



Society of Allied Weight Engineers, Incorporated

Aerospace • Marine • Offshore • Land Vehicle • Allied Industries

Welcome to the SAWE Southeast Region



**A Proud Chapter of the
Society of Allied Weight Engineers**



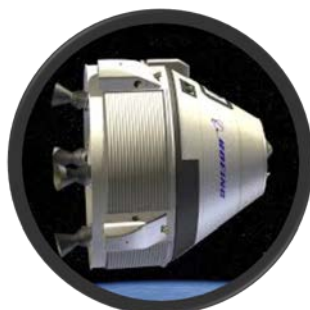
Who is SAWE?

- **We are an International Organization of Mass Properties Engineers founded in 1939**
- **Our Purpose:**
 - To promote the Mass Properties discipline
 - To provide a medium for exchanging recommended practices based on experience and innovation
 - To foster technical excellence and superior quality in mass properties prediction, control and validation
- **22 Chapters in the US, Canada, South America, UK and Europe**
- **15 Corporate Members and Partners**



Industries Served by SAWE

- **Initially - Society of Aeronautical Weight Engineers**
- **1973 - Renamed Society of Allied Weight Engineers to include:**
 - Aerospace – aircraft, missiles, space, electronics, ...
 - Marine – surface, cargo, submarines, ...
 - Land Vehicles – automotive, armored, construction, ...
 - Offshore Platforms – oil and gas, launch/landing, ...





SAWE Leadership

Position	Officer	Organization
President	Bill Boze	Huntington Ingalls Industries
Executive VP	Clint Stephenson	S&K Global Solutions
Senior VP	Ruben González-González	Airbus
VP Publications	Nicholas Marickovich	Huntington Ingalls Industries
VP Technical	Robert Zimmerman	Lockheed Martin - Retired
VP Training	Dan Rowley	Northrop Grumman
VP Vendor Relations	Paul Kennedy	Space Electronics
VP Internet	Andrew Brooks	Lockheed Martin Aeronautics
VP Standards & Practices	Andreas Schuster	SBM Offshore - Retired
VP Academic Affairs	Dr. Donna Gerren	University of Colorado Boulder
Executive Director	Ron Fox	SAWE, Inc.



SAWE Southeast Region Chapter

- **1982 - Began as Atlanta Chapter**
 - Primarily Lockheed Martin and Delta Airlines
- **2011 – Renamed Southeast Region Chapter**
 - Focal point moved to Savannah
 - Includes SE region of USA for those not affiliated with other Chapters
 - Georgia, South Carolina, North Carolina
 - Members from Gulfstream, Boeing, Lockheed Martin, and Shipwright





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SAWE Southeast Region Chapter

OFFICERS

Our Current Leadership Team



Damian Yanez
International Director



Farid Farizy
President



Tom Tanner
Vice President



Luis Alberto Lopez
Secretary



Dell Ruff
Treasurer





Why is Mass Properties Control important?

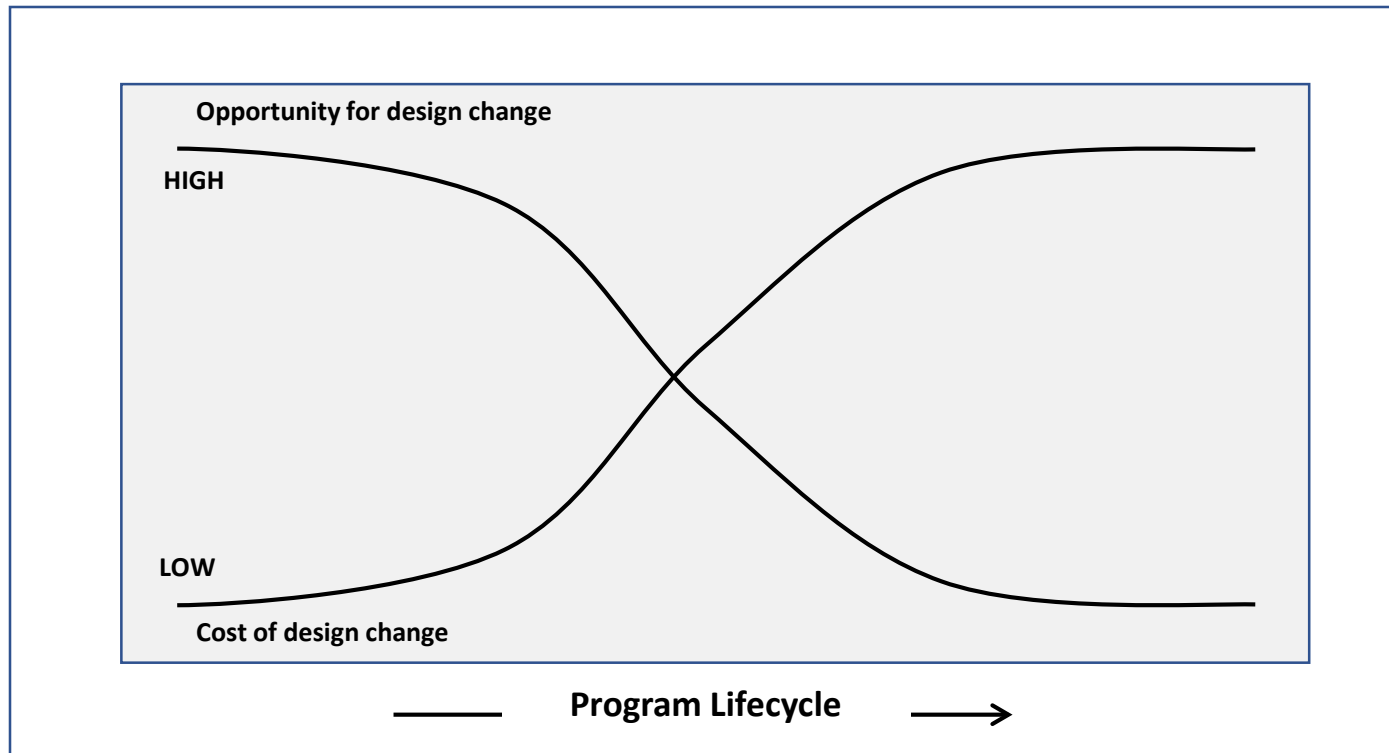
- Weight, Center of Gravity, Moments and Products of Inertia are **critical** for vehicle safety and performance





Why is Mass Properties Control important?

- **Cost of weight growth and balance issues increases dramatically as your programs progress**





Why is SAWE important?

- **Mass Properties discipline often overlooked**
 - Not specifically in college curriculum even though it is integral to every product and system
 - Company Management mistakenly thinks CAD can do it all
 - Inadequate staffing/skills increases program risk
 - Aging workforce in this crucial discipline
- **SAWE provides:**
 - Proven processes for mass properties control
 - Educational resources for ensuring a skilled workforce
 - International collaboration between industry and governments
 - Venue for sharing and discovering new methods and lessons learned



Why should I be a Member?

• Networking

- Collaborate with peers at chapter meetings and regional and international conferences
- Mentor the next generation and learn from experts
- Discover career opportunities
- Make lifelong friendships





Why should I be a Member?

• Publications

- Members Only access to the premier source for Mass Properties literature
- Extensive Library of over 3000 Technical Papers *
- 3 issues of Weight Engineering Journal per year
- SAWE Blog
- Discounts for all SAWE publications and textbooks
- Free SAWE Handbook (digital) plus updates

* 10 free downloads/year





Why should I be a Member?

• Training

- Variety of courses from analytical methods to measurement techniques taught by experts online, onsite, or at conferences
- Improve your technical capabilities and skills



Classroom



Hands on



Why should I be a Member?

• Scholarships*

- SAWE Scholarship - \$1000 (2 awarded/year typically)
 - Applicants must be high school seniors or graduates who plan to enroll or students who are already enrolled in a full-time undergraduate course of study at an accredited four- year college or university.
- Frank Fong Memorial Scholarship - \$1000 (1 awarded/year)
 - Same requirements as above, but applicant must be majoring in a scientific field (e.g. engineering, physics, mathematics, computer sciences, etc.)
- Annual Conference Scholarship - \$1000 (1 awarded/year)
- Chapter Scholarships
 - Amount determined by individual Chapter

*For student members and children or grandchildren of members active for at least 1 year





Why should I be a Member?

- **Recognition**

- Awards for advancing the Mass Properties discipline
 - Best Student Paper Award
 - Ed Payne Young Engineer Award
 - L. R. “Mike” Hackney Best Paper Award
 - Special Merit Award
 - SAWE Fellow
 - SAWE Honorary Fellow
 - SAWE Richard Boynton Lifetime Achievement Award





Why should I be a Member?

- **Leadership Development**

- SAWE helps you:

- Innovate
 - Create
 - Solve problems
 - Make a difference locally and globally!

- Numerous opportunities to get involved and lead

- Local Chapter Positions
 - International Officer Positions
 - Committee Chairs






Why should I be a Member?

• Standards

- Gain access to proven recommended practices created through years of SAWE, industry and government collaboration
- Help shape these standards


 INTERNATIONAL SOCIETY OF ALLIED WEIGHT ENGINEERS, INC. <i>Serving the Aerospace • Shipbuilding • Land Vehicle and Allied Industries</i> Executive Director P.O. Box 60024, Terminal Annex Los Angeles, CA 90060	RECOMMENDED PRACTICE NUMBER 7 Date Issued May 18, 2004
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**MASS PROPERTIES
MANAGEMENT AND CONTROL
FOR MILITARY AIRCRAFT**

Revision Letter D

Prepared by
Government - Industry Workshop
Society of Allied Weight Engineers, Inc.

All SAWE technical reports, including standards applied and practices recommended, are advisory only. Their use by anyone engaged in industry or trade is entirely voluntary. There is no agreement to adhere to any SAWE standard or recommended practice, and no commitment to conform to or be guided by any technical report. In formulating and approving technical reports, the SAWE will not investigate or consider patents which may apply to the subject matter. Prospective users of the report are responsible for protecting themselves against liability for infringement of patents. Notwithstanding the above, if the recommended practice is incorporated into a contract, it shall be binding to the extent specified in the contract.

 SAWE RECOMMENDED PRACTICE


 INTERNATIONAL SOCIETY OF ALLIED WEIGHT ENGINEERS, INC. <i>Aerospace • Marine • Offshore • Land Vehicle • Allied Industries</i> Executive Secretary P.O. Box 60024, Terminal Annex Los Angeles, CA 90060	RECOMMENDED PRACTICE NUMBER 8/A-7 Date Issued July 1, 2015
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**Weight and Balance Data Reporting Forms
for Aircraft (including Rotorcraft and
Air-Breathing Unmanned Aerial Vehicles)**

Revision B

Prepared by
Standards and Practices Committee
Society of Allied Weight Engineers

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 S.A.W.E. RECOMMENDED PRACTICE

 INTERNATIONAL SOCIETY OF ALLIED WEIGHT ENGINEERS, INC. <i>Serving the Aerospace • Shipbuilding • Land Vehicle and Allied Industries</i> Executive Director P.O. Box 60024, Terminal Annex Los Angeles, CA 90060	RECOMMENDED PRACTICE NUMBER 9 Date Issued 03 June 2000
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**WEIGHT AND BALANCE CONTROL
FOR
GUIDED MISSILES**

Prepared by
Government - Industry Workshop
Society of Allied Weight Engineers, Inc.

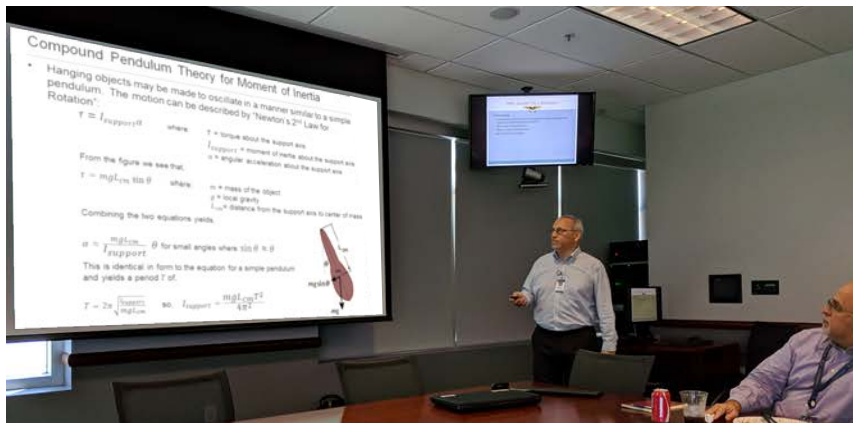
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Why should I be a Member?

• Skilled Workforce

- Mass Properties Engineers properly trained with access to the latest knowledge base
- Program risk reduced through proper application of proven processes
- Lessons learned passed on to younger generation starting at the college level





How much does it cost?

Level	Cost
Individual	
<ul style="list-style-type: none">• New Member• Member• Retired Member• Student Member• Lifetime	<p>\$30/1st year</p> <p>\$60/year</p> <p>\$30/year</p> <p>Free (pending verification)</p> <p>\$900</p>

Special Deal - Gulfstream reimburses half of annual dues for employees!

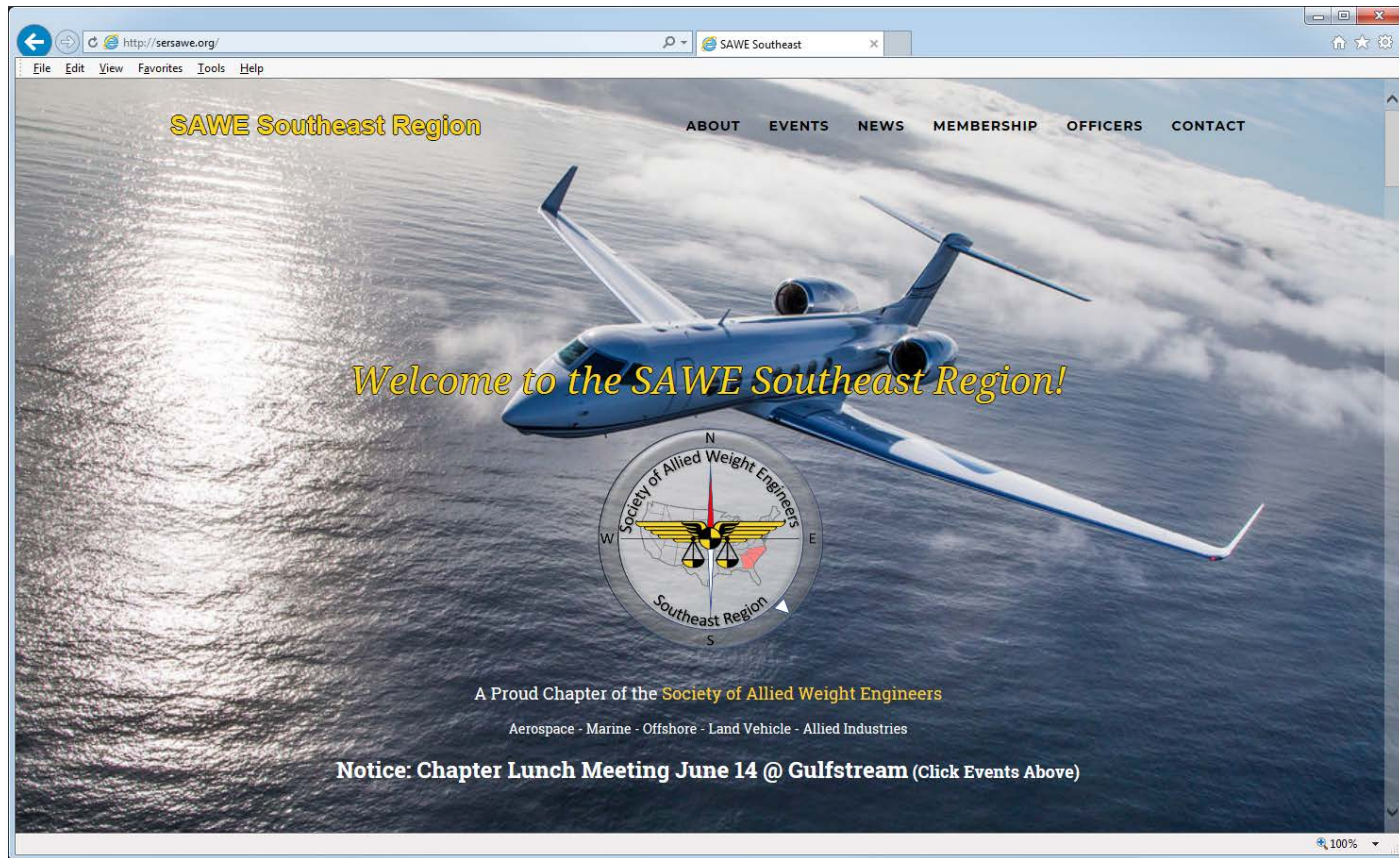


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Where can I learn more?

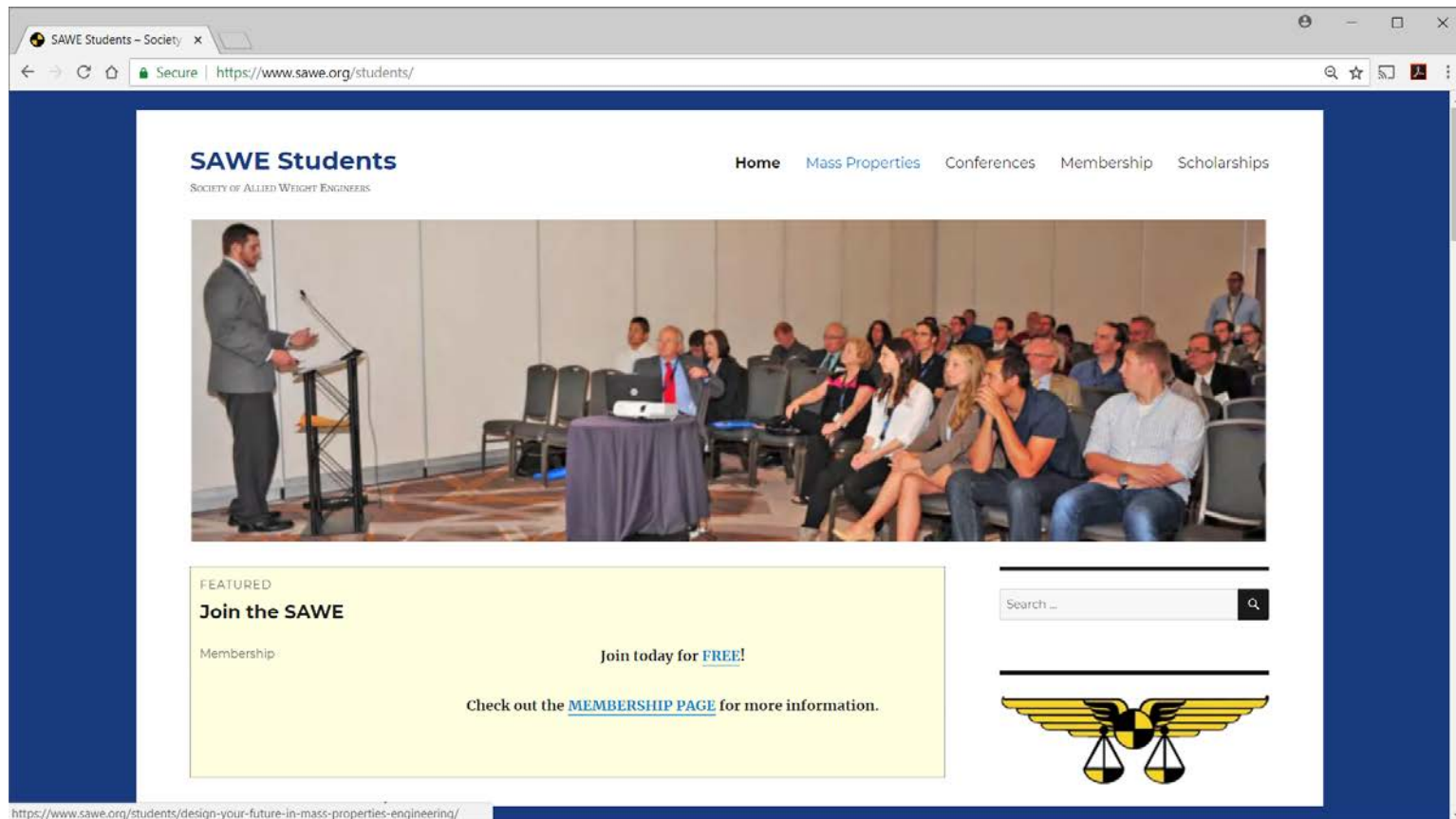
- <http://sersawe.org> and <https://www.sawe.org>





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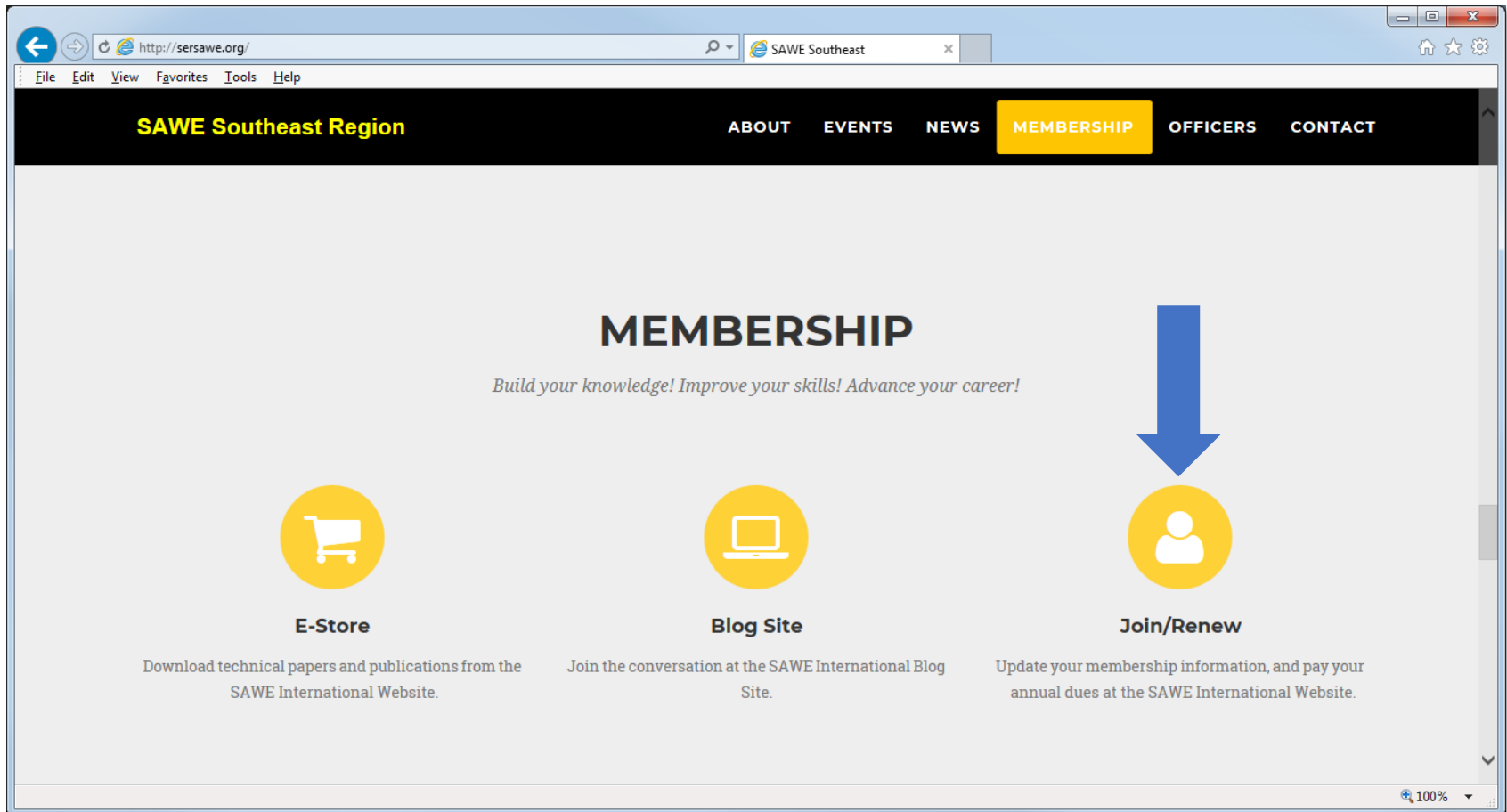
- <https://www.sawe.org/students/>



<https://www.sawe.org/students/design-your-future-in-mass-properties-engineering/>



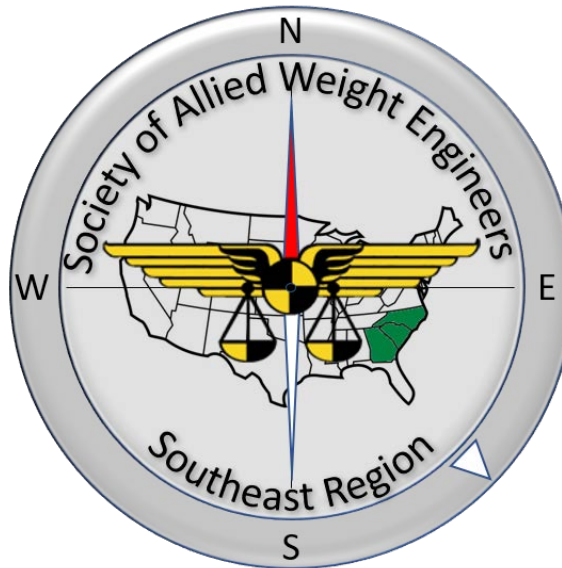
How do I join?





Come and Join Us!

- **We encourage you to join us at our quarterly meetings**
- **Help us keep our critical discipline alive and well**
 - Write a paper, attend a conference, help with chapter projects



Help Us Help YOU!