

Presented by:



# ERM

## Enterprise Risk Management Symposium

**March 9-10, 2020**

Tampa, FL





## **Welcome to the 2020 Enterprise Risk Management (ERM) Symposium!**

Thank you for joining us at the 2020 ERM Symposium. Over the next two days you will hear from thought leaders and today's leading practitioners in the ERM field.

Attend sessions that include discussions of risk topics and challenges across a broad spectrum of industries. The symposium aims to strengthen standards of ERM practice, grow and develop the current and next generation of ERM practitioners and facilitate the incorporation of best practices from other industries.

During the symposium, you will participate in discussions on relevant, meaningful and useful content that you can put into practice. Prepare to participate and collaborate.

**Enjoy the ERM Symposium!**

## Event Information



### Meeting Location

The Westin Tampa  
Waterside  
725 S Harbour Island Blvd,  
Tampa, FL 33602  
Phone: 813-229-5000



### Wireless Access

Attendees of the CAS Spring Meeting have access to complimentary Wi-Fi in the meeting rooms.

**Wi-Fi Login: Westin\_CONF**  
**Wi-Fi Password:**

**Fastweb2020**



### Social Media

Use our official hashtag  
**#ERMSymposium**  
To share your experience at the event.

## Evaluations

The symposium provides feedback to presenters and future program committees. Your input is valuable. An overall evaluation form will be emailed to all attendees after the meeting. The online form allows you to comment on areas not addressed by the individual session evaluations. These results will assist us in planning future meetings.

## Consent to Use of Photographic Images

Registration, attendance or participation at the Symposium constitutes an agreement by the registrant to the CAS's use and distribution (both now and in the future) of the registrant or attendee's image or voice in photographs, videotapes, electronic reproduction and audiotapes of such events and activities.

## Presentations

Presentations are available on the ERM Symposium website before and after the meeting. They can be accessed at the CAS Hubb online content management system site, <https://2020ermssymposium.hubb.me/m> by using the login from the instructions emailed you from [cas@hubb.me](mailto:cas@hubb.me). During the meeting these may be accessed directly from the mobile site. After the Symposium, all presentations (including new or amended materials) will be posted for general viewing on the ERM Symposium website.

## **Speaker Opinions**

The opinions expressed by speakers at this event are their own and do not necessarily reflect the positions of the CAS, CIA, or SOA.

## **Attendee List and Complete Final Program**

The complete final program with session descriptions and the attendee list is available on ERMSymposium.org.

### **Special Meal Requests**

Special meal requests, such as a fruit plate, kosher, gluten-free or vegetarian, are available for luncheons only and must be requested in advance. If you require a special meal but did not request one in advance, please visit the ERM registration desk as soon as possible to inquire about possible late accommodations.

### **Meeting Mobile Site**

Use the ERM Symposium mobile site on your smartphone or tablet and make the most of your time while you're with us at the meeting. Get real-time schedule and speaker updates, the most current version of the list of attendees, maps of the hotel property and meeting space and more!

<https://2020ermsymposium.hubb.me/m>

Please use the email and password that you used to register for the conference.

### **Networking Reception**

Attendees and their registered guests are invited to a reception from 5:00 p.m. to 6:30 p.m. on Tuesday in the First Floor Foyer. Meeting badges are required for attendees and their registered guests. Don't miss this opportunity to meet and engage with your peers.

## **2020 Enterprise Risk Management Symposium Program Committee**

Chet Szczepanski, FCAS, Chair  
Alietia K. Caughron, PhD, MAAA  
Yu Shi Feng, FCAS  
Yangyan Hu, FSA, EA  
Thomas V. Le, FCAS  
Nannan Liu, FCAS  
Shannon Patershuk, FSA, FCIA, CERA  
David Paul, FCAS  
Florian Richard, FCAS  
David Schraub, FSA, CERA, MAAA  
Michael Speedling, ACAS  
Kendall Williams, FCAS, MAAA  
Randi Woods

## Keynote Speaker



### **About the Speaker:**

**General (Ret.) Charles H. Jacoby Jr., Former Commander, United States Northern Command**

**Former Commander, North American Aerospace Defense Command  
Partner, Capitol Peak Asset Management**

General Charles “Chuck” H. Jacoby, Jr. is the Senior Vice Chairman of Tilman & Co., the Distinguished Chair of the Modern War Institute, West Point, NY, a Member of the Board of Directors of Cornerstone Defense and a Senior Advisor for Stellar Solutions. General Jacoby brings over 36 years of experience leading military, government and international organizations. Prior to retiring, he served as the first Army officer to command North American Aerospace Defense Command (NORAD) and the United States Northern Command, where he led the 1,800-person bi-national and joint headquarters, integrating 35 federal, state, and non-governmental organizations for the defense and security of North America.

General Jacoby has commanded at all levels in Joint and Army assignments, from company to geographic combatant command including; combat operations in Grenada with the 82<sup>nd</sup> Airborne Division, Operation Enduring Freedom, Afghanistan and Operation Iraqi Freedom, Iraq. He also served as instructor and assistant professor in the Department of History at the United States Military Academy at West Point. As the deputy commander of Combined/Joint Task Force-76 from 2004 to 2005, he was responsible for the 18,000 troops conducting combat operations in Afghanistan. As the commander of Multi-National Corps-Iraq from 2009 to 2010, he led the 135,000 troops conducting combat operations across Iraq. General Jacoby served as the director for Strategic Plans and Policy for the Joint Staff, where he led planning for coalition and NATO operations in Libya, and he later assisted in the Middle East peace process.

His military decorations include awards from the governments of Canada, Mexico, Honduras, and Colombia. An avid writer, he has penned monographs on the efficacy of air campaigns, the organization of modern brigade combat teams, and articles on ballistic missile defense, strategic deterrence, and institutional agility and risk. General Jacoby is involved with several organizations, including serving as a Trustee of the El Pomar Foundation, a member of the Defense Science Board Task Force on Homeland Defense, the Advisory Board of Thermal Energy Partners, the Council on Foreign Relations and the Association of the United States Army.

General Jacoby is currently writing a book with his Capitol Peak partner, Leo Tilman on the critical organizational and team capability of agility, needed to succeed in the competitive global environment.

General Jacoby holds a B.S. from the United States Military Academy, West Point, NY, an M.A. in History from the University of Michigan, an M.S. in Military Arts and Science from the School of Advanced Military Studies at Fort Leavenworth, Kansas, and an M.A. in Strategic Studies from the National War College at Fort McNair, Washington, DC.

**Sunday, March 8**

5:00 – 7:00 p.m.	Registration	Oasis Foyer Registration Desk
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**Monday, March 9**

7:45 a.m. – 5:00 p.m.	Registration	Oasis Foyer Registration Desk
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7:45 a.m. – 8:30 a.m.	Continental Breakfast	First Floor Foyer
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8:30 a.m. – 9:30 a.m.	<b>FS1: Featured Speaker – Gen. (Ret.) Chuck Jacoby</b> Speaker: Charles H. “Chuck” Jacoby, Jr., Former Commander, United States Northern Command; Former Commander, North American Aerospace Defense Command; and Executive Vice Chairman, Tilman & Co.	Oasis I
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9:30 a.m. – 10:20 a.m.	<b>Concurrent Sessions 1</b>	
	<b>**CS18: Risks and Ethical Issues with Predictive Analytics and Artificial Intelligence</b> Speakers: Allen Klein, Milliman, Inc.; Neil Raden, Hired Brains Research LLC	Oasis I
	<b>*CS14: Operational Resilience – the next evolution of Operational Risk Management</b> Moderator: Randi Woods Speakers: Chris Freese, Principal Financial Group; Alison Williams, Nationwide Insurance; Robert Ceske, KPMG, LLP	Oasis II
	<b>*CS7: Emerging Risks - Overall Trend and Deep(er) Dive into Climate Change</b> Moderator: Sam Gutterman Speakers: Sam Gutterman, Retired; Max Rudolph, Rudolph Financial Consulting	Coral
	<b>**C17: Reserve Risk using Ultimate Loss Triangles</b> Speakers: Yu Shi Feng, Starr Companies	Reef

10:20 a.m. – 10:35 a.m.	Refreshment Break	First Floor Foyer
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10:35 a.m. – 11:50 a.m.	<b>Concurrent Sessions 2</b>	
	<b>*CS13: New ASOP's 55 &amp; 56 - What they means to the ERM Actuary</b> Speakers: Robert Wolf; StoneTrust Commercial Insurance Company; Michael Speedling, AXIS Capital	Oasis I
	<b>*CS12-A: Model Governance...What Could Possibly Go Wrong? (Part 1)</b> Moderator: David Paul Speakers: Dwayne Husbands, EY; Insurance Company; Michael McComis, EY	Oasis II
	<b>**CS15: A Practical Case Study: Incorporating Liquidity and Credit Risk within ERM and ALM to drive Risk-aware Business Decision-Making</b> Speakers: Paolo Laureti, SS&C Algorithmics, Inc.; Andrew Dansereau, SS&C Algorithmics, Inc	Coral
	<b>**CS22: The Intersection of ERM and ALM</b> Speakers: Anthony Dardis, Milliman, Inc.; Adam Lei, AFLAC; Nicholas Brink, National Life Group	Reef

11:50 a.m. – 1:00 p.m.	<b>General Luncheon</b> Sponsored by Deloitte	Channelside
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1:00 p.m. – 1:50 p.m.	<b>Concurrent Sessions 3</b>	
	<b>**CS3: Cyber Security, Data Breaches, and Third Parties - What Can You Do?</b> Speakers: Michael Prendes, Sydney Consulting Group	Oasis I
	<b>*CS12-B: Model Governance...What Could Possibly Go Wrong? (Part 2)</b> Moderator: David Paul Speakers: Dwayne Husbands, EY; Insurance Company; Michael McComis, EY	Oasis II
	<b>**CS19: Risks and Ethical Issues with Predictive Analytics and Artificial Intelligence (Repeat)</b> Speakers: Allen Klein, Milliman, Inc.; Neil Raden, Hired Brains Research LLC	Coral
	<b>*CS1: Actuaries in Banking - Using the ORSA Structure as Guide to Communicate About ERM</b> Speakers: Bill Mech, Connexus Credit Union	Reef
1:50 p.m. – 2:05 p.m.	Networking Break	First Floor Foyer
2:05 p.m. – 2:55 p.m.	<b>Concurrent Sessions 4 (30 minutes)</b>	
	<b>**CS4: Data vs. The Actuary: Stories from the Front</b> Moderator: Timothy Paris Speakers: Timothy Paris, Ruark Consulting LLC; Rosmary Cruz, RGA Reinsurance	Oasis I
	<b>**CS5: Economic Capital: Maximizing Value</b> Speakers: Aletia Caughron, TIAA-CREF; Xiaowei Han, TIAA-CREF	Oasis II
	<b>*CS7-R: Emerging Risks - Overall Trend and Deep(er) Dive into Climate Change (Repeat)</b> Moderator: Sam Gutterman Speakers: Sam Gutterman, Retired; Max Rudolph, Rudolph Financial Consulting	Coral
	<b>**CS23: Who Has it Tougher? Comparing ERM Challenges at Corporations vs. Government Agencies</b> Speakers: Sim Segal, SimErgy Consulting; Thomas Brandt, Internal Revenue Service	Reef
2:55 p.m. – 3:10 p.m.	Refreshment Break	First Floor Foyer
3:10 p.m. – 4:25 p.m.	<b>GS1: CRO &amp; Risk Practitioner Panel - Risk(s) and Agility: A Discussion of Best Practices</b> Moderator/Speaker: General Charles Jacoby Speakers: Henry Essert, PwC; Chris Beck, Milliman, Inc.	Oasis I
5:00 – 6:30 p.m.	Networking Reception	First Floor Foyer
<b>Tuesday, March 10</b>		
<b>7:00 a.m. – 2:00 p.m.</b>	<b>Registration</b>	<b>Oasis Foyer Registration Desk</b>
7:15 a.m. – 8:15 a.m.	Continental Breakfast	First Floor Foyer
8:00 a.m. -9:15 a.m.	<b>GS2: U.S. Economic Outlook</b> Speakers: Thomas Holzheu, Swiss Re Institute	Oasis I
9:15 a.m. – 9:30 a.m.	Networking Break	First Floor Foyer
9:30 a.m. – 10:20 a.m.	<b>Concurrent Sessions 5</b>	



	<b>**CS10: Mathematical Quantification of Operational &amp; Strategic risks: Strategic Survey and Objective Result Aggregation</b> Moderator: Ujae Kang Speakers: Ujae Kang, UAK Diversified; Carol Williams, Strategic Decision Solutions	Oasis I
	<b>*CS20: Scenario Planning in a Low Growth Environment - Why Regulatory Requirements Come Up Short</b> Moderator: David Paul Speakers: Max Rudolph, Rudolph Financial Consulting; David Ingram, Willis Towers Watson	Oasis II
	<b>*CS8: An FBI view of Cybercrime</b> Moderator: Michael Speedling Speakers: Paul Vitchock; Federal Bureau of Investigation	Coral
10:20 a.m. – 10:35 a.m.	Refreshment Break	First Floor Foyer
10:35 a.m. – 11:25 a.m.	<b>Concurrent Sessions 6</b>	
	<b>**CS6: Economic Scenario Generation for Life and P&amp;C Practitioners</b> Moderator: David Schraub Speakers: Daniel Finn, Conning; David Schraub, Society of Actuaries; Arsen Arutyunov, Numerix	Oasis I
	<b>**CS11: Model Governance</b> Speakers: Tricia Matson, Risk & Regulatory Consulting, LLC.; Clifford Lau, Munich Re America, Inc.	Oasis II
	<b>**CS4-R: Data vs. The Actuary: Stories from the Front (Repeat)</b> Moderator: Timothy Paris Speakers: Timothy Paris, Ruark Consulting LLC; Rosmary Cruz, RGA Reinsurance	Coral
	<b>*CS9: Latest Developments in Group Capital</b> Speaker: Ned Tyrrell, National Association of Insurance Commissioners	Reef
11:25 a.m. -11:40 a.m.	Networking Break	
11:40 a.m. – 12:30 p.m.	<b>Concurrent Sessions 7</b>	
	<b>**CS2: Asset Liability (Enterprise Risk) Management</b> Speakers: Peter Wirtala, AAM	Oasis I
	<b>**CS5-R: Economic Capital: Maximizing Value (Repeat)</b> Speakers: Alietia Caughron, TIAA-CREF; Xiaowei Han, TIAA-CREF	Oasis II
	<b>*CS16: Public Policy Risk Management</b> Speakers: Sam Gutterman, Retired	Coral
	<b>**CS21: Supplier Management Risk – Would You Accept It?</b> Speakers: Randi Woods Marsh, The Principal Financial Group	Reef
12:30 p.m. -1:30 p.m.	<b>Box Lunch</b>	Channelside
1:30 p.m. - 2:30 p.m.	<b>Roundtable Discussion Session</b>	Oasis
2:45 p.m. - 3:45 p.m.	<b>Roundtable Discussion Session</b>	Coral Reef

- \* Beginner Session
- \*\* Intermediate Session
- \*\*\* Advanced Session



# SPRING MEETING

MAY 10-13, 2020 • HILTON CHICAGO • CHICAGO, IL

## **Optional Roundtables**

**Tuesday, March 10<sup>th</sup> at 1:30 p.m. – 2:30 p.m. and 2:45 p.m. – 3:45 p.m.**

Get extra CPD credit by catching a later plane and debating your current issues with your peers!

Browse among the topics:

1. Operational risk
2. Canadian Perspective
3. Decision Making
4. Economic Capital
5. Model Validation

Have an informal discussion with attendees, sharing experience and approaches to risk management issues. Great opportunity to pick the collective brains of the group!

### **Missed a Session? Access the Recordings**

The CAS will be recording select 2020 ERM Symposium sessions for later viewing. These will be audio synchronized to the presentations. Attendees may access these at no charge. An email will be sent out soon after the Symposium with instructions on how to access the recordings.

### **Continuing Professional Development Credit**

#### **CAS CE Credit**

The CAS Continuing Education Policy applies to all ACAS and FCAS members who provide actuarial services. Actuarial services are defined in the CAS Code of Professional Conduct as “professional services provided to a Principal by an individual acting in the capacity of an actuary. Such services include the rendering of advice, recommendations, findings or opinions based upon actuarial considerations.” Members who are or could be subject to the continuing education requirements of a national actuarial organization can meet the requirements of the CAS Continuing Education Policy by satisfying the continuing education requirements established by a national actuarial organization recognized by the Policy.

This activity may qualify for up to 14.1 CE Credits for the Symposium for CAS members. Participants should claim credit commensurate with the extent of their participation in the activity. CAS members earn 1 CE Credit per 50 minutes of educational session time not to include breaks or lunch.

The amount of CE credit that can be earned for participating in this activity must be assessed by the individual attendee. It also may be different for individuals who are subject to the requirements of organizations other than the American Academy of Actuaries.

For further information, visit the CAS CE Requirements.

#### **SOA Continuing Professional Development**

The SOA Continuing Professional Development (CPD) Requirement was effective on January 1, 2009 and members must report compliance annually as of each Dec. 31. Members must meet the Basic Requirement provisions of Section B or one of the Alternative Compliance provisions of Section C of the SOA CPD Requirement.

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The SOA believes that sessions at this symposium may be suitable for fulfilling continuing professional development (CPD) requirements. The maximum number of credits you may apply is as follows: 13.2 credits for the Symposium can be applied towards the “Qualification Standard for Actuaries Issuing Statements of Actuarial Opinion” and our “SOA Continuing Professional Development Requirement.”

The maximum total credit is calculated excluding section breakfasts. Each standard has different rules about how you may recognize different types of credit. Review the rules of the standard you are fulfilling to determine the actual number of credits from this meeting that you will be able to apply toward the requirements. Ultimately, it is the member’s responsibility to make a reasonable, good-faith determination as to whether a continuing education event meets the requirements.

For further information on the requirements, visit the SOA website.

## **U.S. Qualification Standards**

The Qualification Standards for Actuaries Issuing Statements of Actuarial Opinion in the United States took effect January 1, 2008 and were developed by the American Academy of Actuaries’ Committee on Qualifications, on behalf of the five U.S. actuarial organizations. As applicable, members may use the provisions of the U.S. Qualification Standard to meet the SOA CPD Requirement.

For further information on this requirement, visit the American Academy of Actuaries website.

## **CIA Continuing Professional Development (CPD) Standard**

The Canadian Institute of Actuaries Qualification Standard — Continuing Professional Development was adopted June 11, 2008. As applicable, members may use the provisions of the CIA CPD Standard to meet the SOA CPD Requirement.

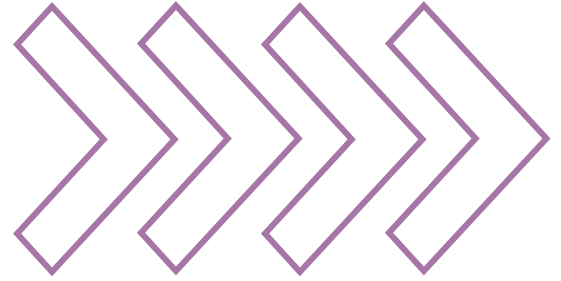
For further information on this requirement, visit the Canadian Institute of Actuaries website.

### **Antitrust Notice**

The Casualty Actuarial Society is committed to adhering strictly to the letter and spirit of the antitrust laws. Meetings conducted under the auspices of the CAS are designed solely to provide a forum for the expression of various points of view on topics described in the programs or agendas for such meetings. Under no circumstances shall CAS meetings be used as a means for competing companies or firms to reach an understanding — expressed or implied — that restricts competition or in any way impairs the ability of members to exercise independent business judgment regarding matters affecting competition. It is the responsibility of all meeting participants to be aware of antitrust regulations, to prevent any written or verbal discussions that appear to violate these laws, and to adhere in every respect to the CAS antitrust compliance policy.

For more complete information regarding the CAS antitrust compliance policy, please refer to the CAS website.

**2020 VALUATION  
ACTUARY**  
SYMPOSIUM



**SAVE THE DATE**

Aug. 31–Sept. 1, 2020

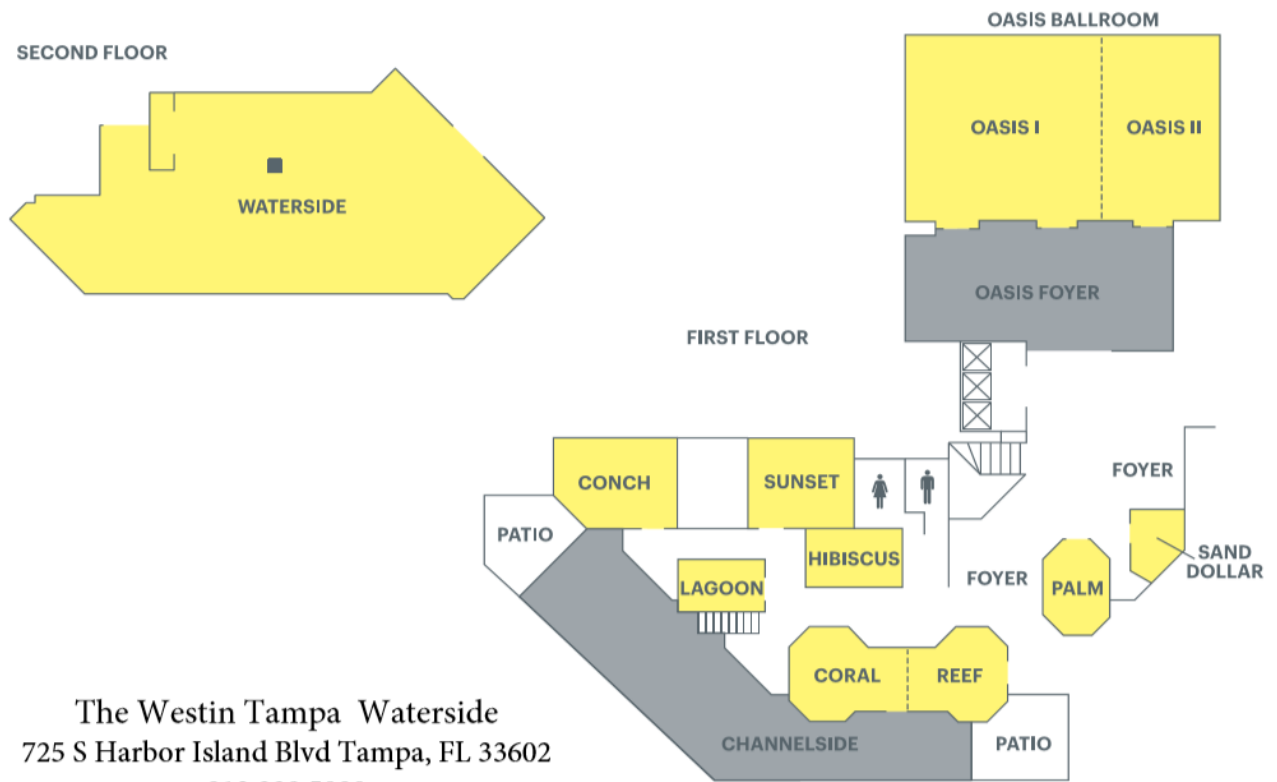
**NEW ORLEANS, LA**

New Orleans Marriott



**SOCIETY OF  
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## Hotel Map



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