor and Exhibitor Info](#).

Many thanks to our Corporate Partners and Research Access Members. These organizations receive a free exhibition space as part of their annual membership benefits. Also, Gold Partners receive 6 free conference registration packages, and Silver Partners and Research Access Members receive 2 free registrations. If you would like to become a partner, you can sign up at [SAWE Corporate Partners](#).

Along with your exhibition space and registrations, your company logo will be featured in our online publications and displayed during the conference. You will also have an opportunity to address our attendees during a dedicated time slot during the conference proceedings.

Much more information is available at the links above, or you can reach out to us via email at vendor@sawe.org.

We look forward to seeing your solutions!



Supporting Organizations

SAWE Corporate Partners



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Opening Session Keynote Speaker

Dr. Thomas A. Spencer

***Director of Engineering and Technical Management
Kirtland Air Force Base***

Dr. Thomas A. Spencer, a member of the Senior Executive Service, is the Director of Engineering and Technical Management, Air Force Nuclear Weapons Center, Kirtland Air Force Base, New Mexico. Dr. Spencer is responsible for technical policy, independent validation of nuclear certification, cybersecurity assessment, and the oversight of center test and evaluation activities, ensuring technical supremacy and integrity of the center's nuclear weapons systems supporting two legs of the nation's nuclear triad, including intercontinental ballistic missiles, air-launched cruise missiles, gravity bombs, and nuclear command-and-control communications systems.



Tuesday May 20, 2025 @ 8:00AM MDT



Technical Program



Amanda Cutright
SAWE Vice President
Technical Director
NASA Langley



Robert Zimmerman
SAWE Deputy VP Technical
Lockheed Martin - Retired

The Society of Allied Weight Engineers has been promoting the exchange of technical information about Mass Properties Engineering since 1939. As we enter our 84th year of holding International Conferences, SAWE welcomes those engineers who have created new technical information to exchange, and those who will be learning about these technical advances. SAWE brings mass properties professionals from around the globe together to partake in a meaningful interchange of ideas during two days of Technical Tracks encompassing the full spectrum of Mass Properties Engineering.

Our technical program provides an opportunity for mass properties professionals to interact and share information that is vital to excellence in mass properties prediction, control, and verification. Plan on attending our technical sessions on Tuesday and Thursday where professional and student authors will present their papers and posters, and you will have the opportunity to meet your colleagues in-person from literally around the world.

The 2025 Conference also includes a collaborative Technical Forum on Thursday morning. This year's Forum will feature an investigation and open discussion of ***"Opportunities for Artificial Intelligence and Machine Learning in Mass Properties Applications"***.

A list of papers and presentations to be delivered at the conference is shown on the following page. A detailed schedule of the conference proceedings by day is presented later in this program. Check back often for the latest updates.



List of Papers and Presentations

No.	Title	Authors	Day / Time	Track
3815	Defending Mass Properties	R. Zimmerman - Lockheed Martin (Retired)	Tue 9:15 AM	I
3816	Empowering Mass Properties Engineers with Artificial Intelligence: Transforming Estimation, Analysis, and Optimization	W. Boze - HII (Retired)	Thu 10:00 AM	I
3817	Mass Property Data Checking for On-Shore Modular Construction	R. Hundl, J. Robertson - Fluor	Tue 3:15 PM	II
3821	Developmental Aircraft Design: Quantifying Weight Maturity to Calculate Retired and Remaining Developmental Weight Growth	R. Aman – Lockheed Martin, M. Gray - USAF	Tue 10:00 AM	I
3822	Enabling Digital Transformation in Weights Management: A Unified Data Model for Industry-wide Integration	M. Beyer – Beyer Flight Sciences	Thu 10:45 AM	I
3823	Agile RIO Management: Best Practices for Vehicle Development	M. Beyer – Beyer Flight Sciences	Tue 11:30 AM	I
3825	Moving Mass Coaxial Monocoiler: Design, Simulation and Control	D. T. A. Nguyen, et al.- New Mexico Tech	Tue 1:45 PM	II
3826	A Non-Conservative Assessment of the Feasibility of a Solar-Powered Airship for Mars	Y. Pozhanka, M. Hassanalain - New Mexico Tech	Tue 2:30 PM	II
3827	Dynamic Mass-Aware Trajectory Tracking of Airships Using Multi-Actors Proximal Policy Optimization	R. Liang, et al.- New Mexico Tech	Thu 2:30 PM	I
3828	Biomimetic Swimming Taxidermy Duck Robot: Design, Development, and Testing	D. Vosbein, et al.- New Mexico Tech	Tue 2:30 PM	I
3829 Pres.	Bio-Inspired Innovations: Exploring the Aerodynamic Impacts of Wing Coloration, Shape, Mass, and Spacing in Flight Efficiency	N. Bagheri, et al.- New Mexico Tech	Tue 9:15 AM	II
3830	Integrating Taxidermy into Drone Engineering: A Mallard-Based Flapping-Wing Aerial System	D. Vosbein, et al.- New Mexico Tech	Tue 3:15 PM	I
3831 Pres.	Development of a Weight-Constrained Permissible Drone: Engineering and Regulatory Frameworks	N. Bagheri, M. Hassanalain - New Mexico Tech	Tue 10:45 AM	II
3832 Pres.	Bio-Inspired Group Avian Flight: Exploring the Aerodynamic Impacts of V-Formed Flight in Flight Efficiency	N. Bagheri, M. Hassanalain - New Mexico Tech	Tue 10:00 AM	II
3833	Design of Ground Systems; Path Planning of Autonomous Advanced Designed Robots in Underground Mine	N. Bagheri, et al. - New Mexico Tech	Tue 11:30 AM	II
3834 Pres.	Numerical Approach Based on Cuboid Splitting to Calculate the CG Shift of a Liquid Filled Container Resulting from Rotations	M. Siewert - Airbus Operations GmbH	Tue 1:45 PM	I
3835	Vibration Characterization for Active Damping in a 2U CubeSat Payload for Rocketry Applications	E. Froelich – Univ. of Minnesota: Twin Cities	Tue 10:45 AM	I
3836	Digital Transformation of Weight, Balance, and Cost Data	B. Buchanan - Altair	Thu 11:30 AM	I
Pres.	Certification Workshop	D. Petersen - SAWE	Wed 8:15 AM	I
Pres.	Unconscious Bias in Weight Management	J. Bes - Airbus	Wed 10:00 AM	I
Pres.	Update on the SAWE Career Initiative	D. Petersen, et al. - SAWE	Thu 1:45 PM	I
Pres.	Technology Development Using the Technology Readiness Assessment Insight Template (TRAIT) Tool	A. Cutright - NASA Langley	Thu 3:45 PM	I



Technical Forum

Opportunities for Artificial Intelligence and Machine Learning in Mass Properties Applications



Amanda Cutright
SAWE Technical
Director / Moderator
NASA Langley



Manuela Bucci
Naval Architect
Tymor Marine LTD



Mark Beyer
Founder & President
Beyer Flight Sciences



Rocco Cappiello
VP Data Analytics
Altair

At this year's Conference Technical Forum, a panel of individuals will discuss their experience with using Artificial Intelligence and Machine Learning (AI/ML) for projects that have benefitted the mass properties discipline. Relevant experiences will be shared regarding topics such as generative design, deep learning, and potential future applications including examples from the marine and space industries. During this session, the audience will have time to engage in the discussion, so please join us on Thursday, May 22, 2025, at 8:00 AM, and bring your questions about AI/ML opportunities for mass properties!





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technologists

20%

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veterans

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For more info visit our store at
<https://www.sawe.org/product-category/publications/textbooks>





Standards and Practices Day



Jorge Bes

**SAWE Vice President Standards and Practices
Airbus**

SAWE supports mass properties professionals and their customers by making available products such as Recommended Practices, textbooks, and handbooks. The Standards and Practices committee provides a non-proprietary consensus forum for developing these products which make our professional activities more efficient, more consistent, and more valuable to the professionals of today and tomorrow, as well as being more understandable to our customers. This effort is so important that an entire day – Wednesday - is dedicated to it. All are invited to attend, learn more, make your voice heard, and get involved.

The day will begin with a review of the year's progress and future objectives. We will then engage in a fun workshop that will introduce everyone to the Certified Mass Properties Engineer exam. Once the workshop is complete, the industry committees will meet in separate break-out sessions for most of the morning. The Standards and Practices Luncheon will follow and feature our guest speaker, Dr. Mostafa Hassanalain from New Mexico Tech. After lunch the industry committees will return to their break-out sessions before reconvening at the end of the day for a short debrief of their day's accomplishments to all.

The six committees encompass the following industries:

- Civil Aircraft
- Military Aircraft
- Marine
- Offshore
- Missiles and Space
- Land Vehicles

During the break-out sessions, we will review industry needs and opportunities, past progress, and future planned activities. Committees may also use this time to brainstorm or build consensus on challenging issues.

All members and visitors are invited to participate and help us improve our profession. You are not required to join the session that matches your industry, and you are not required to stay all day in one session – you may choose to join one session in the morning and another in the afternoon. We welcome new ideas, new participants, and new contributions.

Take this opportunity and make a difference!



Standards and Practices Guest Speaker

“Unlocking Nature's Secrets: Drones, Biomimicry, and Beyond”

Dr. Mostafa Hassanalain

Associate Professor of Mechanical Engineering

and Dean's Research Scholar

New Mexico Tech

Dr. Mostafa Hassanalain is an Associate Professor in the Department of Mechanical Engineering and Dean's Research Scholar at New Mexico Tech. He earned his Ph.D. and Master of Science in Mechanical Engineering from New Mexico State. His main research interests are in the fields of autonomous systems, bioinspiration and biomimetics, and drones. He has authored over 200 peer-reviewed journal and conference publications and has been recognized as one of the Top 2% of Cited Scientists Worldwide. His group's research on Taxidermy Bird Drones has been featured in The New York Times, National Geographic, New York Post, The Washington Post, Reuters, EuroNews, and more.



Over millions of years, nature has evolved a wide array of processes, structures, materials, and functions that enhance efficiency. Engineers and biologists have increasingly drawn inspiration from this vast natural repository, seeking to learn from the solutions that biological systems



provide. Often, nature offers the most effective answers for developing and optimizing various systems, including those used in aerospace. Natural systems present highly effective solutions to complex challenges in aerospace, such as drag reduction, locomotion, navigation, control, sensing, and design. In his presentation, Dr. Hassanalain will introduce us to the expanding field of biomimicry and how engineers can apply these efficient, nature-inspired solutions, refined over millions of years, to modern engineering problems.

Wednesday, May 21, 2025 @ 1:00 PM



Training Program



Darren Gamble
SAWE VP Training
Spirit AeroSystems (Europe)



Dan Rowley
SAWE Deputy VP Training
Northrop Grumman Corporation

This year, the Training Program will take place at The Clyde Hotel or nearby from May 18 through May 22, 2023. SAWE has a long-proven track record of delivering outstanding training, and we hope that you will enjoy training with us here in Albuquerque.

The list of classes and their locations are shown in the table below. More details regarding instructors, and descriptions of the classes may be found at [SAWE Training](#).

Training Classes for May 2025

Class	Day	Instructor	Room
Vendor Weight Control	Sunday, May 18	Rod VanDyk	Fiesta II
Designing the Aircraft of the Future	Sunday & Monday, May 18 –19	Andy Walker	Fiesta I
Aircraft Fuel System Calibration	Monday, May 19	Rod VanDyk	Fiesta II
Advanced Mass Properties Measurement	Monday, May 19	Robert Cipolli	Fiesta III
Developing Basic Parametric Methods	Tuesday, May 20	Andy Walker	Fiesta I
Structural Weight Optimization	Tuesday, May 20	Raj Bishnoi	Fiesta III
Aircraft Weight and Balance	Tuesday & Wednesday, May 20 –21	Errol Oguzhan	Fiesta II
Automated Weight and Balance System (AWBS) Software	Thursday, May 22	Harold Smoot	Fiesta I & II
Crossed out classes to be rescheduled for a later date.			



For more information visit
[SAWE Training](#)
or
Stop by the Career Development Table
at the Conference



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


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purchase for download.**



MassTrack / ShipWeight User Group Meeting



MassTrack



ShipWeight

The 16th MassTrack/ShipWeight User Group meeting will be held on Monday, May 19, 2025. This meeting will be of interest to active users of MassTrack and ShipWeight as well as those who are considering acquiring these software solutions.

The meeting is also an opportunity to meet other users in an informal setting for exchanging experiences and discussions on best practices. Last, but not least, it is a great opportunity to provide feedback to the developers and participate in making priorities for future development of the software.

MassTrack/ShipWeight User Meeting – Schedule*	
Monday, May 19, 2025	
8:30 am – 8:40 am	Welcome
8:40 am – 10:00 am	Overview of New Functionality
10:00 am – 10:30 am	Break
10:30 am – 11:30 am	Parametric Estimation
11:30 am – 12:00 pm	MassTrack/ShipWeight Web Solution
12:00 pm – 1:30 pm	Lunch
1:30 pm – 2:00 pm	User Presentation (TBD)
2:00 pm – 3:00 pm	Reports
3:00 pm – 3:30 pm	Break
3:30 pm – 4:30 pm	Handling Configurations, Loading Conditions and Phase Codes
4:30 pm – 5:00 pm	Questions and Answers/Discussions

* Times in MDT. We reserve the right to change the agenda.

For more information contact B&A Software at office@ba-software.com.



Sunday, May 18 - Schedule Overview

Time (MDT)	Conference	Training	Events
7:00 AM	Registration / Information Desk Open – 2 nd Floor Atrium		
8:00 AM		Designing the Aircraft of the Future (Day 1) – Fiesta I	
12:00 PM		Lunch Break	
1:00 PM		Resume Class - Fiesta I	
5:00 PM			
9:00 PM			Hospitality - Clyde Suite
11:30 PM			

Training
Session

Onsite
Event



Monday, May 19 - Schedule Overview

Time (MDT)	Conference	Training	Events
7:00 AM	Registration / Information Desk Open – 2 nd Floor Atrium		
8:00 AM			
8:30 AM		Designing the Aircraft of the Future (Day 2) – Fiesta I MassTrack/ShipWeight User Group – Fiesta IV	National Museum of Nuclear Science & History (Students free) - Hotel Lobby
11:30 AM	Exhibitor Setup - Enchantment		
12:00 PM		Lunch Break	
1:00 PM		Resume Classes - Same rooms	
2:00 PM			
5:00 PM			
6:00 PM			1st Time Attendees Intro*
6:30 PM			Welcome Reception - 2 nd Floor Atrium
8:00 PM			Hospitality - Clyde Suite
11:30 PM			

* Pre-reception for first-time attendees to meet SAWE Officers and Mentors. – 2nd Floor Atrium

Prep Time

Training Session

Offsite Event

Onsite Event



Tuesday, May 20 - Schedule Overview

Time (MDT)	Conference		Training	Events
7:00 AM	Registration / Information Desk Open – 2 nd Floor Atrium			
8:00 AM	Opening / Keynote - Enchantment		Aircraft Weight and Balance (Day 1) – Fiesta II	Botanic & Japanese Gardens / Old Town* - Hotel Lobby
9:00 AM	Technical Track I & Exhibits - Enchantment	Technical Track II - Fiesta IV		
9:45 AM	Break – 2 nd Floor Atrium			
10:00 AM	Resume Track I - Enchantment	Resume Track II - Fiesta IV	Resume Class - Fiesta II	
12:00 PM	Lunch Break (On Your Own)	Corp. Partner Lunch (Invitation Only) – Sierra Vista	Lunch Break – Carrie’s	
1:00 PM			Resume Class - Fiesta II	
1:30 PM	Resume Track I - Enchantment	Resume Track II - Fiesta IV		
3:00 PM	Break – 2 nd Floor Atrium			
3:15 PM	Resume Track I - Enchantment	Resume Track II - Fiesta IV	Resume Class - Fiesta II	
4:00 PM	Exhibitor Interaction – Enchantment			
5:00 PM				
6:00 PM				Hospitality - Clyde Suite
11:30 PM				

*Separate registration and payment required.

Technical Session	Training Session	Offsite Event	Onsite Event
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Tuesday, May 20 - Conference Details

Time (MDT)	Track I – Enchantment Ballroom	Track II – Fiesta IV
8:00 AM	Opening Remarks	
8:30 AM	Keynote Speaker – Dr. Thomas Spencer	
9:00 AM	Transition	
9:15 AM	3815: <i>Defending Mass Properties</i> – Robert Zimmerman	3829 Pres.: <i>Bio-Inspired Innovations: Exploring the Aerodynamic Impacts of Wing Coloration, Shape, Mass, and Spacing in Flight Efficiency</i> - Narges Bagheri, et al.
9:45 AM	Break – 2 nd Floor Atrium	
10:00 AM	3821: <i>Developmental Aircraft Design: Quantifying Weight Maturity to Calculate Retired and Remaining Developmental Weight Growth</i> – Roman Aman, Melissa Gray	3832 Pres.: <i>Bio-Inspired Group Avian Flight: Exploring the Aerodynamic Impacts of V-Formed Flight in Flight Efficiency</i> - Narges Bagheri, M. Hassanalain
10:30 AM	Lockheed Martin	
10:45 AM	3835: <i>Vibration Characterization for Active Damping in a 2U CubeSat Payload for Rocketry Applications</i> - Ellen Froelich	3831 Pres.: <i>Development of a Weight-Constrained Permissible Drone: Engineering and Regulatory Frameworks</i> - Narges Bagheri, M. Hassanalain
11:15 AM	Altair	
11:30 AM	3823: <i>Agile RIO Management: Best Practices for Vehicle Development</i> – Mark Beyer	3833: <i>Design of Ground Systems; Path Planning of Autonomous Advanced Designed Robots in Underground Mine</i> – Narges Bagheri, et al.
12:00 PM	Lunch Break (On Your Own)	Corporate Partner Lunch – Sierra Vista
1:30 PM	GEC	
1:45 PM	3834 Pres.: <i>Numerical Approach Based on Cuboid Splitting to Calculate the CG Shift of a Liquid Filled Container Resulting from Rotations</i> – Marvin Siewert	3825: <i>Moving Mass Coaxial Monocoiler: Design, Simulation and Control</i> – Duc Thien An Nguyen, et al.
2:15 PM	Intercomp	
2:30 PM	3828: <i>Biomimetic Swimming Taxidermy Duck Robot: Design, Development, and Testing</i> – Darion Vosbein, et al.	3826: <i>A Non-Conservative Assessment of the Feasibility of a Solar-Powered Airship for Mars</i> – Yan Pozhanka, Dr. Mostafa Hassanalain
3:00 PM	Break – 2 nd Floor Atrium	
3:15 PM	3830: <i>Integrating Taxidermy into Drone Engineering: A Mallard-Based Flapping-Wing Aerial System</i> - Darion Vosbein, et al.	3817: <i>Mass Property Data Checking for On-Shore Modular Construction</i> – Robert Hundl, Jeff Robertson
3:45 PM	Raptor Scientific	
4:00 PM	Exhibitor Interaction – Enchantment	
5:00 PM		

Mass Properties Profession
Chair: Amanda Cutright

Design & Testing
Chair: Robert Zimmerman

Bio-inspired & Robots
Chair: Bill Boze

Estimation
Chair: Amanda Cutright



Wednesday, May 21 - Schedule Overview

Time (MDT)	Conference	Training	Events
7:00 AM	Registration / information Desk Open – 2 nd Floor Atrium		
8:00 AM	S&P Day Opening Remarks - Enchantment	Aircraft Weight and Balance (Day 2) – Fiesta II then Offsite	
8:15 AM	Certification Workshop - Enchantment		
9:45 AM	Break – 2 nd Floor Atrium		
10:00 AM	Presentation: <i>Unconscious Bias in Weight Management</i> – Jorge Bes - Enchantment		
10:30 AM	Industry Breakouts <ul style="list-style-type: none">• Military Aircraft – Enchantment• Civil Aircraft – Fiesta I• Missiles and Space – Fiesta III• Offshore – Board Room East• Marine – Fiesta IV		
12:00 PM	S&P Luncheon – Whyte Room	Lunch Break – Sierra Vista	
1:00 PM	Plenary Session: <i>Drone Technology</i> – Dr. Mostafa Hassanalian – Enchantment	Resume Class – Fiesta II	
2:00 PM	Industry Breakouts (cont.) – Same rooms as morning sessions		
3:00 PM	Break – 2 nd Floor Atrium		
3:15 PM	Industry Breakouts (cont.) – Same rooms as morning sessions	Resume Class – Fiesta II	
5:00 PM	Lessons Learned Meeting (Invitation Only) – Board Room East		
6:00 PM			Sawmill Market - shuttle leaves hotel at 6:00PM & 6:30PM, returns at 7:30PM & 9:00PM
9:00 PM			Hospitality - Clyde Suite
11:30 PM			

Standards & Practices

Training Session

Offsite Event

Onsite Event



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and start taking advantage of our
members only benefits and discounts.



Thursday, May 22 - Schedule Overview

Time (MDT)	Conference	Training	Events
7:00 AM	Registration / Information Desk Open – 2 nd Floor Atrium		
8:00 AM	Technical Forum - Enchantment	AWBS – Fiesta I & II	Santa Fe Day Trip - Hotel Lobby
9:30 AM	Technical Sessions - Enchantment		
9:45 AM	Break – 2 nd Floor Atrium		
10:00 AM	Resume Technical Sessions - Enchantment	Resume Class – Fiesta I & II	
12:00 PM	Lunch Break (On Your Own)	Lunch Break – Whyte Room	
1:00 PM		Resume Class – Fiesta I & II	
1:30 PM	Resume Technical Sessions - Enchantment		
3:00 PM	Break – 2 nd Floor Atrium		
3:15 PM	Resume Technical Sessions - Enchantment	Resume Class – Fiesta I & II	
4:15 PM	Exhibitor Pack Up - Enchantment		
5:00 PM			
6:00 PM			Reception/ Auction - Whyte Room Foyer
7:00 PM			Awards Banquet – Whyte Room
9:30 PM			Hospitality - Clyde Suite
11:30 PM			

Technical
Session

Training
Session

Offsite
Event

Onsite
Event



Thursday, May 22 - Conference Details

Time (MDT)	Track I – Enchantment Ballroom
8:00 AM	Technical Forum - <i>Opportunities for Artificial Intelligence and Machine Learning in Mass Properties Applications</i>
9:45 AM	Break – 2nd Floor Atrium
10:00 AM	3816: <i>Empowering Mass Properties Engineers with Artificial Intelligence: Transforming Estimation, Analysis, and Optimization</i> – William Boze
10:30 AM	Gulfstream
10:45 AM	3822: <i>Enabling Digital Transformation in Weights Management: A Unified Data Model for Industry-wide Integration</i> – Mark Beyer
11:15 AM	B&A Software
11:30 AM	3836: <i>Digital Transformation of Weight, Balance, and Cost Data</i> – Ben Buchanan
12:00 PM	Lunch Break (On Your Own)
1:30 PM	HII
1:45 PM	Presentation: <i>Update on the SAWE Career Initiative</i> – Dirk Petersen, Robert Zimmerman, Darren Gamble, Melissa Gray, Amanda Cutright
2:15 PM	Beyer Flight Sciences
2:30 PM	3827: <i>Dynamic Mass-Aware Trajectory Tracking of Airships Using Multi-Actors Proximal Policy Optimization</i> – Rongwei Liang, et al.
3:00 PM	Break – 2nd Floor Atrium
3:15 PM	The Boeing Company
3:30 PM	Presentation: <i>Technology Development Using the Technology Readiness Assessment Insight Template (TRAIT) Tool</i> – Amanda Cutright
4:00 PM	Closing Remarks
4:15 PM	

Digital Advancements
Chair: Doug Fisher

Dynamic Mass
Chair: Alyx Stubbers



Friday, May 23 - Schedule Overview

Time (MDT)	Conference	Training	Events
7:00 AM			
8:00 AM			Day at New Mexico Tech* - Hotel Lobby
2:00 PM			

*Separate registration and payment required.

Offsite
Event



Thanks to our SAWE Student Chapter at New Mexico Tech for their participation!



Hotel Information



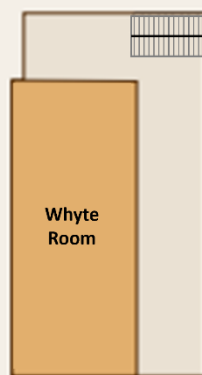
The Clyde Hotel

330 Tijeras Ave NW
Albuquerque, NM 87102
505-539-7298

<https://www.clydehotel.com/>

Carrie's Restaurant,
1922 Bar & Lounge,
Mercantile Café, Little Bear Coffee,
Outdoor Pool, Fitness Studio,
Spa at Chaco

First Floor (Lobby Level)



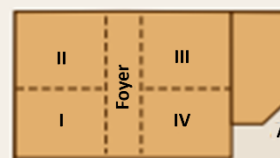
Stairs Up to
Convention
Level

Sierra Vista Room
– 19th Floor
Clyde Suite
– 20th Floor

Stairs Down to
Whyte Room

Second Floor (Convention Level)

Fiesta Room



Boardroom North

Alcove

Boardroom East

Elevators

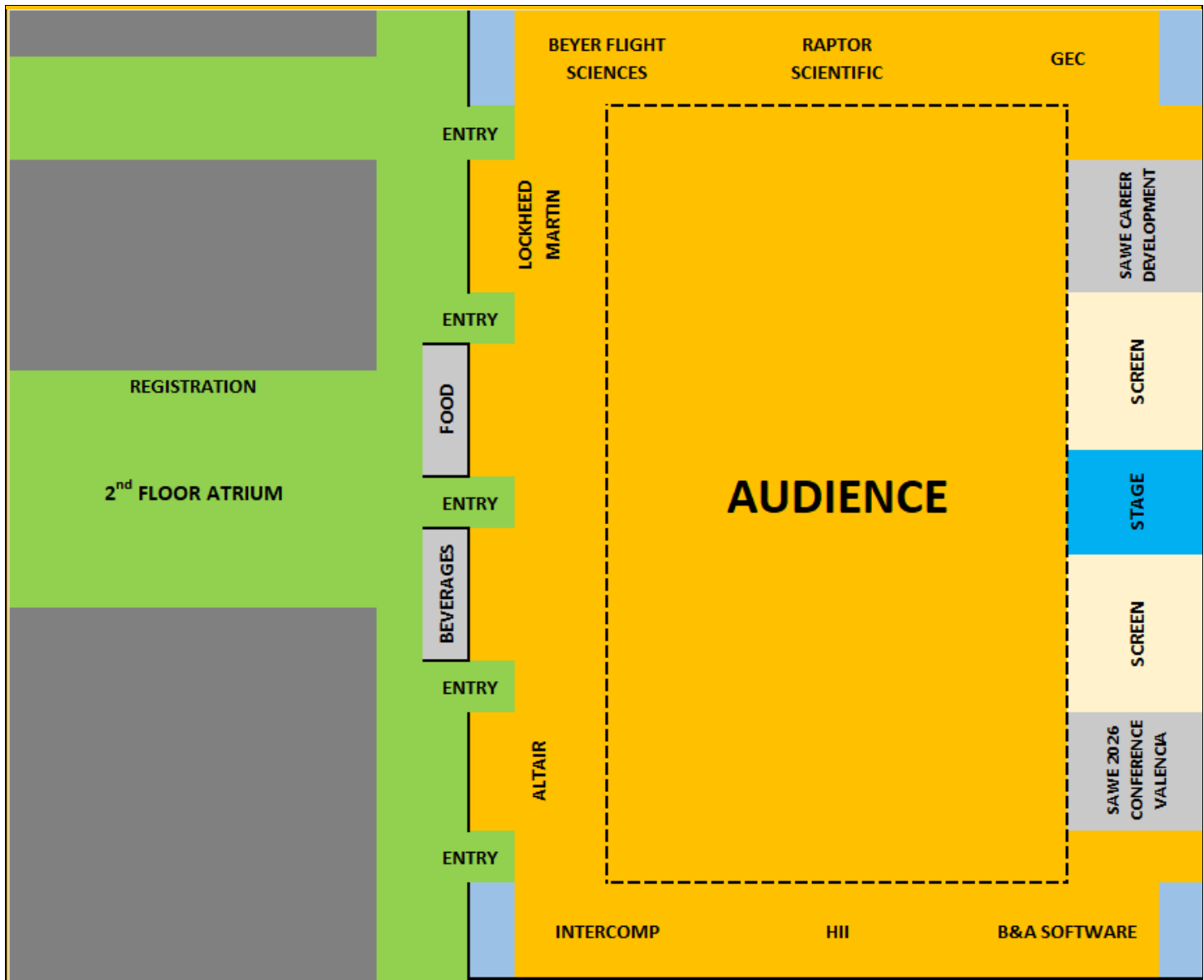
Atrium

Registration

Enchantment
Ballroom
(Main Venue)



Enchantment Ballroom Arrangement



Take time to visit our Exhibitors!



Conference Committee

Position	Name	Affiliation
Co-Chair	Errol Oguzhan	Lockheed Martin - Retired
Co-Chair	Chris Wandell	Northrop Grumman Corp.
Budget/Finance	Fred Brown	HII NNS
Technical Papers	Amanda Cutright	NASA Langley
Student Coordinator	Dr. Donna Gerren	University of Colorado Boulder - Retired
Training Coordinator	Darren Gamble	Spirit Aerosystems
Exhibitor Coordinator	Clint Stephenson	The Boeing Company
Facilities	Bill Boze	HII NNS - Retired
Publications	Alyx Stubbers	Gulfstream Aerospace Corp.
Events Coordinator	Errol Oguzhan	Lockheed Martin - Retired
Registration	Aleni Burcham	US Air Force
IT	Greg Ray	The Boeing Company
Program	Damian Yañez	Gulfstream Aerospace Corp.
Photography	Karla Gregg	Northrop Grumman Corp.
Hospitality	Clint Stephenson	The Boeing Company



HII

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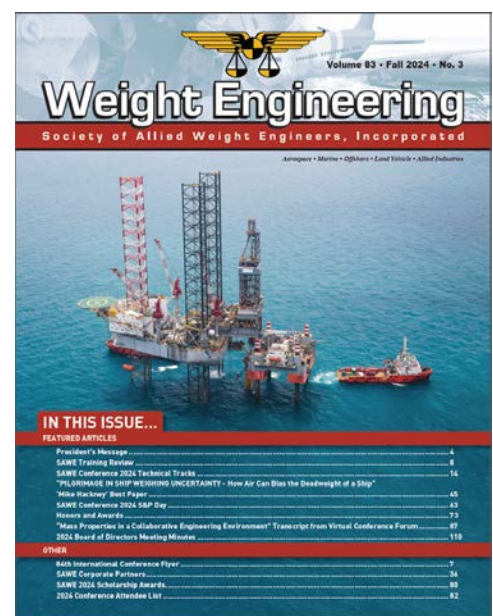
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Historical Journals dating from 1962 may also be viewed at:

[SAWE Members – SAWE Historical Journals](#)





Officer Transition

Many thanks to the following outgoing officers for their selfless service to SAWE!

Robert Hundl	President
Jason Booth	Executive Vice President
Chris Wandell	Senior Vice President
Damian Yañez	Past President
Melissa Gray	Vice President - Publications
Jorge Bes	Vice President - Standards & Practices

Your SAWE Executive Committee members for 2025 – 2026 are:

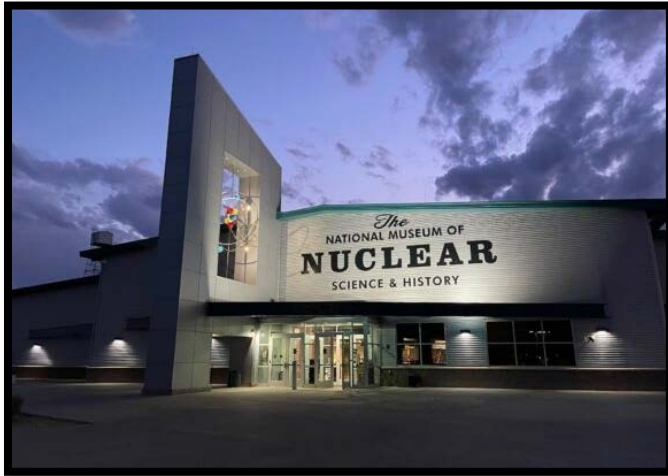
Jason Booth	President
Chris Wandell	Executive Vice President
Karla Gregg*	Senior Vice President
Robert Hundl	Past President
Dr. Ali Elham	Vice President – Academic Affairs
Greg Ray	Vice President – Internet Operations
Aleni Burcham*	Vice President - Publications
Nick Thies*	Vice President - Standards & Practices
Amanda Cutright	Vice President – Technical Director
Darren Gamble	Vice President – Training
Clint Stephenson	Vice President – Vendor Relations
Dirk Petersen	Vice President – Certification
Bill Boze	Executive Director

*New to the Committee. Welcome and thank you!

Be sure to join us at the **Silent Auction and Awards Banquet on Thursday at 6:00 PM** to support our Scholarship Program and to honor our award recipients, outgoing officers, and future officers. **See you there!**



Offsite Events



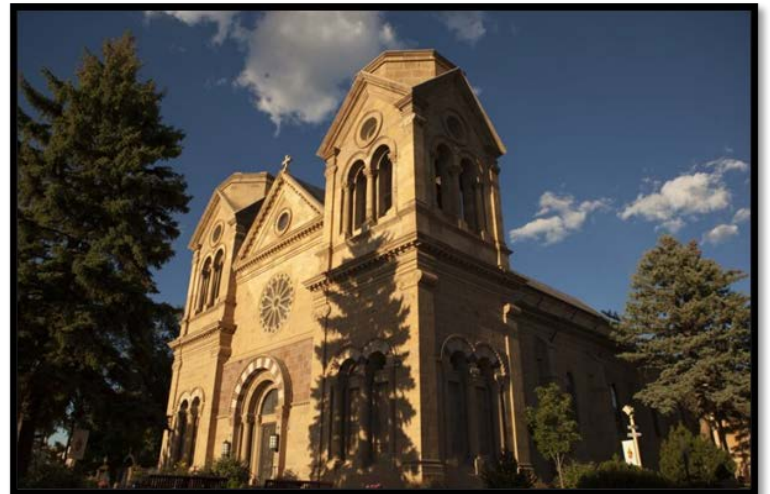
Monday - National Museum of Nuclear Science & History (Students Free)



*Tuesday - Botanical and Japanese Gardens/Old Town**



Wednesday - Sawmill Market



*Thursday - Santa Fe Day Trip**



*Friday - New Mexico Tech Day**

*Separate registration and payment required for Tuesday, Thursday, and Friday events.



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85th International Conference on Mass Properties
May 2026
Valencia, California USA
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