CASUALTY ACTUARIAL SOCIETY

Organized 1914

2012 YEARBOOK and 2011 PROCEEDINGS



Published by the

CASUALTY ACTUARIAL SOCIETY

4350 North Fairfax Drive, Suite 250 Arlington, Virginia 22203 Telephone: 703-276-3100 Fax: 703-276-3108 E-Mail: office@casact.org CAS Web Site: www.casact.org

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FOREWORD

Actuarial science originated in England in 1792 in the early days of life insurance. Because of the technical nature of the business, the first actuaries were mathematicians. Eventually, their numerical growth resulted in the formation of the Institute of Actuaries in England in 1848. Eight years later, in Scotland, the Faculty of Actuaries was formed. In the United States, the Actuarial Society of America was formed in 1889 and the American Institute of Actuaries in 1909. These two American organizations merged in 1949 to become the Society of Actuaries.

In the early years of the 20th century in the United States, problems requiring actuarial treatment were emerging in sickness, disability, and casualty insurance—particularly in workers compensation, which was introduced in 1911. The differences between the new problems and those of traditional life insurance led to the organization of the Casualty Actuarial and Statistical Society of America in 1914. Dr. I.M. Rubinow, who was responsible for the Society's formation, became its first president. At the time of its formation, the Casualty Actuarial and Statistical Society of America had 97 charter members of the grade of Fellow. The Society adopted its present name, the Casualty Actuarial Society, on May 24, 1921.

The purposes of the Society are to advance the body of knowledge of actuarial science applied to property, casualty, and similar risk exposures, to establish and maintain standards of qualification for membership, to promote and maintain high standards of conduct and competence for the members, and to increase the awareness of actuarial science. The Society's activities in support of this purpose include communicating with those affected by insurance, presenting and discussing papers, conducting seminars and workshops, collecting a library, conducting research, and other means.

Since the problems of workers compensation were the most urgent at the time of the Society's formation, many of the Society's original members played a leading part in developing the scientific basis for that line of insurance. From the beginning, however, the Society has grown constantly, not only in membership, but also in range of interest and in scientific and related contributions to all lines of insurance other than life, including automobile, liability other than automobile, fire, homeowners, commercial multiple peril, and others. These contributions are found principally in original papers prepared by members of the Society and others involved with actuarial science. These papers are published in the *Proceedings of the Casualty Actuarial Society* and currently in *Variance*, the Society's peer-reviewed journal. The presidential addresses, also published in the *Proceedings*, have called attention to the most pressing actuarial problems, some of them still unsolved, that have faced the industry over the years.

The membership of the Society includes actuaries employed by insurance companies, industry advisory organizations, national brokers, accounting firms, educational institutions, state insurance departments, and the federal government. It also includes independent consultants. The Society has three classes of members: Fellows, Associates, and Affiliates. Both Fellowship and Associateship require successful completion of education requirements (examination, Validation by Educational Experience, and the Course on Professionalism) specified in the *CAS Syllabus of Basic Education*. The CAS also has mutual recognition agreements with other actuarial organizations as described under "Join/Renew" on the CAS Web Site (www.casact.org). Affiliates are qualified actuaries who practice in the general insurance field and wish to be active in the CAS but do not meet the qualifications to become a Fellow or Associate.

The publications of the Society and their respective prices are listed in the Society's *Yearbook/Proceedings*. The *Syllabus of Examinations* outlines the course of study recommended for the examinations. Both the *Yearbook/Proceedings* and the *Syllabus of Examinations* are available online at www.casact.org.

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Elizabeth M. Mauro	
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Richard J. Mills	
John A. Potter	
Yves Provencher	
Matthew Rodermund	
Philip R. Thompson	
Frank T. White	

2012 YEARBOOK/2011 PROCEEDINGS EDITORIAL STAFF

Avraham Adler, Editor in Chief Glenn Balling Mark Florenz Victoria Imperato Sudershan Malik Helen Neglia Elizabeth Smith, CAS Manager of Publications Sonja Uyenco, CAS Desktop Publisher

JANUARY 1, 2012

***EXECUTIVE COUNCIL**

Patricia Teufel	President
Gary R. Josephson	President-Elect
Leslie R. Marlo	Vice President-Administration
Virginia R. Prevosto	Vice President-Admissions
Kris D. DeFrain	Vice President-International
Nancy A. Braithwaite	Vice President-Marketing & Communications
Chester John Szczepanski	Vice President-Professional Education
Alice M. Underwood	Vice President-Research & Development
Barry A. Franklin	
Cynthia R. Ziegler	CAS Executive Director, Secretary/Treasurer

THE BOARD OF DIRECTORS

*Officers

Patricia Teufel	<i>it</i>
Gary R. Josephson	xt

Immediate Past President

Ralph S. Blanchard III	2
------------------------	---

†Elected Directors

Richard T. De	aney ‡
Kathryn Morg	an ‡
Michael Steel	‡
Beth E. Fitzge	ald
Richard S. Go	dfarb
Arlie J. Procto	
Kenneth Quin	tilian
Jeanne Crowe	2012 1
C. K. "Stan" k	2013
Andrew E. Ku	2013 vski
Ronald Kozlo	vski
Shawna S. Acl	erman
Steven D. Arm	strong
Annette J. Goo	dreau
James R. Merz	

* Term expires at the 2012 Annual Meeting. All members of the Executive Council are Officers.

† Term expires at the Annual Meeting of year given.

‡ Appointed Directors will be elected by the Board of Directors and will serve a term of one year, renewable for up to three years.



Patricia Teufel* President



Gary R. Josephson* President-Elect



Leslie R. Marlo Vice President– Administration



Virginia R. Prevosto Vice President— Admissions



Kris D. DeFrain Vice President— International



Nancy A. Braithwaite Vice President–Marketing & Communications



Chester John Szczepanski Vice President— Professional Education



Alice M. Underwood Vice President— Research & Development



Barry A. Franklin Vice President— ERM



Cynthia R. Ziegler CAS Executive Director, Secretary/Treasurer

*Also a member of the Board of Directors

BOARD OF DIRECTORS



Ralph S. Blanchard III Immediate Past President (Chairs Board in 2012)

2012



Patricia Teufel President



Gary R. Josephson President-Elect



Michael Steel[†] 2012



Beth E. Fitzgerald 2012





Arlie J. Proctor 2012





Ronald Kozlowski 2013



James R. Merz 2014



Jeanne Crowell 2013



Shawna S. Ackerman 2014 † Appointed



C. K. "Stan" Khury 2013



Steven D. Armstrong 2014



Andrew E. Kudera 2013

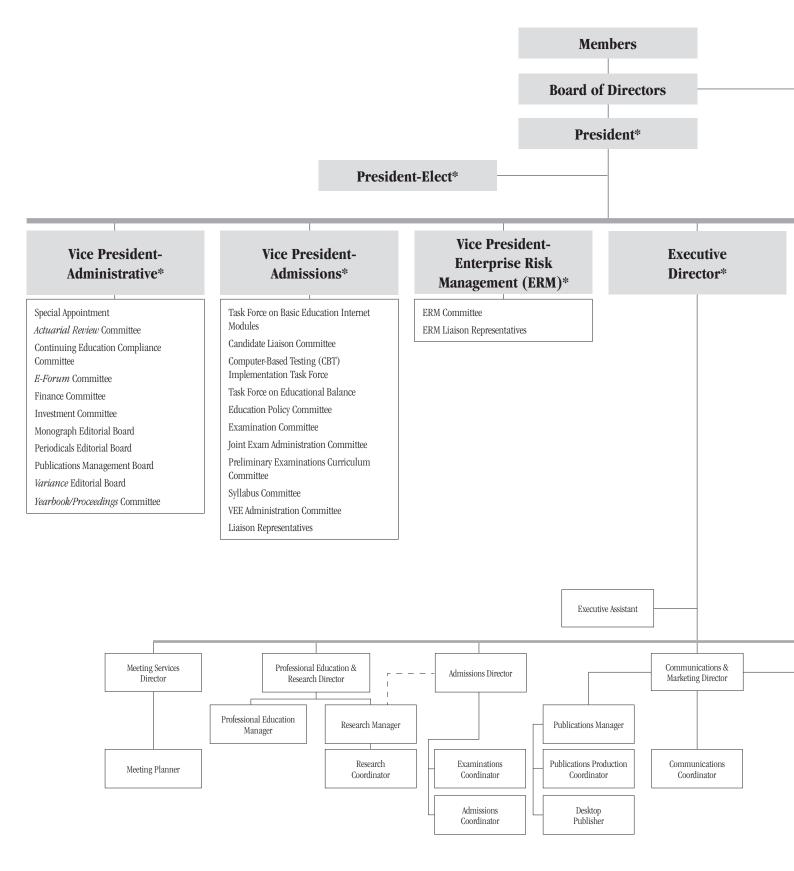






ORGANIZATIONAL STRUCTURE OF

All groups are committees unless otherwise indicated.



*Member of the Executive Council **EC Committee/Task Force

THE CASUALTY ACTUARIAL SOCIETY

Audit CommitteeCAS Risk Management CommitteeLiaison RepresentativesCAS Centennial Steering CommitteeDiscipline CommitteeLeadership Development CommitteeCAS Centennial Commemorative Steering
SubcommitteeLeadership Development CommitteeCAS Centennial History SubcommitteeNominating CommitteeCAS Centennial Finance SubcommitteeTask Force on the Review and Update of the
Statements of Principles

International Leadership Team**

Vice President-International*

Asia Regional Committee CAS Ambassador Program East Asia Task Force International Congress of Actuaries (ICA) 2014 Organizing Committee ICA 2014 Finance and Risk Management Committee ICA 2014 Hospitality Committee ICA 2014 Hospitality Committee ICA 2014 Logistics Committee ICA 2014 Public Relations and Marketing Committee ICA 2014 Scientific Committee ICA 2014 Special Events and Entertainment ICA 2014 Sponsorship and Exhibits Committee

ICA 2014 Stewardship Committee

IT & Online Services

Manager

Webmaster & Online

Services Coordinator

IT Coordinator

- International Actuarial Association (IAA) Delegates Committee International Member Services Committee
- Liaison Representatives

Vice President-Marketing and Communications*

Joint CAS/SOA Committee on Actuarial Diversity Joint CAS/SOA Committee on Career Encouragement Media Relations Committee Member Advisory Panel Committee Member Advisory Panel New Members Committee Committee on Online Services Committee on Online Services Committee on Sponsorships and Advertising University Relations Committee CAS Trust Scholarship Subcommittee University Liaisons Committee on Volunteer Resources Liaison Representatives

Member Resource Center

Manager

Member Resource Center

Representative

Member Resource Center

Representative

Vice President-Professional Education*

Joint CAS/SOA Committee for the ERM Symposium Joint Program for the CIA/CAS Appointed Actuary Seminar Joint Program Committee for Casualty Loss Reserve Seminar Professional Education Policy Committee Special Interest Seminar Subcommittee Committee on Professionalism Education Program Planning Committee Ratemaking and Product Management Seminar Planning Committee Reinsurance Seminar Planning Committee Webinar Committee Liaison Representative

Finance

& Operations Director

Operations & Accounting

Assistant

Operations Assistant (PT)

Vice President-Research and Development*

Accounting Changes Task Force Climate Change Committee Committee on Dynamic Risk Modeling Hachemeister and Michelbacher Prizes Committee Committee on Health Care Issues Committee on Management Data and Information Open-Source Software Committee Committee on Ratemaking Committee on Reinsurance Research Research Grants Task Force Research Oversight Committee Committee on Reserves Committee on Theory of Risk Committee on Valuation, Finance, and Investments Working Party on Bornhuetter-Ferguson-Initial Expected Losses Economic Capital Model Working Party Low Interest Rate Environment Working Party Risk-Based Capital (RBC) Dependencies and Calibration Working Party Tail Factors Working Party Underwriting Risk Working Party Liaison Representatives



Membership & Volunteer

Manager

Volunteer & Committee

Coordinator

CAS OFFICE AND STAFF

CASUALTY ACTUARIAL SOCIETY 4350 North Fairfax Drive, Suite 250 Arlington, Virginia 22203 Telephone: **703-276-3100** Fax: 703-276-3108 E-Mail: office@casact.org Web Site: www.casact.org

Cynthia R. Ziegler, CPCU, ARM, AAI, CAE, Executive Director, cziegler@casact.org

J. Michael Boa, CAE, Director of Communications and Marketing Matthew Caruso, Membership and Volunteer Manager Melissa Casemier, Volunteer and Committee Coordinator David Core, CAE, Director of Professional Education and Research Bob Craver, Examinations Coordinator Kathleen R. Dean, CMP, Director of Meeting Services J. Thomas Downey, Director of Admissions Vincent Edwards, Manager of Professional Education Danelle Gee, Member Resource Center Manager Jesse Jennings, Operations Assistant Matia Johnson, Member Resource Center Representative Cecily M. Marx, Webmaster James Mundia, Information Technology Coordinator Megan O'Neill, Communications Coordinator Lawrence L. Peacock III, Admissions Coordinator Todd P. Rogers, CPA, CAE, Director of Finance and Operations David Roldan, Accounting and Operations Assistant Donna Royston, Publications Production Coordinator Elizabeth A. Smith, Manager of Publications Karen Sonnet, Research Coordinator Diane Tremblay, Executive Assistant Sonja Uyenco, Desktop Publisher Jennifer D. Walton, Information Technology and Online Services Manager Cheri Widowski, Research Manager Leanne Wieczorek, Meeting Planner Ashley Zamperini, Member Resource Center Representative

COMMITTEES AND TASK FORCES

The functions of all committees and task forces are subject to the policy determination and overall direction of the Board of Directors. DIRECTORY OF COMMITTEES, TASK FORCES, AND REPRESENTATIVES

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BOARD COMMITTEES, TASK FORCES, LIAISONS

AUDIT COMMITTEE

The CAS Audit Committee is responsible for overseeing the internal control structure of the CAS and the annual independent audit of the financial statements and supporting accounts of the CAS by an auditing firm. The CAS Audit Committee is authorized to accept the independent audit reports and will use them as a basis for preparing its own annual report to the CAS Board of Directors.

Kenneth Quintilian, Chairperson Jeanne E. Crowell, Vice Chairperson Lisa G. Chanzit David M. Klein James R. Merz Leslie R. Marlo, Ex Officio

Todd P. Rogers, Staff Liaison

CAS CENTENNIAL STEERING COMMITTEE

The CAS Centennial Steering Committee is responsible for developing all aspects of and timelines for CAS Centennial events in 2014.

Gail M. Ross, Chairperson

Charles A. Bryan Stephen P. D'Arcy Robert V. Deutsch Michael Fusco Tom Myers Joanne S. Spalla Cynthia R. Ziegler

CAS CENTENNIAL COMMEMORATIVE STEERING SUBCOMMITTEE

The CAS Centennial Commemorative Steering Subcommittee is charged with developing commemorative publications and gifts celebrating the CAS Centennial in 2014.

Stephen P. D'Arcy, Chairperson

Stacy J. Adams Terry J. Alfuth Claudette Cantin Jeanette R. Costello Linda A. Dembiec Janet L. Fagan Edward W. Ford Margaret Wendy Germani Gregory L. Hayward Evelyn Toni Mulder Jerome A. Scheibl Margaret Tiller Sherwood Emanuel James Stergiou Patricia A. Teufel John J. Winkleman

Matthew Caruso, Staff Liaison

CAS CENTENNIAL HISTORY SUBCOMMITTEE

The CAS Centennial History Subcommittee will produce a commemorative history book of the Casualty Actuarial Society in observance of the Society's centennial in 2014. The committee will design the book's overall structure, recruit and assist authors, edit each contribution, search for and obtain photographs, and publish and distribute the book. Members are encouraged to contribute ideas to the committee.

Charles A. Bryan, Chairperson

Steven F. Goldberg Elizabeth A. Smith, *Staff Liaison*

YEARBOOK AND PROCEEDINGS

CAS CENTENNIAL FINANCE SUBCOMMITTEE

The Centennial Finance Subcommittee will develop and monitor the budget for the Centennial based upon financial projections of membership/ attendance, revenues from registrations, reserve fund, and sponsors/exhibitors, and expenses. The subcommittee will also collaborate with the Marketing subcommittee in securing corporate exhibitors and sponsors. Finally, the subcommittee will provide financial advice to the Centennial Commemorative Steering Committee as needed.

Robert V. Deutsch, Chairperson

Bonnie C. Maxie Francois Morin Aran Jee-Yun Paik

Todd P. Rogers, Staff Liaison

CAS CENTENNIAL MARKETING SUBCOMMITTEE

The Centennial Marketing Subcommittee will develop and execute an integrated marketing communications plan including print, electronic, and Web media to promote the celebration and meeting attendance, including attracting international actuarial dignitaries. The subcommittee will cooperate with the Finance subcommittee to identify and secure corporate sponsors and exhibitors.

Joanne S. Spalla, Chairperson

Scott K. Charbonneau Lilian Y. Giraldo Jennifer Lynn Weiner Dorothy A. Woodrum Xinxin Xu

J. Michael Boa, Staff Liaison

CAS RISK MANAGEMENT COMMITTEE

The CAS Risk Management Committee ensures that all risks and opportunities have been identified and are being treated consistently across the CAS. It considers the integration of all risks and opportunities to identify correlations and diversification benefits. It also is an oversight committee in that risks and opportunities may be addressed within other CAS functions. By including representatives from each CAS functional area, the committee will facilitate the CAS risk management activities while minimizing overlap. The Risk Management Committee reports to the Board of Directors.

Aaron M. Halpert, Chairperson

Terry J. Alfuth Regina M. Berens Ann M. Conway Wayne H. Fisher Louise A. Francis Barry A. Franklin Richard S. Goldfarb Annette Goodreau Danielle Richards Harrison Anne E. Kelly C.K. Stan Khury Mary D. Miller Todd P. Rogers Daniel G. Roth Michael Steel John P. Tierney Alice M. Underwood Lisa Walsh Cynthia R. Ziegler Nathan Alexander Schwartz, Liaison

Todd P. Rogers, Staff Liaison

DISCIPLINE COMMITTEE

The CAS Discipline Committee is responsible for considering recommendations for disciplinary actions against members presented by the appropriate investigatory body, e.g., Actuarial Board for Counseling and Discipline (ABCD) or the Canadian Institute of Actuaries (CIA), and for taking actions on those recommendations as it deems appropriate in accordance with procedures described in the Bylaws and the CAS Rules of Procedure for Disciplinary Actions.

Thomas G. Myers, Chairperson

Richard I. Fein Michael Fusco Alice H. Gannon Steven F. Goldberg Orin M. Linden Mary D. Miller David J. Oakden Sheldon Rosenberg Richard J. Roth

Cynthia R. Ziegler, Staff Liaison

LEADERSHIP DEVELOPMENT COMMITTEE

The Leadership Development Committee is responsible for implementing the "Leadership Development Program" through which potential leaders will be identified and development plans for their progress will be formulated and tracked.

Joanne S. Spalla, Chairperson

DuoDuo Cai Mei Dong Beth E. Fitzgerald Bernard H. Gilden Larry A. Haefner Aaron M. Halpert Gary R. Josephson Deborah M. Rosenberg David M. Terne Karen F. Terry Cynthia R. Ziegler

Matthew Caruso, Staff Liaison

NOMINATING COMMITTEE

The Nominating Committee nominates candidates for offices of the Society and for Board directors and submits its selections to the Board (for vice presidents) and to Fellows of the Society (for president-elect and Board directors) prior to the annual elections. The Committee makes recommendations to the Board to fill interim vacancies in Society offices or in Board membership.

Roger M. Hayne, Chairperson

Ralph S. Blanchard Amy S. Bouska Ann M. Conway Jeffrey Alan Courchene Larry A. Haefner Joseph A. Herbers Thomas E. Hettinger Morton N. Lane Joanne S. Spalla David M. Terne Cynthia R. Ziegler

Diane Tremblay, Staff Liaison

STRATEGIC PLANNING COMMITTEE

The Strategic Planning Committee has five major objectives:

- 1. To recommend strategy to the Board of Directors to enable the Casualty Actuarial Society to better realize its mission as stated in the Constitution and achieve strategic objectives endorsed by the Board.
- 2. To develop related goals that support the strategic objectives and, at the same time, identify strategic risks and opportunities facing the CAS and coordinate with the CAS Risk Management Committee on the management of these risks and opportunities.
- 3. To liaise with the Executive Council with respect to the interaction of strategy with tactics pursued by the various CAS Committees and Task Forces.
- 4. To maintain liaison relationships with planning groups in other actuarial organizations, both domestically and internationally.
- 5. To perform such other tasks as the Board may assign to it.

Arlie J. Proctor, Chairperson

Stephen D. Armstrong Eugene C. Connell Ann M. Conway Kris D. DeFrain Aaron M. Halpert Curtis E. Huntington Gary R. Josephson Ronald T. Kozlowski Robert S. Miccolis Roosevelt C. Mosley Michael L. Toothman Mark C. Vonnahme Robert F. Wolf Cynthia R. Ziegler

Diane Tremblay, Staff Liaison

TASK FORCE ON THE REVIEW AND UPDATE OF THE STATEMENT OF PRINCIPLES

The task force is charged to review the CAS Statements of Principles with the intent to update them and to revise them where necessary to contain principles only, not standards of practice. Material in the current Statements that does not describe or explain an actuarial principle should be eliminated. Conflicts between the Statements and more current material (e.g., standards of practice) should be resolved in favor of the more current interpretation.

Christopher S. Carlson, Chairperson

Shawna S. Ackerman Eugene C. Connell Gregory L. Hayward Mary D. Miller David S. Powell Ezra Jonathan Robison Jason L. Russ Patrick B. Woods

J. Michael Boa, Staff Liaison

LIAISON REPRESENTATIVES

Risk Management Section (RMS) Council

James K. Christie

Casualty Practice Council (CPC) Liaison to the CAS Board

Timothy L. Wisecarver

Canadian Institute of Actuaries (CIA) Board Liaison to the CAS Board

Christopher J. Townsend

EXECUTIVE COUNCIL COMMITTEE

INTERNATIONAL LEADERSHIP TEAM

The International Leadership Team has the following charge:

- Foster the achievement of the CAS Centennial Goal and international travel strategy;
- Increase continuity in decision-making on international issues;
- Establish CAS positions on international issues involving IAA, NAAC, etc.;
- Discuss and develop a plan to systematically manage international travel opportunities presented to the CAS president, president-elect (and other leaders) that can be integrated with other travel commitments of the offices and implemented annually;
- Develop and foster international relationships and trust, and transfer the relationships when new leaders take office;
- Prioritize invitations from and to other actuarial organizations outside of Canada and the United States;
- Establish expense parameters for IAA Meetings and other international travel;
- Appoint/recommend IAA delegates as appropriate;
- Recommend support for actuarial organizations in developing countries.

Kris D. DeFrain, Chairperson

Ralph S. Blanchard Gary R. Josephson Patricia A. Teufel Cynthia R. Ziegler

ADMINISTRATION COMMITTEES, TASK FORCES, LIAISONS

SPECIAL APPOINTMENT

Richard Babel, Assistant Treasurer

ACTUARIAL REVIEW COMMITTEE

The *Actuarial Review* is the quarterly newsletter of the Casualty Actuarial Society. Articles and opinions are copyedited by the AR Committee and CAS staff. Opinions are reviewed by the Publications Editorial Board.

Grover M. Edie, *Editor in Chief* Elizabeth A. Smith, *Managing Editor* C.K. Stan Khury, *Editor Emeritus*

Martin Adler, *Nonactuarial Pursuits* James Parker Boone Michael D. Ersevim, *Humor Editor* Charles R. Grilliot Mark D. Komiskey David S. Levy Glenn G. Meyers John P. Robertson, *Puzzle Editor* Shama S. Sabade Eric L. Savage Michael B. Schenk Arthur J. Schwartz Robert D. Share

CONTINUING EDUCATION COMPLIANCE COMMITTEE

The CAS CE Compliance Committee is responsible for administering the CE Compliance Review process to verify accuracy in the attestation of compliance for continuing education for members of the Casualty Actuarial Society. Administration includes review of compliance documentation and resolution of any issues that may arise from such review.

On an annual basis, the CE Compliance Committee randomly selects a sample of 1% of the membership certifying compliance to audit. In addition, all CAS members serving on the CAS Board of Directors and CAS Executive Council will be audited annually. Members selected to be audited will be required to submit acceptable supporting CPE documentation to the CE Compliance Committee to verify compliance. As a function of the CE review process, members may be required to provide additional documentation as requested by the CE Compliance Committee to support compliance.

Leslie R. Marlo, Vice Chairperson

Manuel Almagro Denise M. Ambrogio Mark Crawshaw Ginda Kaplan Fisher Joshua S. Grunin Jane Jasper Krumrie Ramona C. Lee Mary Ann McMahon Genevieve L. O'Toole Patricia E. Smolen Xiao-shu Su Cong Wang

Matthew Caruso, *Staff Liaison* Melissa Casemier, *Staff Liaison*

E-FORUM COMMITTEE

The E-Forum Committee solicits material for publication and coordinates electronic publishing of the E-Forum.

Windrie Wong, Chairperson

Cara M. Blank Mei-Hsuan Chao Mark A. Florenz Dennis L. Lange Shayan Shen Rial R. Simons John B. Sopkowicz Zongli Sun Yingjie Zhang

Elizabeth A. Smith, Staff Liaison

FINANCE COMMITTEE

The Finance Committee makes recommendations to the Board on all aspects of financial matters, including, but not limited to, preparation of the budget, establishment of dues and examination fees, investment of funds, fund-raising measures, administration of funds given or bequeathed to the Society, major expenditures, and risk management including the CAS insurance program.

Catherine M. Wilson, *Co-Chairperson* Todd P. Rogers, *Co-Chairperson* James E. Buck, *Vice Chairperson*

Todd H. Dashoff Richard T. Delaney David A. Foley Joshua S. Grunin Andrew E. Kudera Bonnie C. Maxie Jeffrey B. McDonald Isaac Merchant Yuchun Mu Melissa A. Remus Kevin B. Thompson

Richard J. Babel, *Ex Officio* Leslie R. Marlo, *Ex Officio* Nathan Alexander Schwartz, *Ex Officio*

INVESTMENT COMMITTEE

The Investment Committee is responsible for making recommendations to the CAS Board on the investment of CAS Operating, Short-term, and Longterm funds. The committee determines the asset allocation and selects the appropriate investment vehicles consistent with CAS investment policy. The committee consults with the CAS Office to manage the actual deposit of monies into the investments. Quarterly reports on the allocation of assets and investment performance are made to the Board.

Nathan Alexander Schwartz, Chairperson

Frank H. Chang Bradley G. Gipson Stuart J. Hayes Vinu Kuriakose David Langlois Yuanhe (Edward) Yao Max Zormelo

Richard J. Babel, Ex-Officio

Todd P. Rogers, Staff Liaison

MONOGRAPH EDITORIAL BOARD

The Monograph Editorial Board is the governing body of the CAS Monograph Series. The Monograph Editorial Board maintains guides for submissions, solicits material for publication, evaluates submissions, coordinates with authors, and works with CAS staff on production.

Emily Gilde, Editor-in-Chief

Sholom Feldblum Gail P. McDaniel

Donna Royston, *Staff Liaison* Elizabeth Smith, *Staff Liaison*

PERIODICALS EDITORIAL BOARD

The Periodicals Editorial Board reviews regular opinion pieces to be published in the *Actuarial Review* and *Future Fellows* newsletters and counsels the editorial staff of these periodicals on the suitability of material for publication. Additionally, the Periodicals Editorial Board solicits CAS members to generate alternative points of view, suggests professional issues to be addressed, and occasionally writes an opinion piece. The Periodicals Editorial Board will provide advice and counsel regarding letters to the editor or nonopinion content when requested by the *AR* and *Future Fellows* editorial staff.

Leslie R. Marlo, *Chairperson* Grover M. Edie, *Vice Chairperson*

Brian Haney Ali Ishaq Dennis Lawton Elizabeth A. Smith Joanne S. Spalla Dong Zheng

Sonja Uyenco, Staff Liaison

PUBLICATIONS MANAGEMENT BOARD

The Publications Management Board is responsible for overseeing all aspects of the CAS publication process. Included in this charge is the development of policies for the various publications, coordination of activities of the publication committees, and identifying appropriate distribution channels for the various CAS publications. The committee is made up of three at-large members and editors and representatives of the following CAS publications: *The Actuarial Review*, *E-Forum*, *Proceedings*, *Syllabus*, *Yearbook*, and *Variance*. The Vice Presidents of Administration, Marketing and Communications, and Research and Development serve as ex officio members.

Curtis Gary Dean, *Chairperson* Elizabeth Smith, *Co-Chairperson*

Avraham Adler Nancy Braithwaite, *Ex Officio* Grover Edie Dale Edlefson Richard I. Fein Patricia Furst Emily Gilde Clive Keatinge John Kulik Leslie Marlo, *Ex Officio* Alice Underwood, *Ex Officio* Windrie Wong

J. Michael Boa, *Staff Liaison* Donna Royston, *Staff Liaison*

VARIANCE EDITORIAL BOARD

The Variance Editorial Board is the governing body of the peer-reviewed journal published by the Casualty Actuarial Society. The Variance editorial board solicits material for publication, conducts peer reviews, and copyedits articles for style and clarity. Variance disseminates work that is of interest to casualty actuaries worldwide, focusing on original practical and theoretical research in casualty actuarial science.

Editorial Board

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Donna Royston, *Staff Liaison* Elizabeth A. Smith, *Staff Liaison*

YEARBOOK/PROCEEDINGS COMMITTEE

This committee is charged with producing the CAS *Yearbook/Proceedings*. The *Yearbook* section of this online publication contains information on the CAS organization and its membership, including constitution, bylaws, and related policy; education, affiliated organizations, and other actuarial organizations; and future meetings of the Society. The *Proceedings* contains meeting minutes and addresses, administrative and financial reports, member obituaries, and listings of successful CAS examination candidates.

Avraham Adler, Editor in Chief

Glenn R. Balling Mark A. Florenz Victoria K. Imperato Sudershan Malik Helen Patricia Neglia

Elizabeth A. Smith, *Staff Liaison* Sonja Uyenco, *Staff Liaison*

ADMISSIONS COMMITTEES, TASK FORCES, LIAISONS

TASK FORCE ON BASIC EDUCATION INTERNET MODULES

The Task Force on Basic Education Internet Modules is charged to create an overall plan and budget, develop the education content, design the testing format and related test items, recommend the delivery platform, and implement the first offering of the two modules in Spring 2011.

Jacqueline Friedland, *Co-Chairperson* Clive Keatinge, *Co-Chairperson*

Denise L. Cheung Kenneth Fikes Ginda Fisher Gareth Kennedy Sarah McNair-Grove Thomas Myers Virginia Prevosto Chris Throckmorton

Lawrence L. Peacock, Staff Liaison

CANDIDATE LIAISON COMMITTEE

The Candidate Liaison Committee communicates with CAS candidates, collectively and individually, who are taking CAS Examinations. The committee informs candidates as to appropriate courses of action available to them. Through periodic communication, the committee informs candidates of results of examination administrations, actions taken on complaints received regarding examination questions, and reasons for syllabus and examination changes being implemented. Communication encompasses existing policies and procedures as well as changes being considered. The committee should advise the CAS and its committees of the interests of the candidates regarding matters that come before the CAS and its committees.

Kendall P. Williams, Chairperson

Shane Eric Barnes Adam Bates Susan Roberta Curtis Thomas J. Duffy Alicia Marie Gasparovic Brady L. Hermans Shira L. Jacobson Derek Paul Pouliot Katrina Andrea Redelsheimer Amy Beth Green Sayegh Caitlin E. Tatarzyn Dan Omer Tevet Joshua A. Youdovin

Kudakwashe F. Chibanda, *Representative* Angelina Y. Kim, *Representative* Kari A. Palmer, *Representative* Susan M. Poole, *Representative*

Arlene F. Woodruff, Liaison

Thomas Downey, *Staff Liaison* Lawrence L. Peacock, *Staff Liaison*

TASK FORCE ON EDUCATIONAL BALANCE

This Task Force is charged with determining what skills potential actuarial employers are currently seeking from candidates and what supplemental training employers are providing to address skill gaps among actuarial candidates. The review of employer needs should particularly focus on whether actuaries are being displaced by other technically proficient individuals as well as whether actuarial candidates are viewed as having insufficient technical, communication, and/or business skills. The Task Force will also seek input from the academic community on how skill gaps might best be addressed in the education process. Based on feedback obtained, the Task Force will make recommendations regarding potential gaps in current CAS basic and continuing education programs.

Thomas G. Myers, Chairperson

Steven D. Armstrong Ann M. Conway Beth E. Fitzgerald Aaron M. Halpert Joanne S. Spalla

EDUCATION POLICY COMMITTEE

The Education Policy Committee recommends educational policy and goals to the Board. The Committee develops education policy and plans and establishes liaisons with other organizations.

Derek W. Freihaut, Chairperson

Guy Cloutier Sholom Feldblum Jacqueline Frank Friedland James R. Merz Mary Frances Miller Manalur S. Sandilya David A. Smith Glenn M. Walker

Kyewook Gary Kang, Consultant

Susan Roberta Curtis, *Liaison* Deborah Driussi, *Liaison* Alana C. Farrell, *Liaison* Neil Hilary, *Liaison* R. Kannan, *Liaison* Thomas G. Myers, *Liaison* Brett W. Rogers, *Liaison* Alicia Rollo, *Liaison* Robert G. Sanford, *Liaison* Klayton N. Southwood, *Liaison* Arlene F. Woodruff, *Liaison*

Thomas Downey, Staff Liaison

EXAMINATION COMMITTEE

The CAS Examination Committee is responsible for organizing, managing, and administering the CAS Examinations and for determining the standards to be achieved by successful candidates.

> Steven D. Armstrong, *Chairperson* William B. Wilder, *Assistant Chairperson*

General Officers

Kevin A. Kesby Arthur C. Placek Jason L. Russ Jeremy D. Shoemaker Thomas Struppeck Rhonda Port Walker Geoffrey Todd Werner Arlene F. Woodruff

Roselyn M. Abbiw-Jackson Rachel A. Abramovitz **Jason Edward Abril** Yazeed F. Abu-Sa'a Jeffrey R. Adcock Alex Rudolf R. Agatep Aadil A. Ahmad Iustin L. Albert Melanie Allred Rocklyn Tee Altshuler Kevin L. Anderson Kimberly Borgelt Anderson Desmond D. Andrews Rebecca J. Armon William M. Arthur Yanfei Z. Atwell Craig Victor Avitabile William P. Ayres Richard J. Babel Robert Sidney Ballmer Angelo E. Bastianpillai Mallika Bender Guillaume Benoit Carolyn J. Bergh Brian J. Biggs Brad Stephen Billerman Chris M. Bilski Francois Blais Carol Blomstrom Peter George Blouin Sharon D. Blumer John Stephen Bogaardt Amv S. Bouska Jerelyn S. Boysia Nancy A. Braithwaite Erich A. Brandt Rebecca Schafer Bredehoeft Linda K. Brobeck Craig R. Brophy Lisa J. Brubaker David C. Brueckman

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Vice Chairpersons

Paul A. Ceaser Karen M. Commons George Lawrence De Graaf Christopher P. DiMartino Heidi Marie Garand Dustin J. Loeffler Amanda Cole Lubking Kathleen C. Odomirok Teresa K. Paffenback Cosimo Pantaleo Dianne M. Phelps Kevin John Van Prooyen

Peter H. D'Orsi Maja Dos Santos Kenneth Wavne Doss Edmund Daniel Douglas Sara P. Drexler Jerome Dube Tehya Rose Duckworth Jeffrey A. Dvinoff Ellen R. Erwav Andrew J. Evans David C. Fairchild Kyle A. Falconbury Yuting Fan Caryl Marie Fank Iacob C. Fetzer Patrick Arthur Fillmore Gregory Andrew Finestine Ginda Kaplan Fisher Ellen D. Fitzsimmons Daniel J. Flick Iason A. Flick Jim L. Flinn Amy M. Fournier Timothy M. Garcia Nina Vladimirovna Gau Feng Ge Kristen Gervais-Andrade John S. Giles Kristen Marie Gill Trintin Chad Glenn Gregory P. Goddu Akshar G. Gohil Olga Golod Seth A. Goodchild Dane Grand-Maison Eric L. Greenhill Legare W. Gresham Wesley John Griffiths David Thomas Groff Simon Guenette Olivier Guillot-Lafrance

Admissions Committees

Kofi Gyampo William Joseph Hackman Greg M. Haft Jeannette Marie Haines David Scott Hamilton John C. Hanna Robin A. Harbage Lily K. L. Harger Guo Harrison Robin A. Haworth Iefferv Tim Hav Patrick A. Hayden Qing He James Richard Healey Paul Daniel Herzog Thomas Gerald Hess Brandon L. Heutmaker Aaron Nicholas Hillebrandt Mohamad A. Hindawi Rvan Yin-kei Ho William Allen Hossom Chia-Han (Jerry) Hsieh Oueenie W.C. Huang Dennis Dar You Huang Min Huang Paul Jeffrey Hurd Christopher Wayne Hurst Paul R. Hussian Michelle Lvnn Iarkowski Craig D. Isaacs Jason Israel Jennifer J. Jabben Randall Allen Jacobson Philip J. Jennings Xiang Ii Zivi Jiao Yi Jing Steven M. Jokerst Lisa K. Juday Amy Ann Juknelis Robert C. Kane Kvewook Gary Kang Kai Kang John J. Karwath Jennifer Lynn Kaye David M. Kaye Clive L. Keatinge Tatyana Keller Brian Danforth Kemp Alison Therese Khan Matthew G. Killough Thomas Patrick King Kavne M. Kirby Scott M. Klabacha Susan L. Klein David J. Klemish Brandelyn C. Klenner Steven T. Knight Dea Kondi Mariana Radeva Kotzev Dusan Kozic Alexander Kozmin Jeffrev L. Kucera Emilee J. Kuhn Pamela G. Kurtz

Iason B. Kurtz Kenneth A. Kurtzman Edward M. Kuss Keith Patrick Kwiatkowski Kimberly E. Lacker Lan See Lam Derek Michael Lanoue Robert J. Larson Jason A. Lauterbach Henry T. Lee Mever Tedde Lehman Elizabeth Ann Lemaster Bradlev H. Lemons Kenneth L. Leonard Hoi Fai Leung George M. Levine **Justin M. Levine** Xin Li Yongxing David Li Ying Li Lily (Manjuan) Liang Andrew Hankuang Liao Gavin X. Lienemann Jiunjen Lim Lian-Ching Lim Lynda Ming Hui Lim Liming Lin Christine Lin Hua Lin Paul T. Lintner Fengru Liu Millie Man Sum Lo John David Lower Christopher J. Loyd Eric Lussier Evan P. Mackey Brian E. MacMahon Vahan A. Mahdasian Zachary J. Martin Liana Martuccio Frederic Matte David Michael Maurer Laura A. Maxwell Christina Abbott McArthur Laurence R. McClure Christopher Karol McCulloch Steven G. McKinnon Peter A. McNamara Lawrence J. McTaggart Kenneth James Meluch Isaac Merchant Elizabeth Cashman Merritt Paul Edward Metzger Jennifer Lynn Meyer Stephanie A. Miller Aaron G. Mills **Richard James Mills** Ain Milner Meagan S. Mirkovich Jennifer Yungi Mo Emily Christine Moore Richard P. Moore Allison L. Morabito Alejandro Morales Joseph J. Muccio

Brian J. Mullen Karen E. Myers Marie-Eve Nadeau Jacqueline Lee Neal Amber L. Ng Chun Kit Ng Tho D. Ngo Leonidas V. Nguyen Norman Niami Baohui Ning Peter M. Nonken Randall S. Nordquist Christopher M. Norman Denise R. Olson Kathleen S. Ores Walsh Michael G. Paczolt Aiav Pahwa Damon W. Paisley Keith William Palmer Ying Pan Paul Pelock Julie A. Peters Christopher A. Pett Arthur C. Placek Felix Podgaits Timothy K. Pollis Timothy Ray Porter Luke Ellis Porter Aaron Z. Potacki Derek Paul Pouliot Melissa D. Prvor Joseph David Rakstad Sylvain Renaud Zoe F. S. Rico Todd Richard Rio Dolph J. Robb Krista Kathleen Robinson Iacob D. Roe Scott I. Rosenthal Jason M. Rosin Robert Allan Rowe Stuart C. Rowe James B. Rowland Ashley Carver Roya William Paige Rudolph Nadiya Rudomino Michael Joseph Russell Joseph J. Sacala John Christopher Sadloske Michael R. Sadowski Kelly Ann Salmon Brett Andrew Saternus Eric L. Savage Jonathan M. Schreck Andrew J. Schupska Karen Scott Rachel Marie Seale Ernest C. Segal Matthew D. Sharp Xiaoyu Sheng Kam Sang So Jiyang Song Richard C. Soulsby Michael D. Sowka Kevin D. Staples

YEARBOOK AND PROCEEDINGS

Admissions Committees

Samantha Elizabeth Steiner Paul-Andre St-Georges Emily Ruth Stoll Christopher James Stoll John Paul Stonestreet Lisa M. Sukow Kevin M. Sullivan Adam M. Swartz Beth M. Sweeney Christopher C. Swetonic Erica W. Szeto Wei-Chvin Tan Wee Keat Kenny Tan Dan Omer Tevet Jonas F. Thisner Robert W. Thompson Lori R. Thompson Robby E. Thoms Jennifer L. Throm Michael Toledano Kyle W. Tompkins Queenie Wing Kan Tsang Denny Tei Tuan Patrick N. Tures Alexander J. Turrell Sebastien Vachon Tony A. Van Berkel

John V. Van de Water Victor Maximillian C. Victoriano Kathryn Ann Walker Glenn M. Walker Xuelian Wan Cong Wang Qing Janet Wang Xiaomin Wang Gary C. Wang Lynne K. Wehmueller **Jennifer Lynn Weiner** Robert S. Weishaar Katherine Therese Werner Jean Patti West Anna Marie Wetterhus Timothy G. Wheeler Patricia Chervl White Shauna S. Williams Stephen C. Williams Chad P. Wilson Steven M. Wilson Erin Groark Winters Benjamin T. Witkowski Brandon L. Wolf Kah-Leng Wong Simon Kai-Yip Wong Mark L. Woods

Consultants

Craig A. Allen Sophia Cyma Banduk Robert W. Batten Stephen A. Belden David R. Border Anthony E. Cappelletti Houston Hau-Shing Cheng David R. Chernick Timothy David Conrad Jacqueline Frank Friedland Margaret Wendy Germani Richard W. Gorvett Ali Ishaq David C. Korb Gustave A. Krause Kevin A. Lee Jason K. Machtinger Catherine A. Neufeld Daniel G. Roth Jeffery J. Scott Thomas N. Stanford Navid Zarinejad

Sandy Wu Xueming Grace Wu Wei Xie Tong Xu Xinxin Xu Yulai Yang Yi-Chuang (Sylvia) Yang Shuk Han Lisa Yeung Guanrong You Joshua A. Youdovin Michael Scot Young Jonathan Kam Yu Ting Yu Yuan-Hung (David) Yu Jiwei Yu Arthur J. Zaremba Yue Zhang Junya Zhang Li Zhang Wei Zhao Jeffrey W. Zheng Guo Zhong Yu Zhou Adolphe Emery Zielinski

Alana C. Farrell, Representative

Shira L. Jacobson, *Liaison*

Thomas Downey, Staff Liaison

JOINT EXAM ADMINISTRATION COMMITTEE

This CAS/SOA committee is responsible for administrative issues for jointly administered Exams/Courses 1/P, 2/FM, 3F/MFE, and 4/C. The committee reviews administrative procedures to ensure that rules are compatible with the rules of each society and that rule modifications are approved by both societies.

Steven Kopp, Chairperson

Paul Judd Robert Stokes Thomas Struppeck

Thomas Downey, *Staff Liaison* Brett Rogers, *Staff Liaison*

PRELIMINARY EXAMINATIONS CURRICULUM COMMITTEE

Coordinates education topics and syllabus material for preliminary Exams 1-4 with the Canadian Institute of Actuaries and the Society of Actuaries.

Justin J. Brenden, *Chairperson* Robert A. Alps, *Vice Chairperson*

Tak Wai Chan Toby Hall Syed Hossain Bruce Jones Stuart Klugman, *Consultant* James Miles Adam Niebrugge Amy R. Waldhauer

Gary Parker, Liaison

Thomas Downey, *Staff Liaison* Sarah Phelps, *Staff Liaison*

SYLLABUS COMMITTEE

The Syllabus Committee determines the scope and content of the syllabus and course of readings for the CAS Examinations. The committee also directs the preparation of educational material for the CAS *Syllabus of Basic Education*.

Rajesh Sahasrabuddhe, Chairperson

Consultants Liaisons Sophia Cyma Banduk Steven D. Armstrong David Langlois Carolyn J. Bergh Seung-Won (Sam) Lee Patricia A. Hladun Erika Helen Schurr Dana F. Joseph Lleweilun Smith Kathleen C. Odomirok James Charles Sandor Robert G. Sanford Raymond Bond Shum Christopher J. Styrsky Dan Omer Tevet William B. Wilder Members Jacob D. Roe Angelo E. Bastianpillai Kevin A. Kesby Justin J. Brenden Jim Klann Kelly Ann Salmon Laura N. Cali John E. Kollar Manalur S. Sandilva Tak Wai Chan Todd W. Lehmann Frances G. Sarrel Wanchin W. Chou George M. Levine Ouan Shen Zhe Robin Li Catherine Harwood Taylor Edmund Daniel Douglas Chris S. Throckmorton Peter F. Drogan Stephane J. McGee Sholom Feldblum Sarah K. McNair-Grove Michel Trudeau Robert Jerome Foskey Scott L. Negus Steven L. Turner Derek W. Freihaut Marc Lawrence Nerenberg Garv G. Venter Jacqueline Frank Friedland Adam Kevin Niebrugge Amy R. Waldhauer Margaret Wendy Germani Dmitry E. Papush Joshua C. Worsham Patrick A. Hayden Michael Robert Petrarca Li Zhang Ali Ishaq John D. Renze Clive L. Keatinge Delia E. Roberts Thomas Downey, Staff Liaison

VEE ADMINISTRATION COMMITTEE

The VEE Administration Committee (VEEAC) determines whether specific courses or educational experiences are appropriate to fulfill the Validation by Educational Experience (VEE) requirements. The VEEAC is a joint committee of the CAS, CIA, and SOA.

Richard Soulsby, Chairperson

Bryan Hearsey Bruce Jones Aaron Tenenbein Rebecca Williams

Thomas Downey, *Staff Liaison* Stuart Klugman, *Staff Liaison* Gena Long, *Staff Liaison*

LIAISON REPRESENTATIVES

AAA Committee on Qualifications

John Gleba

SOA Education & Examination Management Committee

Steven D. Armstrong

ENTERPRISE RISK MANAGEMENT (ERM) COMMITTEES

ERM COMMITTEE

The CAS ERM Committee is responsible for ERM activities on behalf of the CAS as they relate to broadening, enhancing, and advancing the understanding of ERM for CAS members, especially through research, education, and training. The Committee helps implement and administer the new global ERM designation for the CAS.

> David M. Terne, *Chairperson* Maryellen J. Coggins, *Vice Chairperson*

Stephen A. Belden Abbe Sohn Bensimon Jeffrey Alan Courchene A. David Cummings Kevin G. Dickson Wayne H. Fisher Barry A. Franklin John J. Kollar Kenneth A. Kurtzman Stephen P. Lowe Margaret Tiller Sherwood Robert W. Thompson

Lawrence L. Peacock, Staff Liaison

ERM LIAISON REPRESENTATIVES

Liaison to the Actuarial Profession (U.K.) (Formerly the Institute of Actuaries)

Barry Franklin

Liaison to the American Academy of Actuaries (AAA) ERM Task Force

Barry Franklin

Liaison to the AAA P/C Financial Soundness/Risk Management Committee

Barry Franklin

Liaison to the AAA Risk Management and Solvency Committee

Barry Franklin

Liaison to the Canadian Institute of Actuaries (CIA)

Barry Franklin

CERA External Reviewer

Gary Venter

CERA Treaty Board Delegates

John Kollar Kevin Dickson

CERA Review Panel Representative

Stephen P. D'Arcy CERA Treaty Contact Cynthia Ziegler

Liaison to the Chartered Financial Analysts (CFA) Institute

Barry Franklin

Liaison to the Conference of Consulting Actuaries (CCA)

Barry Franklin

Enterprise Risk Management Institute International (ERMII) Board and Executive Committee

Shaun Wang Wayne Fisher Barry Franklin

ERM Committees

Liaison to the Global Association of Risk Professionals (GARP)

Barry Franklin

Liaison to the Institute of Actuaries of Australia (IAAust)

Barry Franklin

Liaison to the National Association of Insurance Commissioners (NAIC)

Barry Franklin

Liaison to the Professional Risk Managers' International Association (PRMIA)

Barry Franklin

Liaisons to the Risk and Insurance Management Society, Inc. (RIMS)

Barry Franklin Kip Bohn

Risk Management Section (RMS) ERM Symposium Representative

Kevin Madigan

Liaison to the RMS Newsletter

J. Michael Boa

Liaison to the RMS Web Site

J. Michael Boa

INTERNATIONAL COMMITTEES, TASK FORCES, LIAISON REPRESENTATIVES

ASIA REGIONAL COMMITTEE

The Asia Regional Committee facilitates the development and delivery of CAS services to members and candidates in Asia, serves as liaison to local actuarial organizations and their members and coordinates CAS participation in their activities, promotes local programs and seminars, develops and facilitates two-way communications between the CAS and local actuarial organizations, and serves an ambassadorial role.

Chung-Ye Scott Yen, Chairperson

Hussain Ahmad, *Ambassador* So-Yeun Kim, *Ambassador* Ronald T. Kozlowski, *Ambassador*

ZhenZhen Lai, Ex Officio

Min Jiang

Zivi Jiao

Kai Kang

Patricia Kum

Vinu Kuriakose

Kahshin Leow

Zhe Robin Li

Reng Lin

Yunhsia B. Liu

Anna Liu

Iie (Michael) Lu

Minchong Mao

Douglas H. Min

Michael Guerin Owen

Ying Pan Javne L. Plunkett

Manalur S. Sandilya

Alex Rudolf R. Agatep Morgan Haire Bugbee DuoDuo Cai Chung Yin Eric Chan Jonathan J. Charak Sen Chen Kin Lun (Victor) Choi Kuei-Hsia Ruth Chu Robert F. Conger Xiaoye Cui Herbert G. Desson Yuting Fan Weishu Fan Mantang Feng Yun Gao Feng Ge Amit K. Gupta

Cynthia R. Ziegler, Staff Liaison

CAS AMBASSADOR PROGRAM

The charge of the Ambassador Program is to assist the CAS in attaining the Centennial Goal, to identify needs of members who reside or work outside North America, and to serve as resources to emerging actuarial organizations and academic programs.

Ron Kozlowski, *Asia Regional Ambassador* Manalur S. Sandilya, *Ambassador to India* Peter Murdza, *Ambassador to Korea* Alejandra S. Nolibos, *Ambassador to Latin America* Marcus Ewe, *Ambassador to Malaysia* Hussain Ahmad, *Ambassador to Singapore*

EAST ASIA TASK FORCE

This group is tasked with developing a formal plan for the future organizational structure for the CAS in East Asia. This may or may not result in retaining the current Asia Regional Committee structure, but should allow for support of continuing education needs, university liaisons, and basic education/admissions needs. Additionally, consideration could be given as to whether a separate Regional Affiliate, or Affiliates, should be created for the social aspects/needs for the profession in East Asia.

Ronald T. Kozlowski, Chairperson

Ralph S. Blanchard Robert F. Conger Kris D. DeFrain ZhenZhen Lai Manalur S. Sandilya Chung-Ye Scott Yen Cynthia R. Ziegler

Xiao-shu Su Xiaowei Sun Wei-Chvin Tan Victor Maximillian C. Victoriano Xuelian Wan Anping Wang Yao Wang Ming Yi Wong Xingzhi Wu Jie Xiao Wei Xie Xiaoying Yi Ting Yu Qinnan Zhang Jun Zheng Dong Zheng

ICA 2014 ORGANIZING COMMITTEE

Led by the CAS, the five U.S. actuarial organizations will be hosting the International Congress of Actuaries (ICA) meeting in Washington, D.C. The 2014 ICA Organizing Committee will be staffed with leadership from the American Academy of Actuaries, American Society of Pension Professionals and Actuaries, Casualty Actuarial Society, Conference of Consulting Actuaries, and Society of Actuaries.

Robert F. Conger, *Chairperson* Cecil D. Bykerk, *Vice Chairperson* Cynthia R. Ziegler, *Vice Chairperson*

Maggie Conger Kathleen R. Dean Yves Guerard Aaron Halpert Roger M. Hayne Gregory W. Heidrich Steven G. Lehmann Christian Levac S. Michael McLaughlin Joseph Nichols Adam Reese Deborah M. Rosenberg Nicole Seguin Thomas S. Terry

ICA 2014 FINANCE AND RISK MANAGEMENT COMMITTEE

This committee is responsible for preparing a financial plan and for developing and managing budgets for ICA 2014 income and expenses within the overall vision and architecture articulated by the Organizing Committee. In addition, the committee is responsible for developing the Risk Management Plan for ICA 2014 for approval by the Organizing Committee, and for implementing and monitoring the Risk Management Plan, working with and through other ICA 2014 committees as appropriate.

The committee is responsible for communicating relevant budget information and expectations to other ICA 2014 committees, and for tracking progress against budgets. The committee handles day-to-day interface with the IAA regarding the bursary program for actuaries seeking financial support to attend ICA 2014. The committee is responsible for providing regular progress reports, exception reports, analyses, and recommendations to the Organizing Committee. The Finance Committee reports to the Organizing Committee.

Aaron M. Halpert, Chairperson

Kathleen R. Dean Mark Freedman Stacy Lin Todd P. Rogers Max J. Rudolph Andrea M. Sweeny

Robert F. Conger, *Ex Officio* Cynthia R. Ziegler, *Ex Officio*

Todd P. Rogers, Staff Liaison

ICA 2014 HOSPITALITY COMMITTEE

This committee is responsible for creating and managing a welcoming, helpful, interesting, and entertaining experience for delegates and their accompanying persons, exclusive of the meeting rooms and major events. The anticipated scope of Committee activities includes, but is not necessarily limited to, recruiting, organizing, training, and deploying meeters and greeters; procuring and delivering delegate gifts; organizing and staffing daily hospitality lounges for accompanying persons; organizing and operating an internet lounge; organizing and coordinating guest tours and activities including activities for children and tours before/after ICA 2014; and assuring convenient access to information about the city and activities. The Hospitality Committee reports to the Organizing Committee and operates within the overall vision, architecture, and financial plan articulated by the Organizing Committee.

Maggie Conger, Chairperson

Peggy Black Nancy Braithwaite Lau Chan Buffin Loree Bykerk Michele Fuerst Kitty Hartman Eileen Hayne Sue Hohman Helen Kollar Judy Lehmann Barbara MacGinnitie Mary McLaughlin Barbara Meyers Laurie Miccolis Teresa Parmenter Cindy Sandberg Karen Terry Cynthia Ziegler

Kathleen Dean, Staff Liaison

ICA 2014 LOGISTICS COMMITTEE

This committee is responsible for planning and operating the infrastructure of ICA 2014 in support of the other committees, including meeting space, exhibitor space, social activity space, hotel and vendor management, food and beverage, transportation, signage, language translation, registration desk, printed materials, and audio-visual equipment. The Logistics Committee reports to the Organizing Committee and operates within the overall vision, architecture, and financial plan articulated by the Organizing Committee.

Kathleen Dean, Chairperson

Rita DeGraaf Keith G. Stewart

ICA 2014 PUBLIC RELATIONS AND MARKETING COMMITTEE

This Committee is responsible for public relations and marketing activities in support of ICA 2014 within the overall vision, architecture, and financial plan articulated by the Organizing Committee. The Committee's responsibilities include brand and logo design, Web site design, design and dissemination of brochures and similar collateral, and presence and visibility at key actuarial meetings around the world from 2009 through 2014. This Committee's responsibilities also includes creating appropriate visibility for ICA 2014 (including attracting and managing media representative attendance at ICA 2014) in the actuarial, industry, and general business and financial media – before, during, and after ICA 2014. The Committee reports to the Organizing Committee.

Deborah M. Rosenberg, Chairperson

J. Michael Boa Amy S. Bouska Leslie Cummings Anne E. Kelly Kim McKeown Megan O'Neill Bruce D. Schobel Joanne S. Spalla Mavis A. Walters Cynthia R. Ziegler

ICA 2014 SCIENTIFIC COMMITTEE

This committee is responsible for the overall design and content of the educational sessions of ICA 2014, working within the overall vision, architecture, and financial plan articulated by the Organizing Committee. The Scientific Committee is responsible for the planning and development of keynote speakers, plenary sessions, and concurrent sessions. These sessions will include speakers, panel discussions, paper presentations, and other similar content. The Scientific Committee will conduct any calls for papers in connection with ICA 2014 (except where agreed that some other organization, such as an IAA section, will conduct a call for papers).

The Scientific Committee serves as the point of contact, coordination, and oversight with any of the U.S. actuarial organizations, IAA sections, and other organizations that have been invited and have agreed to take responsibility for creating content for one or more sessions.

The Scientific Committee reports to the Organizing Committee.

Roger M. Hayne, Chairperson

Rejean Besner Robert Brown Andrew Cairns Tom Campbell Chris Carlson Gary Dean Rita DeGraaf Louise Francis Tom Herget Ellen Kleinstuber Eduardo Melinsky Godfrey Perrott Steve Rosen Carol Sears Marc Slutzky Emile Stipp Eric Thorlacius Mike Toothman Lisa Tourville

David Core, Staff Liaison

ICA 2014 SPECIAL EVENTS AND ENTERTAINMENT

This committee is responsible for the development, planning, and operation of the special events that are an integral part of ICA 2014, working within the overall vision, architecture, and financial plan articulated by the Organizing Committee. These events include, for example, marquis events, outings and evening events that are intended for ICA 2014 delegates, as well as entertainment and special activities during opening and closing sessions or delegate meals. These events do not include events for accompanying persons or pre- and post-ICA 2014 tours and activities (see Hospitality Committee). The Special Events and Entertainment Committee reports to the Organizing Committee.

Adam Reese, Chairperson

Maggie Conger Linda Damitz Kathleen R. Dean Olga Jacobs Mary Frances Miller

ICA 2014 SPONSORSHIP AND EXHIBITS COMMITTEE

This committee is responsible for designing and operating the sponsorship program, recruiting and obtaining sponsors of ICA 2014, handling the ongoing interface with sponsors, and working with other committees to assure the effective delivery of promised sponsor benefits, all within the overall vision, architecture, and financial plan articulated by the Organizing Committee.

The Sponsorships and Exhibits Committee reports to the Organizing Committee.

S. Michael McLaughlin, *Chairperson* Steven G. Lehmann, *Vice Chairperson*

Robert M. Beuerlein Raji Bhagavatula J. Michael Boa Howard Bolnick Robert F. Conger Colleen Fiore Denise Fuesz Michael Fusco John J. Haley W. James MacGinnitie

Alice Rosenblatt Bradley M. Smith Robert W. Stein Larry D. Zimpleman

ICA 2014 STEWARDSHIP COMMITTEE

This committee is responsible for developing, managing, and operating community outreach activities in connection with ICA 2014, including charitable works and donations; and invited university and high school professors to the daily sessions. The committee interfaces with and hosts The Actuarial Foundation and other philanthropic actuarial and business organizations that seek a presence at ICA 2014. The Stewardship Committee reports to the Organizing Committee and operates within the overall vision, architecture, and financial plan articulated by the Organizing Committee.

Thomas S. Terry, *Chairperson*

INTERNATIONAL ACTUARIAL ASSOCIATION (IAA) DELEGATES COMMITTEE

The IAA Delegates Committee consists of CAS delegates to the various IAA Committees, Subcommittees, Task Forces, Working Groups, and Council (included in the term "Committees" as used in the following). The delegates' responsibilities include representing the CAS position and protecting the interest of CAS members on the issues and items addressed by these IAA Committees, subject to also meeting their responsibility as an official IAA committee member. As such, they are expected to search out the CAS position and possible CAS member interests on the various issues and items addressed by their IAA committees.

Kris D. DeFrain, *Chairperson, Council Delegate* Ralph S. Blanchard, *Alternate*

Paul Braithwaite Robert F. Conger Robert S. Miccolis Mary Frances Miller Peter J. Murdza Alejandra S. Nolibos Marc F. Oberholtzer

Cynthia R. Ziegler, Staff Liaison

INTERNATIONAL MEMBER SERVICES COMMITTEE

The committee's purpose is to maintain and enhance the connection between the CAS and its international members. By working in conjunction with the international regional affiliates, the committee aims to better serve the CAS's international membership and increase their connection to and involvement with the CAS and other CAS members. The Committee reports to the VP-International.

Examples of service include:

- assistance to the international regional affiliates in developing and implementing programs for their membership
- facilitating and encouraging informal communication and interaction via maintenance of e-mail lists
- assistance to actuaries who are relocating by putting them in touch with others who have relocated to that region
- possible newsletters and other communications
- sponsorship of webinars for education on international actuarial topics
- · Facilitate interactions between traveling CAS leadership and international members

Jeffrey Alan Courchene, *Co-Chairperson* Gabriel Matthew Ware, *Co-Chairperson*

> Yazeed F. Abu-Sa'a Roselyn M. Abbiw-Jackson Athula Alwis Robert G. Blanco Christine Cadieux Joyce Chen Kris D. DeFrain Qing He Scott C. Kurban ZhenZhen (Jenny) Lai Jing Li Yvonne Naa Korkor Palm Rade Musulin John Narvell Alejandra S. Nolibos Juan Carlos Rodriguez Mayoral Manalur S. Sandilya David B. Sommer Andrew Jon Staudt David Tkatch

Cynthia R. Ziegler, Staff Liaison

LIAISON REPRESENTATIVES

China Association of Actuaries

Zhen Zhen (Jenny) Lai

General Insurance Research Organising (GIRO) Committee

Douglas Lacoss

International IAA Council

Kris DeFrain Ralph S. Blanchard (Alternate)

Institute of Actuaries of Australia

Rade T. Musulin

Institute of Actuaries (U.K.) General Insurance Practice Executive Committee

Kathryn Morgan (UKAP)

SOA Latin America Committee

Alejandra Nolibos

MARKETING AND COMMUNICATIONS Committees, task forces, liaisons

JOINT CAS/SOA COMMITTEE ON ACTUARIAL DIVERSITY

The Joint CAS/SOA Committee on Actuarial Diversity is responsible for encouraging the entrance of minority students into the actuarial profession. The committee also administers funds that provide scholarships to qualified minority students interested in pursuing an actuarial career.

David M. Terne, Chairperson

Fritzie R. Archuleta Kim Boxell Susan M. Cleaver Robert F. Conger Lilian Y. Giraldo Victoria A. Gomez Brian E. Johnson Ramona C. Lee Barry J. McKeown Henry Edward Newman Joy-Ann C. Payne Kevin S. Wolf Ruth Zea

Kathryn Baker, *Staff Liaison* Megan O'Neill, *Staff Liaison*

JOINT CAS/SOA COMMITTEE ON CAREER ENCOURAGEMENT

This Committee is responsible for increasing the recognition of the actuarial profession among students, educators, and career counselors in high schools, colleges, and universities. The Committee conducts research to investigate trends, target markets for recruiting, and to measure attitudes of those in the exam process. The Committee develops ways to provide information on actuarial careers, such as printed and electronic recruiting material and career fairs. It shares editorial board responsibilities of the joint CAS/SOA actuarial career Web site, www.BeAnActuary.org, with the CAS/SOA Joint Committee on Actuarial Diversity.

Michael John Noble, Chairperson

Johnathan D. Chernick Jennifer Elizabeth Clark Christian J. Coleianne Thomas J. DeFalco Jeffrey F. Deigl Richard Charles Frese

Kathryn Baker, *Staff Liaison* Megan O'Neill, *Staff Liaison* Wesley John Griffiths Erin Ashley Groark R. Dale Hall Michael James Hartshorn Kelly J. Hernandez Gary I. Koupf Erin M. Olson Kirk Alan Peter David A. Pitts Erin Winters Wee Keat Kenny Tan

MEDIA RELATIONS COMMITTEE

The Media Relations Committee is charged with working through the national, state, and local media to enhance the external visibility of casualty actuaries and to increase the public awareness of the role actuaries play in traditional, non-traditional, and developing areas of practice. The committee works with the American Academy of Actuaries and Insurance Information Institute in support of media relations efforts on property/casualty issues.

Mary T. Hosford, Chairperson

Mark S. Allaben Jennifer Elizabeth Clark Robin A. Harbage Pamela A. Kaplan Alex Krutov Michael L. Toothman Marina Vaninsky Navid Zarinejad

Kim McKeown, *Liaison* Cary Schneider, *Liaison* Susanne Sclafane, *Liaison* Ellen Dadisman, *Liaison*

J. Michael Boa, Staff Liaison

MEMBER ADVISORY PANEL COMMITTEE

The Member Advisory Panel Committee provides a mechanism that can be used to measure and assess CAS membership satisfaction levels, with a goal of assuring that the benefits of association far exceed the costs for members. To achieve this, CAS leaders and committees communicate openly with a representative collection of members who are willing to participate in surveys and research conducted by the CAS.

Robert J. Schutte, Chairperson

Regina M. Berens Melisa L. Darnieder Thomas J. DeFalco Andrea Gardner Charles Gruber Dennis H. Lawton Stephen V. Merkey David L. Miller William F. Murphy Karen Lynn Rivara Dan Omer Tevet

Matt Caruso, Staff Liaison

MEMBER ADVISORY PANEL

The Member Advisory Panel (MAP) was formed to provide CAS leaders and committees with access to a representative collection of members who are willing to participate in surveys and research conducted by the CAS. The MAP is managed by the Member Advisory Panel Committee.

Jeffrey R. Adcock Kevin L. Anderson Jonathan L. Ankney Deborah Herman Ardern Elizabeth A. Arsenault Megan Laurissa Astudillo Rose D. Barrett Michael Christopher Beck Saeeda Behbahany Regina M. Berens Robert G. Blanco Michael P. Blivess Neil M. Bodoff David R. Bradley Sara T. Broadrick Elaine K. Brunner Andrea W. Cablayan Stephanie T. Carlson William M. Carpenter Michael J. Caulfield Maureen A. Cavanaugh Debra S. Charlop Wai Yip Chow Gregory J. Ciezadlo Eric R. Clark J. Edward Costner Jeanne E. Crowell Kelly K. Cusick Melisa L. Darnieder Willie L. Davis Raymond V. Debs Thomas J. DeFalco Victor G. Dos Santos Kevin M. Dyke Howard M. Eagelfeld Anthony D. Edwards Caroline B. Edwards Lindsay Aaron Eng Jonathan Palmer Evans Philip A. Evensen Joseph Gerard Evleth John S. Ewert Doreen S. Faga Janet L. Fagan Caryl Marie Fank Wendy A. Farley

Alana C. Farrell Ginda Kaplan Fisher Sarah J. Fore Jonathan W. Fox Marie LeStourgeon Fredericks Kevin Jon Fried Bruce F. Friedberg Chad J. Gambone Andrea Gardner Louis Gariepy Nicholas P. Giuntini Victoria A. Gomez Philippe Gosselin Francis X. Gribbon Charles R. Grilliot Charles Gruber John A. Hagglund Sandra K. Halpin Trevor C. Handley Brady L. Hermans Todd J. Hess Anthony D. Hill Aaron Nicholas Hillebrandt Patricia A. Hladun Gary Hoo Long-Fong Hsu Jeffrey R. Hughes Victoria K. Imperato Min Jiang Philippe Jodin Daniel Keith Johnson Jennifer Polson Johnson Kurt J. Johnson William Rosco Jones Laura Dembiec Jordan Jeremy M. Jump Stephen H. Kantor C.K. Stan Khury Leon W. Koch Kenneth A. Kurtzman Francois Lacroix Dean K. Lamb Dennis H. Lawton Todd W. Lehmann Jennifer M. Levine Kelly Carmody Lewis

Lian-Ching Lim Janet G. Lindstrom Maria Mahon Kevin Christopher Mahoney Donald E. Manis Zachary J. Martin Jeffrey B. McDonald Thomas S. McIntyre Kelly S. McKeethan Mary Ann McMahon William T. Mech Stephen V. Merkey Daniel John Messner Jennifer Lynn Meyer Michael E. Mielzynski David L. Miller Richard B. Moncher Christopher J. Monsour Dawn Morelli Timothy C. Mosler Fritzner Mozoul Conrad P. Mueller William F. Murphy Helen Patricia Neglia William S. Ober Kevin Jon Olsen Wade H. Oshiro Joanne M. Ottone John R. Pedrick Tracie L. Pencak Christopher Kent Perry George N. Phillips Joseph W. Pitts Etienne Plante-Dube Igor Pogrebinsky Amber Bentley Popovitch Warren T. Printz David S. Pugel Alan K. Putney Karen L. Queen Kenneth Quintilian David C. Riek Karen Lynn Rivara Ezra Jonathan Robison Rebecca L. Roever Steven Carl Rominske

Gail M. Ross Kenneth W. Rupert Stephanie Elizabeth Russell John Christopher Sadloske Timothy Steven Sallay Stephen Paul Sauthoff Joshua Stewart Sawyer Amy Beth Green Sayegh Letitia M. Savlor Doris Y. Schirmacher Karen L. Schmitt Robert J. Schutte Debbie Schwab Jeffory C. Schwandt Lyndsey J. Schwegler Suzanne Mills Scott Elizabeth L. Sogge Anthony A. Solak Jeffrey L. Subeck Wei-Chyin Tan Dan Omer Tevet Neeza Thandi Jonas F. Thisner Anne M. Thomas John Frank Thomas Robert W. Thompson Phoebe A. Tinney Michael L. Toothman Turgay F. Turnacioglu Brian K. Turner Brian A. Viscusi Tice R. Walker Kimberley A. Ward Gabriel Matthew Ware David W. Warren Alfred O. Weller Scott Werfel Lawrence White Steve Winstead Kirby W. Wisian Linda Yang Richard P. Yocius Edward J. Yorty Bin Yuan Michael R. Zarember

NEW MEMBERS COMMITTEE

The New Members Committee is responsible for effectively integrating new members into the CAS and for ensuring that new member perspectives are readily available to CAS committees in their work. Initially, the New Members Committee is asked to consider the recommendations of the Task Force on New Members with respect to new member recognition and class spirit and to be a resource to the Leadership Development Committee as it explores development programs for the CAS.

A New Member is defined as any Associate or Fellow whose most recent credential has been awarded within the past ten years.

Sean M. McAllister, Chairperson

John R. Emig Richard Charles Frese Stephen M. Harter Kristin Harp Monopolis Ronald S. Scott Kimberly Yeomans

Matthew Caruso, *Staff Liaison* Melissa Casemier, *Staff Liaison*

COMMITTEE ON ONLINE SERVICES

The Committee on Online Services is responsible for assessing and providing guidance to staff on the configuration, content and "look" of the CAS Web Site. At the direction of the Executive Council and the Board, the Committee will also provide support as the CAS explores and experiments with other emerging communication technologies.

G. Chris Nyce, Chairperson

Andrew Martin Chandler Peter A. McNamara Joshua Stewart Sawyer Joanne S. Spalla Xiaomin Wang Chunpong Woo

Jennifer D. Walton, Staff Liaison

COMMITTEE ON SPONSORSHIPS AND ADVERTISING

The Committee on Sponsorships and Advertising is responsible for managing all aspects of the CAS sponsorship and advertising programs. This Committee will implement the recommendations of the CAS Revenue Opportunities Task Force, lead the identification and consideration of potential new sources of CAS non-dues revenue sources, recommend appropriate policies and guidelines for managing the programs, and regularly assess the effectiveness of the programs from both member and sponsor perspectives. The Committee will prepare an annual report for the Board on the CAS sponsorship and advertising programs.

Joanne S. Spalla, Chairperson

Nancy A. Braithwaite, *Ex Officio* Chester John Szczepanski, *Ex Officio*

Eric J. Hornick Richard B. Moncher Kimberley A. Ward Cynthia R. Ziegler

J. Michael Boa, *Staff Liaison* Kathleen R. Dean, *Staff Liaison* Megan O'Neill, *Staff Liaison* Leanne Wieczorek, *Staff Liaison*

UNIVERSITY RELATIONS COMMITTEE

The CAS University Relations Committee is responsible for managing the CAS University Liaison and Academic Correspondent Programs. The Committee encourages and facilitates activities within the programs and actively promotes the programs to attract new participants. The Committee maintains liaison relationships with other committees involved in university activities to assure integration and coordination of efforts.

Jeffrey L. Kucera, Chairperson

Gwendolyn L. Anderson Paul E. Kinson Elizabeth Cashman Merritt Douglas H. Min Ginette Pacansky Mark Priven Paul Kinson Robert K. Smith Elizabeth A. Wellington Mark S. Wenger

Melissa Casemier, Staff Liaison

CAS TRUST SCHOLARSHIP SUBCOMMITTEE

The CAS Trust Scholarship Subcommittee is responsible for all aspects of the CAS Trust Scholarship Program. The Subcommittee, which falls under the University Relations Committee, establishes eligibility requirements and application procedures, reviews applications and selects award winners, actively promotes the availability of the scholarship, and develops an annual recommendation for the number of scholarships and award amount, in consultation with the CAS Trustees.

Kenneth L. Leonard, *Chairperson*

Silvia Bach Aaron Nicholas Hillebrandt Julie Perron Chunpong Woo Mark Wenger Elizabeth A. Wellington

Megan O'Neill, Staff Liaison

UNIVERSITY LIAISONS

Established in 1999, the CAS University Liaison Program is made up of CAS members who have volunteered to be liaisons to colleges and universities. Managed by the University Relations Committee, the program matches CAS members with academics to provide the academics a one-on-one contact with a practicing actuary. The program helps facilitate the partnership between the academic community and the actuarial profession.

Ahsan Abdullah Hussain Ahmad Denise M. Ambrogio Vagif Amstislavskiv Mark B. Anderson Gwendolyn L. Anderson Keat Beng Ang Nolan E. Asch Farid Aziz Ibrahim Gregory S. Babushkin Robert Sidney Ballmer Phillip W. Banet Rose D. Barrett Aaron J. Beharelle Jeremy Todd Benson Jason E. Berkey Linda Jean Bjork Gavin C. Blair Jonathan Everett Blake Caleb M. Bonds Lee M. Bowron Thomas Leininger Boyer Lori Michelle Bradley Michael D. Brannon Tracy L. Brooks-Szegda Elaine K. Brunner Morgan Haire Bugbee Christopher J. Burkhalter DuoDuo Cai Chuan Cao Maureen A. Cavanaugh R. Scott Cederburg Zhijian Chen Kin Lun (Victor) Choi Stephen Daniel Clapp Kay A. Cleary Christopher Paul Coelho Christian J. Coleianne Matthew P. Collins Jeffrey Alan Courchene Ryan J. Crawford Catherine Cresswell Jonathan Scott Curlee John Edward Daniel Edgar W. Davenport Robin Davis Robert V. DeLiberato Sean R. Devlin Neal Ray Drasga Thomas J. Duffy Francois Richard Dumontet

Grover M. Edie Charles C. Emma David Engles William H. Erdman Michael A. Falcone Thomas R. Fauerbach Vicki A. Fendley Jacob C. Fetzer Evan Fisher Yan Lap "Jess" Fung Anne M. Garside Jacob Julius Geyer Bernard H. Gilden Patrick John Gilhool Nathan Terry Godbold Timothy L. Graham Legare W. Gresham Francis X. Gribbon Jeffrey Robert Grimmer Charles Gruber Todd A. Gruenhagen Scott T. Hallworth David Scott Hamilton Robin A. Harbage Gary M. Harvey Gregory L. Hayward Kathryn Enochs Herzog Thomas E. Hettinger John V. Hinton Dennis E. Hoffmann Carol Irene Humphrey Brian L. Ingle Shira L. Jacobson Shiwen Jiang Christian Jobidon Brian E. Johnson Jennifer Polson Johnson Kelli Shepard-El Jones Sally M. Kaplan Lawrence S. Katz Cheryl R. Kellogg Chester T. Kido Young Y. Kim Paul E. Kinson Kayne M. Kirby David M. Klein James J. Kleinberg Adam J. Kreuser Jeffrey L. Kucera Yin Lawn Zhe Robin Li

Krista A. Lienau Shiu-Shiung Lin Jia (Judy) Liu Erik Frank Livingston Michelle Luneau Eric A. Madia Dorothy Lentz Magnuson James M. Maher Donald E. Manis Robert B. McCleish D. Michael McConnell Renée Marie McGovern Simon M. Mellor William A. Mendralla Ryan A. Michel Albert-Michael Micozzi William J. Miller Neil L. Millman **Richard James Mills** H. Elizabeth Mitchell David F. Mohrman Kristin Harp Monopolis Matthew C. Mosher Brian J. Mullen Mark Naigles Antoine A. Neghaiwi Aaron West Newhoff Loren J. Nickel Matthew P. Nimchek Randall S. Nordquist David J. Oakden Denise R. Olson Leo Martin Orth Wade H. Oshiro Ginette Pacansky Jeremy Parker Pecora John R. Pedrick Daniel Berenson Perry Richard N. Piazza Susan R. Pino Peter Victor Polanskyj Bill D. Premdas Joseph David Rakstad Eric W.L. Ratti Andrew Scott Ribaudo Robert C. Roddy Beatrice T. Rodgers James B. Rowland Kelly Ann Salmon Mitra Sanandajifar Andrew K. Schueler

Genine Darrough Schwartz Steven George Searle Stephen Ray Segroves Ahmad Shadman **Richard Sieger** Robert K. Smith Gina L.B. Smith David Spiegler David Chan Stanek James P. Streff Thomas Struppeck Brian Tohru Suzuki Chester John Szczepanski Megan Elizabeth Taylor Robert M. Thomas Gordon C. Thompson Robby E. Thoms Melissa Tomita Michael L. Toothman Jennifer M. Tornquist Ethan Kenneth Triplett Michel Trudeau Kai Lee Tse Jerome E. Tuttle Matthew L. Uhoda Steven J. Vercellini Brian A. Viscusi Benjamin J. Walker Robert J. Walling Lisa Walsh Xuelian Wan Rina Meng-Jie Wang Gabriel Matthew Ware Monty James Washburn Elizabeth A. Wellington Jo Dee Westbrook Christopher John Westermeyer Charles Scott White Lawrence White Peter G. Wick John Spencer Wideman Robin M. Williams Trevar K. Withers Ka Chun Yeung Jeanne Lee Ying Bin Yuan Haixia Zhao John D. Zicarelli David E. Zurndorfer

Melissa Casemier, Staff Liaison

COMMITTEE ON VOLUNTEER RESOURCES

The Committee on Volunteer Resources is responsible for reviewing volunteer involvement in the CAS and recommending ways to increase volunteer involvement and improve member satisfaction with CAS methods for utilizing volunteers. The committee also selects the recipients of the annual Matthew Rodermund Service Award and the Above and Beyond Achievement Award.

Patrick B. Woods, Chairperson

Andrew J. Doll Wen Hung Leung Orin M. Linden William F. Murphy

Matthew Caruso, *Staff Liaison* Melissa Casemier, *Staff Liaison*

LIAISON REPRESENTATIVES

American Risk and Insurance Association (ARIA)

Albert J. Beer

International Association of Black Actuaries (IABA)

Sharon Robinson

Mathematical Association of America (MAA)

Clifford A. Pence

American Institute for Chartered Property Casualty Underwriters (AICPCU) and Society of CPCU

Cynthia Ziegler

PROFESSIONAL EDUCATION COMMITTEES AND REPRESENTATIVES

JOINT CAS/SOA COMMITTEE FOR THE ENTERPRISE RISK MANAGEMENT SYMPOSIUM

The joint program committee of the CAS and the SOA is charged with sponsoring and conducting a symposium on enterprise risk management (ERM) issues. The Professional Risk Management International Association (PRMIA) and Canadian Institute of Actuaries are additional program sponsors. By providing extensive opportunities for interaction with faculty and peers, this symposium is ideal for learning more about current emerging risk management trends and practices, as well as keeping up to speed with the latest ERM developments.

Kevin M. Madigan, *Chairperson* Jason C. Alleyne, *Vice Chairperson*

Mark C. Abbott Maryellen J. Coggins Eugene C. Connell Philip P. Ferrari Wayne H. Fisher Timur Gok Kathryn A. Hyland Valentina A. Isakina Jed Nathaniel Isaman Joseph R. Lebens Stephen R. Lindo Jodi Lundell Robert M. Mark Irma Medina Lori Ramos-Marilla Francis P. Sabatini Mark J. Scanlon Rebecca Scotchie Sim A. Segal Alexander Shipilov Robert F. Wolf

David Core, *Staff Liaison* Kathleen Dean, *Staff Liaison* Jacquenette Moody, *Staff Liaison*

JOINT PROGRAM COMMITTEE FOR CLRS SEMINAR

The Joint Program Committee for the Casualty Loss Reserve Seminar is a joint Casualty Actuarial Society/American Academy of Actuaries Committee that is responsible for developing a program for the annual Casualty Loss Reserve Seminar.

Ronald T. Kuehn, *Chairperson* Jessica Leong, *Vice Chairperson* Margaret Wendy Germani, *Vice Chairperson*

Scott C. Anderson Jennifer A. Andrzejewski Nancy L. Arico Justin J. Brenden Anthony R. Bustillo Kenneth E. Carlton Michael A. Coca Charles F. Cook Rachel C. Dolsky Charles C. Emma David A. Foley Steven A. Glicksman

Kathleen R. Dean, *Staff Liaison* Vincent L Edwards, *Staff Liaison*

Lise A. Hasegawa Patrick A. Hayden Yi Jing Kai Kang Deborah M. King Sarah Krutov William J. Lakins Scott J. Lefkowitz Mark W. Littmann Miranda Ma Paul David Miotke David F. Mohrman

Jeremy Parker Pecora Peter S. Rauner John Dale Reynolds Alan R. Seeley Ahmad Shadman Elisabeth Stadler Edward C. Stone Edward Daniel Thomas Robert F. Wolf Vincent F. Yezzi Joshua A. Youdovin

JOINT PROGRAM FOR THE CIA/CAS APPOINTED ACTUARY SEMINAR

The Joint Program Committee for the CIA/CAS Appointed Actuary Seminar is a joint Casualty Actuarial Society/Canadian Institute of Actuaries Committee that is responsible for developing a program for the annual CIA/CAS Appointed Actuary Seminar.

Nathalie Begin, *Chairperson* Louis-Philippe Caron, *Vice Chairperson*

Sylvain Fauchon Bill D. Premdas

Vincent L Edwards, Staff Liaison

PROFESSIONAL EDUCATION POLICY COMMITTEE

The Professional Education Policy Committee endeavors to broaden the knowledge of the Casualty Actuarial Societyship in all areas of actuarial and related fields. The Committee surveys the Societyship regarding its interests; works with the Program Planning Committee and other committees in planning topics for CAS meetings, special interest seminars, and limited attendance seminars; develops alternative continuing education vehicles; stimulates authorship of specified continuing education topics; and evaluates continuing education requirements.

Klayton Southwood, *Chairperson* Susan Pino, *Vice Chairperson* Christopher Tait, *Vice Chairperson*

Katharine Barnes Nathalie Begin Abbe Bensimon Kevin Dyke Joshua Fishman Eric Hornick Mary Hosford

David Core, *Staff Liaison* Kathleen Dean, *Staff Liaison* Vincent Edwards, *Staff Liaison* Leanne Wieczorek, *Staff Liaison* Linda Howell Ronald Kuehn Yvonne Palm Igor Pogrebinsky Pamela Reale Delia Roberts Kevin Roll James Rowland Mark Shapland Julia Stenberg Xiao-shu Su Chester Szczepanski

SPECIAL INTEREST SEMINAR SUBCOMMITTEE

This subcommittee of the Professional Education Policy Committee is responsible for developing the program for two-day seminars on topics of current interest. Past seminars addressed subjects such as government in insurance, the underwriting cycle, predictive modeling, environmental and catastrophe risk, emerging technologies, medical cost containment, valuation, profitability and rate of return methodologies, and international issues.

Katharine Barnes, Chairperson

Thomas Le Mathieu Picard Klayton Southwood Xiao-shu Su John Winkleman

David Core, *Staff Liaison* Leanne Wieczorek, *Staff Liaison*

COMMITTEE ON PROFESSIONALISM EDUCATION

It is the mission of the Committee on Professionalism Education to provide the CAS and appropriate Canadian Institute of Actuaries (CIA) membership with the professionalism education needed to meet applicable qualification standards and membership requirements.

In this capacity, members of the committee endeavor to conduct the Casualty Actuarial Society Course on Professionalism so that potential new members satisfy the applicable membership requirements as well as understand the ramifications of acceptance into a professional actuarial organization.

In addition, the members of the Committee work with the American Academy of Actuaries and CIA in the development of qualification standards that have an impact on, and apply to, casualty actuaries. The members of the Committee support these qualification standards through creation and sponsorship of appropriate educational opportunities for the membership.

Chad Wischmeyer, *Chairperson* Therese Klodnicki, *Vice Chairperson* Dorothy Magnuson, *Vice Chairperson*

Esther Becker Matthew Carrier Thomas Chisolm Elizabeth Cohen Robin Davis Brian Donlan Kevin Dyke Warren Ehrlich Kyle Falconbeury Richard Fein Tricia Floyd Susan Forray Patrick Gilhool Anthony Katz Emilee Kuhn Matthew Kunish ZhenZhen Lai Martin Menard Melinda Oosten Melanie Ostiguy Fanny Paz-Prizant Mark Phillips Amy Beth Sayegh Martin Simons Maheswaran Sudagar Dan Tevet Jennifer Vincent John Wade Christopher Walker Kimberley Ward Kendall Williams Rebecca Williams David Wolfe

Leanne Wieczorek, Staff Liaison

PROGRAM PLANNING COMMITTEE

The Program Planning Committee is responsible for the actuarial content of Society meetings, identifying and securing the services of faculty and speakers for the various segments of programs, and obtaining feedback from attendees on the effectiveness of various aspects of programs. The Committee is also responsible for overseeing the coordination of all physical arrangements with hotels, resorts, conference centers, tour operations, etc., needed to house and accommodate the various functions at Society meetings.

Julia Stenberg, *Chairperson* Carl Ashenbrenner, *Vice Chairperson* Linda Brobeck, *Vice Chairperson*

Benoit Carrier Bethany Cass Gregory Cote Daniel Crifo David Cummings Xiang Ji

David Core, *Staff Liaison* Kathleen Dean, *Staff Liaison* Martin King Jeffrey Kucera Mary Miller Roosevelt Mosley Daniel Murphy Samuel Nolley Beverly Phillips Sandra Santomenno David Snow Simon Wong Vincent Yezzi Raisa Zarkhin

RATEMAKING AND PRODUCT MANAGEMENT SEMINAR PLANNING COMMITTEE

The Ratemaking and Product Management Seminar Committee is responsible for developing a program for the annual Ratemaking and Product Management Seminar.

Mary Hosford, *Chairperson* Kelly McKeethan, *Vice Chairperson* Shantelle Thomas, *Vice Chairperson*

Kelleen Arquette John Baldan Jeremy Benson Justin Brenden David Chernick Robert Curry

Thomas Hess Millie Lo Melanie Ostiguy Daniel Post Jay Rosen Sheri Scott Maheswaran Sudagar Gaetan Veilleux Gary Wang Cheng-Sheng(Peter) Wu

Vincent L Edwards, Staff Liaison

REINSURANCE SEMINAR PLANNING COMMITTEE

The Joint Program Committee for Reinsurance Seminars is a joint Casualty Actuaries in Reinsurance (CARe)/CAS Committee that is responsible for continuing education seminars on the subject of property and casualty reinsurance. These seminars include, but are not limited to, the annual CARe/ CAS Reinsurance Seminar and limited attendance seminars providing in-depth reviews of reinsurance topics.

Joshua L. Fishman, *Chairperson* Raju Bohra, *Vice Chairperson*

Athula Alwis Timothy Paul Aman Michael E. Angelina Barry Blodgett John Buchanan Elliot Burn

Vincent L. Edwards, *Staff Liaison* Leanne Wieczorek, *Staff Liaison*

WEBINAR COMMITTEE

The Webinar Committee is responsible for developing CAS Webinars.

James B. Rowland, *Chairperson* Pamela Reale, *Vice Chairperson*

Elaine Brunner Christina Gwilliam Laura Maxwell Ezra Robison Jason Russ

Vincent L. Edwards, *Staff Liaison* Leanne Wieczorek, *Staff Liaison*

LIAISON REPRESENTATIVE

Liaison to AAA Council on Professionalism

Kevin Dyke

Robert Harnatkiewicz Joseph Marino Izzo Sarah Krutov Li Ling Lin Ronald Taylor Nelson Matt J. Schmitt Bret Charles Shroyer Marina Vaninsky HongTao Wang Peter W. Wildman

RESEARCH AND DEVELOPMENT Committees, task forces, and working parties

ACCOUNTING CHANGES TASK FORCE

The Accounting Changes Task Force, reporting to the VP-Research & Development, is a "rapid response" group that will evaluate proposed changes to international and U.S. accounting regulations.

Donna D. Brasley William M. Carpenter Kenneth J. Eiger Brian A. Fannin Philip E. Heckman David E. Heppen Erin Hye-Sook Kang Gareth L. Kennedy Steven M. Visner, *Chairperson* Orin M. Linden, *Vice Chairperson*

> Gary I. Koupf Robert S. Miccolis Chris E. Nelson Marc F. Oberholtzer Nicholas H. Pastor Parr T. Schoolman Vladimir Shander Lee Oliver Smith

Patricia A. Teufel Mark Alan Verheyen James C. Votta Jin Zhang Kun Zhang John D. Zicarelli

Karen Sonnet, Staff Liaison

CLIMATE CHANGE COMMITTEE

The Climate Change Committee will recommend, support, and perform research on climate change and assess the potential risk management implications for the insurance industry.

Gwendolyn L. Anderson Oliver Bettis John W. Buchanan Alp Can Yvonne W.Y. Cheng Douglas J. Collins Les Dandridge Brian S. Donovan Margaret E. Doyle Howard M. Eagelfeld Peter Eben Yao-Chuen Fang Vijay Manghnani, Chairperson

Tanya D. Havlicek Kathryn Enochs Herzog Bruce Iverson Amanda Kisala Stephen L. Kolk Stuart Leckie Caterina Nicolina Lindman Trevor Maynard John C. Neal Jason Pessel John P. Richardson Thomas A. Ryan Michael P. Speedling Laura A. Stevens Ronora E. Stryker Thomas C. Toce Kanika Vats Betty-Jo Walke Adolphe Emery Zielinski Rita M. Zona

Katharine Hayhoe, *Science Advisor* Evan Mills, *Science Advisor*

Cheri Widowski, Staff Liaison

COMMITTEE ON DYNAMIC RISK MODELING

The Committee on Dynamic Risk Modeling will facilitate research and provide direction, guidance, and support to the profession, regulators, and others regarding dynamic modeling of property/casualty risks. The committee is also responsible for monitoring and coordinating activities with other organizations or CAS committees working in the areas related to property/casualty dynamic risk modeling. The Committee also expects to support and enhance the Enterprise Risk Management process by researching and developing risk modeling tools and concepts for the practicing ERM professional.

Robert A. Bear, *Chairperson* Christopher Diamantoukos, *Vice Chairperson*

Jason Abril Fernando Alberto Alvarado Yanfei Atwell Steven Berman Morgan Haire Bugbee Alp Can Chuan Cao Patrick J. Crowe Charles Emma

Karen Sonnet, Staff Liaison

46

Sholom Feldblum Stephen A. Finch Bo Huang Ziyi Jiao Steven M. Lacke Zhe Robin Li Christopher J. Luker Xiaoyan Ma Joseph O. Marker Alan Pakula Ying Pan Rachel Radoff Theodore R. Shalack Zhongmei Su Min Wang Wei Xie Kun Zhang

HACHEMEISTER AND MICHELBACHER PRIZES COMMITTEE

The Committee's purpose is to administer the awarding of the Hachemeister Prize and Michelbacher Prize. The evaluation of eligible papers for the Hachemeister Prize will take place predominately during the second quarter of each year. Eligible papers are those published in the ASTIN bulletin or presented as part of the ASTIN Colloquium in the prior calendar year, with additional criteria as posted on the CAS Web Site. The Committee strives to achieve a broad geographic mix for its committee members, consistent with the international focus of ASTIN.

The Michelbacher Prize is an award for significant achievement that has fundamentally advanced casualty actuarial science, and is administered by this Committee. Selection of recipients could be based on a single contribution or a lifetime body of work at the committee's discretion; the award could be shared by two or more professionals if appropriate.

A. David Cummings, Chairperson

Benjamin Avanzi Lisa A. Brown Lisa G. Chanzit Luyang Fu Kamil K. Jasinski Stephen J. Mildenhall Tatjana Miljkovic Christopher J. Monsour Roosevelt C. Mosley John C. Narvell Charles P. Neeson Eva M. Paxhia Klaus D. Schmidt Debbie Schwab David B. Sommer Michael L. Toothman Kanika Vats

Karen Sonnet, Staff Liaison

COMMITTEE ON HEALTH CARE ISSUES

The Committee on Health Care Issues addresses actuarial issues related to property and casualty implications of health care. The Committee's charge includes furthering the development and dissemination of research and information regarding health care as they pertain to property and casualty issues; identifying topics for research and discussion; monitoring professional developments and legislative/regulatory activities; and working with continuing education and program committees in sponsoring panels, seminars, and other public forums on health care issues.

Stephen R. DiCenso, Chairperson

Edward G. Bradford Anthony R. Bustillo Michael L. DeMattei Kevin M. Dyke Erik A. Johnson Derek A. Jones Glen Alan Leibowitz David M. Patterson Anthony J. Pipia Debbie Schwab Kirsten M. Singer John Patrick Smith Christopher P. Walker

Greger J. Vigen, SOA

Cheri Widowski, Staff Liaison

COMMITTEE ON MANAGEMENT DATA AND INFORMATION

The Committee on Management Data and Information addresses actuarial issues of property and casualty insurance data and information systems. The Committee's charge includes furthering the development and dissemination of data management theory and principles; identifying topics for research and discussion; monitoring professional developments and regulatory activities; establishing liaisons with other organizations working in this area; and sponsoring panels, seminars, and other public forums on data management issues.

Jeremy Todd Benson, Chairperson

Waswate Ayana Peter T. Bothwell Houston Hau-Shing Cheng Kirk Allen Conrad Benedict M. Escoto Michael A. Henk Dennis Dar You Huang Joseph Marino Izzo Mary Jo Kannon

Ravi Kumar William J. Lakins Shan Lin Yunhsia B. Liu Peter A. McNamara Charles P. Neeson Raymond S. Nichols James L. Norris Thomas A. Nowak Rudy A. Palenik Ying Pan Moshe C. Pascher William Paige Rudolph Richard H. Seward Linda M. Waite Dominique Howard Yarnell

Cheri Widowski, Staff Liaison

OPEN-SOURCE SOFTWARE COMMITTEE

The purpose of the Open-Source Software Committee is to make advanced open-source reserving, ratemaking, and predictive modeling procedures available, accessible, and of practical value to a wider audience. The Open-Source Software Research Committee will foster the development of tutorials, interfaces, procedures, and educational resources, and will liaise with the Professional Education committees to disseminate information to CAS members.

Lee M. Bowron, Chairperson

Avraham Adler Steven L. Berman John T. Bonsignore Kevin Scot Burke Alan Chalk Andrew Martin Chandler Donald L. Closter

- Francis L. Decker Benedict M. Escoto Sholom Feldblum Matthew J. Flynn Edward W. Frees James C. Guszcza Greg Jaynes Hou-wen Jeng Todd W. Lehmann
 - Hai You Yi Zhang

Yali Li Stephen L. Lienhard Shan Lin Rasa Varanka McKean Peter James Mulquiney Daniel M. Murphy Ying Pan Adam Lee Rich Scott G. Sobel

Karen Sonnet, Staff Liaison

COMMITTEE ON RATEMAKING

The Committee on Ratemaking addresses actuarial issues of property and casualty insurance ratemaking including risk classification. The Committee's charge includes furthering the development and dissemination of ratemaking theory and principles; identifying topics for research and discussion; monitoring professional developments and regulatory activities; and sponsoring panels, seminars, and other public forums on ratemaking issues. Donald L. Closter Dennis T. McNeese

John L. Baldan Angelo E. Bastianpillai LeRoy A. Boison James M. Boland Lee M. Bowron William M. Carpenter

Karen Sonnet, Staff Liaison

Donåld L. Clošter Christopher L. Cooksey Kiera Elizabeth Doster John S. Ewert Dennis L. Lange Pierre Lepage Taylan Matkap Robert W. Matthews Dennis T. McNeese Benjamin R. Newton Joseph M. Palmer Jane C. Taylor Jonathan White Richard P. Yocius Ronald Joseph Zaleski Yi Zhang

COMMITTEE ON REINSURANCE RESEARCH

The Committee on Reinsurance Research addresses actuarial issues related to property and casualty ceded and assumed reinsurance. The Committee's charge includes furthering the development and dissemination of actuarial practice, theory, and principles of reinsurance; identifying topics for research and discussion; monitoring professional developments and regulatory activities; establishing liaisons with other organizations working in this area; and sponsoring panels, seminars, and other public forums on reinsurance issues.

Mario E. DiCaro, Chairperson

Avraham Adler Gary Blumsohn Nebojsa Bojer Michael A. Coca Kirk Allen Conrad Richard Jason Cook Thomas Marie Cordier Jeffrey L. Dollinger Robert A. Giambo Lilian Y. Giraldo Evan W. Glisson Leigh Joseph Halliwell Wei Juan Han Robert L. Harnatkiewicz James Anthony Heer Anthony D. Hill

David L. Homer Wang Yang Hu Zivi Jiao Amanda Kisala Richard Scott Krivo Alex Krutov Francois Lacroix Michael L. Laufer Charles Chaoyuen Lee Charles Letourneau Li Ling Lin Jie (Michael) Lu Marc Lawrence Nerenberg Raymond S. Nichols James L. Norris Gerard J. Palisi

Tracie L. Pencak Anthony J. Pipia Jaishan Rajendra Nanxia Rao Brett M. Shereck Yiping Shi Michael C. Tranfaglia Denny Tei Tuan Joel A. Vaag Paul A. Vendetti Ping Wang Xingzhi Wu Dominique Howard Yarnell Ka Chun Yeung Arthur J. Zaremba Kan Zhong

Cheri Widowski, Staff Liaison

RESEARCH GRANTS TASK FORCE

The Research Grants Task Force is charged with reviewing letters of intent and grant proposals submitted to the annual Individual Grants Competition to determine CAS interest in the research projects. The Task Force makes recommendations to the CAS Vice President-Research and Development as to which (if any) of the proposals the CAS may be interested in funding.

Donald L. Closter, Chairperson

Kevin M. Cleary Li Hwan Hwang Rudy A. Palenik Aleksey Popelyukhin Yao Wang

David Core, Staff Liaison

RESEARCH OVERSIGHT COMMITTEE

The Research Oversight Committee coordinates the activities of the various research committees, working parties, and task forces. This includes assisting with the prioritization of research projects, reviewing the staffing of committees, and monitoring the activities of each committee, working party, and task force. The Research Oversight Committee also develops general research policies and goals for approval by the CAS Executive Council and Board of Directors.

Alice Underwood, Chairperson

Robert A. Bear Jeremy Todd Benson Lynne M. Bloom Lee M. Bowron Donald L. Closter A. David Cummings Richard A. Derrig

David Core, *Staff Liaison* Karen Sonnet, *Staff Liaison* Cheri Widowski, *Staff Liaison* Mario E. DiCaro Stephen R. DiCenso Sholom Feldblum Christopher Gerald Gross Sam Gutterman Steven C. Herman Allan M. Kaufman Todd W. Lehmann Vijay Manghnani Rasa Varanka McKean Mark R. Shapland Steven M. Visner

COMMITTEE ON RESERVES

The Committee on Reserves addresses actuarial issues related to reserves associated with property and casualty exposures including loss and loss adjustment expense reserves, premium reserves, and other contingent reserves. The Committee's charge includes furthering the development and dissemination of reserving theory, principles, and practices; identifying reserving topics for research and discussion; and monitoring professional development and regulatory activities. The Committee strives to maintain a balanced and diverse membership in terms of geography, employment (insurer/consultant/regulator), and background (personal/commercial/reinsurance) with significant and current reserving experience being a pre-requisite for membership.

Lynne M. Bloom, Chairperson

John P. Alltop Bradley J. Andrekus Nancy L. Arico Alp Can Andrew Martin Chandler Robert F. Flannery Kofi Gyampo Dana F. Joseph Weng Kah Leong Glenn G. Meyers Jon W. Michelson Marc B. Pearl Susan R. Pino Christopher James Platania Vladimir Shander Hemanth Kumar Thota Bryan C. Ware Ernest I. Wilson Jianlu Xu

Cheri Widowski, Staff Liaison

COMMITTEE ON THEORY OF RISK

The Committee on the Theory of Risk (COTOR) is charged to propose, encourage, and monitor research and other projects concerning the actuarial and financial evaluation of risk in insurance contracts and operations in support of the CAS Centennial goals.

Richard A. Derrig, Chairperson

Edward G. Bradford, Vice Chairperson

David Appel Yanfei Atwell Todd R. Bault Anthony O'Boyle Beirne Patrick L. Brockett Alp Can Joseph F. Cofield Marc-Andre Desrosiers Robert G. Downs Sholom Feldblum James R. Garven

Karen Sonnet, Staff Liaison

Richard S. Goldfarb Guo Harrison Philip E. Heckman Daniel D. HeyerWang Yang Hu Zhigang Huang Alexander Kozmin John Lewandowski Atul Malhotra Stephen J. Mildenhall Prakash Narayan William H. Panning Edward Peck Anthony J. Pipia Gregory S. Richardson Frederick Douglas Ryan James Charles Sandor Richard H. Seward Paul Silberbush Thomas Struppeck Adam Troyer Oakley E. Van Slyke Allan S. Voltz Ruth Ward Run Yan Yingjie Zhang

COMMITTEE ON VALUATION, FINANCE, AND INVESTMENTS

The Valuation, Finance, and Investments Committee is charged with providing direction, guidance, and support to the profession, regulators, and others regarding valuation and financing of property and casualty risks and investments. The Committee is also responsible for monitoring and coordinating activities with other organizations or CAS committees working in areas related to property and casualty valuation, finance, and investments.

Rasa Varanka McKean, Chairperson

Michael J. Belfatti Edward G. Bradford Robin Davis Jonathan Palmer Evans Richard S. Goldfarb Christopher Gerald Gross Denis G. Guenthner Philip A. Kane Alexander Kozmin James M. Maher Lawrence F. Marcus Michael G. McCarter Claus S. Metzner David A. Rosenzweig David L. Ruhm Jason L. Russ Michael C. Schmitz HongTao (Heidi) Wang Yuanhe (Edward) Yao

David Core, Staff Liaison

WORKING PARTY ON BORNHUETTER-FERGUSON-INITIAL EXPECTED LOSSES

The goal of this working party is to produce a paper regarding the initial expected loss assumption in the Bornhuetter-Ferguson reserving method. The working party is not expected to engage in primary research, but instead will leverage initial expected loss approaches already in use. With many competent actuaries using the Bornhuetter-Ferguson method, there are probably many very good initial expected loss approaches already in use but not documented.

Lynne M. Bloom, Chairperson

Ethan D. Allen Nancy L. Arico Sharon C. Carroll Catherine Cresswell Michael L. DeMattei Kenneth D. Fikes Wu-Chyuan Gau Aaron M. Halpert Scott E. Henck

Karen Sonnet, *Staff Liaison* Cheri Widowski, *Staff Liaison* Aaron Nicholas Hillebrandt Bertram A. Horowitz Warren H. Johnson Dennis L. Lange Xin Li Jon W. Michelson Douglas Robert Nation Raymond S. Nichols Alejandra S. Nolibos Dale F. Ogden Anthony J. Pipia Brenda L. Reddick Jennifer Ross Joseph J. Sacala Ronald J. Schuler Paul J. Struzzieri Yuchen Su Jeffrey S. Trichon

ECONOMIC CAPITAL MODEL WORKING PARTY

The Economic Capital Model Working Party is charged with developing a stochastic, principles-based economic capital model that meets Solvency II objectives and can be used by insurers, rating agencies, and regulators for solvency monitoring. The Working Party is also preparing a white paper and presentation for insurers, rating agencies, and regulators to explain how to apply such a stochastic model. This paper will provide input to the American Academy of Actuaries, which in turn will provide input to the NAIC

Sholom Feldblum, *Co-Chairperson* Sam Gutterman, *Co-Chairperson*

Fernando Alberto Alvarado Robert P. Butsic Joseph F. Cofield Terri J. Dalenta Ian Hinder Rachel Radoff Zhongmei Su Susan E. Witcraft

Karen Sonnet, Staff Liaison

LOW INTEREST RATE ENVIRONMENT WORKING PARTY

The Low Interest Rate Environment Working Party is exploring issues related to the new environment of historically low levels of current interest rates with the purpose of uncovering and communicating potential problems before they occur. There are challenges posed to the property/casualty industry from this new environment, both with regard to income statements—reduced investment income if rates stay low, as well as with the strength of balance sheets—market value of fixed income assets will drop if rates return to more normal levels. This Working Party is addressing questions related to insurance pricing policy, investment strategy, risks to solvency, use of debt, and long-term impacts, among other issues.

Christopher Gerald Gross, Chairperson

Jonathan L. Ankney Waswate Ayana Andra Catalina Ban Etai Barach Sandra J. Callanan Kenneth J. Eiger Eric J. Gesick Denis G. Guenthner Dave Kunka Wenyi Lu James M. Maher Ankit Nanda Thien Ngo William H. Panning Leonid Rasin Lu Sun Gayna Swart Samantha M. Taylor Susan E. Witcraft Jianwei Xie

Karen Sonnet, Staff Liaison

RISK-BASED CAPITAL DEPENDENCIES AND CALIBRATION WORKING PARTY

The RBC (Risk-Based Capital) Dependencies Working Party will be researching how to handle dependencies and correlations in the NAIC P&C RBC formula, including the extent to which risk diversification should be reflected in the P&C formula.

Allan M. Kaufman, Chairperson

Karen Adams Jess B. Broussard Robert P. Butsic Joseph F. Cofield Chris Dougherty Sholom Feldblum Spencer M. Gluck Robert Haimov Shiwen Jiang James B. Kahn Alex Krutov Terry T. Kuruvilla Lily Liang Eduardo P. Marchena James P. McNichols Glenn G. Meyers Yi Pu David A. Rosenzweig David L. Ruhm Timothy Sweetser Anna Wetterhaus Jianwei Xie Ji Yao

Karen Sonnet, Staff Liaison

TAIL FACTORS WORKING PARTY

Tail factors are widely used, have a huge impact on results, and yet there is minimal literature on the subject. The product of this working party will be a paper that will survey existing literature and then identify additional methods in use. The objective is both to educate students and to help practitioners.

Steven C. Herman, *Co-Chairperson* Mark R. Shapland, *Co-Chairperson*

Mohammed Q. Ashab Joseph A. Boor Anthony R. Bustillo David Alan Clark Robert Jerome Foskey Sejal Haria Bertram A. Horowitz Gloria A. Huberman Richard Kollmar Rasa Varanka McKean David F. Mohrman Michael R. Murray Bernard A. Pelletier Anthony J. Pipia Frederick Douglas Ryan Scott G. Sobel

Karen Sonnet, Staff Liaison

UNDERWRITING RISK WORKING PARTY

The Underwriting Risk Working Party will be researching approaches for quantifying the reserve and premium risks in the P&C RBC formula.

Allan Kaufman, Chairperson

Karen Adams Emmanuel Theodore Bardis Robert P. Butsic Pablo Castets Orla Donnelly Nicole Elliott Brian A. Fannin Sholom Feldblum Kendra M. Felisky Timothy Allen Gault James C. Guszcza Jed Nathaniel Isaman Shira L. Jacobson James B. Kahn Alex Krutov Giuseppe F. LePera Zhe Robin Li Lily Liang Thomas Toong-Chiang Loy Mark McCluskey Daniel Murphy G. Chris Nyce Andrew Jon Staudt Timothy Sweetser Anna Wetterhaus Jennifer Wu Linda Zhang

Karen Sonnet, Staff Liaison

LIAISON REPRESENTATIVES

Liaison Representative to Actuarial Studies In Non-life insurance (ASTIN)

Louise Francis

Liaison Representative to the Society of Actuaries' (SOA) Committee on Knowledge Extension Research

Richard W. Gorvett

PRESIDENTS AND VICE PRESIDENTS

YEAR	PRESIDENT	VICE PRESIDE	NTS
1914—'15	*Isaac M. Rubinow	*Albert H. Mowbray	*Benedict D. Flynn
1916—'17	*James D. Craig	*Joseph H. Woodward	*Harwood E. Ryan
1918	*Joseph H. Woodward	*Benedict D. Flynn	*George D. Moore
1919	*Benedict D. Flynn	*George D. Moore	*William Leslie
1920	*Albert H. Mowbray	*William Leslie	*Leon S. Senior
1921	*Albert H. Mowbray	*Leon S. Senior	*Harwood E. Ryan
1922	*Harwood E. Ryan	*Gustav F. Michelbacher	*Edmund E. Cammack
1923	*William Leslie	*Gustav F. Michelbacher	*Edmund E. Cammack
1924-'25	*Gustav F. Michelbacher	*Sanford B. Perkins	*Ralph H. Blanchard
1926-'27	*Sanford B. Perkins	*George D. Moore	*Thomas R. Tarbell
1928-'29	*George D. Moore	*Sydney D. Pinney	*Paul Dorweiler
1930-'31	*Thomas F. Tarbell	*Roy A. Wheeler	*Winfield W. Greene
1932-'33	*Paul Dorweiler	*William F. Roeber	*Leon S. Senior
1934-'35	*Winfield W. Greene	*Ralph H. Blanchard	*Charles J. Haugh
1936-'37	*Leon S. Senior	*Sidney D. Pinney	*Francis S. Perryman
1938-'39	*Francis S. Perryman	*Harmon T. Barber	*William J. Constable
1940	*Sidney D. Pinney	*Harold J. Ginsburgh	*James M. Cahill
1941	*Ralph H. Blanchard	*Harold J. Ginsburgh	*James M. Cahill
1942	*Ralph H. Blanchard	*Albert Z. Skelding	*Charles J. Haugh
1943-'44	*Harold J. Ginsburgh	*Albert Z. Skelding	*Charles J. Haugh
1945-'46	*Charles J. Haugh	*James M. Cahill	*Harry V. Williams
1947-'48	*James M. Cahill	*Harmon T. Barber	*Russell P. Goddard
1949-'50	*Harmon T. Barber	*Thomas O. Carlson	*Norton E. Masterson
1951-'52	*Thomas O. Carlson	*Joseph Linder	*Seymour E. Smith
1953-'54	*Seymour E. Smith	*Dudley M. Pruitt	*John A. Mills
1955-'56	*Norton E. Masterson	*Clarence A. Kulp	*Arthur N. Matthews
1957-'58	*Dudley M. Pruitt	*John W. Carleton	*William Leslie Jr.
1959-'60	*William Leslie Jr.	*Ernest T. Berkeley	*L.H. Longley-Cook
1961-'62	*L.H. Longley-Cook	*Thomas E. Murrin	*Richard J. Wolfrum
1963-'64	*Thomas E. Murrin	*Harold E. Curry	*William J. Hazam
1965-'66	*Harold E. Curry	Charles C. Hewitt Jr.	*Harold W. Schloss
1967	*Harold W. Schloss	*William J. Hazam	*Daniel J. McNamara
1968	*William J. Hazam	*Richard L. Johe	*Daniel J. McNamara
1969	*Daniel J. McNamara	*Richard L. Johe	*LeRoy J. Simon
1970	*Richard L. Johe	Charles C. Hewitt Jr.	*LeRoy J. Simon
1971	*LeRoy J. Simon	Charles C. Hewitt Jr.	*Paul S. Liscord
1972	Charles C. Hewitt Jr.	*Paul S. Liscord	M. Stanley Hughey
1973	*Paul S. Liscord	M. Stanley Hughey	*Ronald L. Bornhuetter
1974	M. Stanley Hughey	*Ronald L. Bornhuetter	George D. Morison
1975	*Ronald L. Bornhuetter	George D. Morison	*P. Adger Williams
1976	George D. Morison	*P. Adger Williams	Ruth E. Salzmann
1977	*P. Adger Williams	Ruth E. Salzmann	W. James MacGinnitie
1978	Ruth E. Salzmann	W. James MacGinnitie	Jerome A. Scheibl
1979	W. James MacGinnitie	Jerome A. Scheibl	Steven H. Newman
1980	Jerome A. Scheibl	Steven H. Newman	Frederick W. Kilbourne
1981	Steven H. Newman	Frederick W. Kilbourne	Carlton W. Honebein
1982	Frederick W. Kilbourne	Carlton W. Honebein	C.K. Khury

PRESIDENTS AND PRESIDENTS-ELECT

YEAR	PRESIDENT	PRESIDENT-ELECT
1983	Carlton W. Honebein	C.K. Khury
1984	C.K. Khury	Phillip N. Ben-Zvi
1985	Phillip N. Ben-Zvi	Michael A. Walters
1986	Michael A. Walters	David G. Hartman
1987	David G. Hartman	Kevin M. Ryan

* Deceased

PRESIDENTS AND PRESIDENTS-ELECT, CONT.

YEAR	PRESIDENT	PRESIDENT-ELECT
1988	Kevin M. Ryan	Michael Fusco
1989	Michael Fusco	Charles A. Bryan
1990	Charles A. Bryan	Michael L. Toothman
1991	Michael L. Toothman	David P. Flynn
1992	David P. Flynn	Irene K. Bass
1993	Irene K Bass	Allan M. Kaufman
1994	Allan M. Kaufman	Albert J. Beer
1995	Albert J. Beer	Robert A. Anker
1996	Robert A. Anker	Mavis A. Walters
1997	Mavis A. Walters	Steven G. Lehmann
1998	Steven G. Lehmann	Alice H. Gannon
1999	Alice H. Gannon	Patrick J. Grannan
2000	Patrick J. Grannan	Robert F. Conger
2001	Robert F. Conger	Gail M. Ross
2002	Gail M. Ross	Mary Frances Miller
2003	Mary Frances Miller	Stephen P. D'Arcy
2004	Stephen P. D'Arcy	Paul Braithwaite
2005	Paul Braithwaite	Thomas G. Myers
2006	Thomas G. Myers	Christopher S. Carlson
2007	Christopher S. Carlson	John J. Kollar
2008	John J. Kollar	Roger M. Hayne
2009	Roger M. Hayne	Ralph S. Blanchard
2010	Ralph S. Blanchard	Patricia Teufel
2011	Patricia Teufel	Gary R. Josephson
		*

VICE PRESIDENTS

YEAR	VICE PRESIDENT-MEMBERSHIP	YEAR	VICE PRESIDENT-CONTINUING
1983-'85	Wayne H. Fisher		EDUCATION
1986-'88	Michael L. Toothman	1989-'91	Irene K. Bass
VEAD	VICE DECIDENTE DEVELODATION	1992-'94	David N. Hafling
YEAR	VICE PRESIDENT-DEVELOPMENT	1995-'97	Susan T. Szkoda
1983-'84	Robert A. Anker	1998-'00	Abbe S. Bensimon
1985	David G. Hartman	2001	Roger A. Schultz
1986-'88	Charles A. Bryan	VEAD	VICE DECIDENTE MADVETINIC 9
YEAR	VICE PRESIDENT-PROGRAMS	YEAR	VICE PRESIDENT-MARKETING &
1983-'84	Michael A. Walters	2002	COMMUNICATION
1985-'87	Michael Fusco	2002	Roger A. Schultz
1988	Richard I. Fein	2003-'05	Joanne S. Spalla Patricia A. Teufel
1900	Renard I. Fenn	2006-'08	
YEAR	VICE PRESIDENT-ADMINISTRATION	2009-	Nancy A. Braithwaite
1983-'84	*Herbert J. Phillips	YEAR	VICE PRESIDENT-INTERNATIONAL
1985-'87	Richard H. Snader	1999-'01	LeRoy A. Boison
1988-'90	Robert F. Conger	2002-'03	John C. Narvell
1991-'93	John M. Purple	2004-'06	Amy S. Bouska
1994-'96	Paul Braithwaite	2007-'08	Ralph S. Blanchard
1997-'99	Curtis Gary Dean	2009-	Kris D. DeFrain
2000-'02	Sheldon Rosenberg)	
2003-'05	Deborah J. Rosenberg	YEAR	VICE PRESIDENT-PROGRAMS &
2006-'08	Kenneth Quintilian		COMMUNICATION
2009-	Leslie R. Marlo	1989	Richard I. Fein
		1990-'91	Albert J. Beer
YEAR	VICE PRESIDENT-ADMISSIONS	1992-'94	Alice H. Gannon
1989	Michael L. Toothman	1995-'97	Patrick J. Grannan
1990-'92	Steven G. Lehmann	1998-'00	David R. Chernick
1993-'95	John J. Kollar	2001	Christopher S. Carlson
1996-'98	Kevin B. Thompson		
1999-'01	Mary Frances Miller		
2002-'04	Thomas G. Myers		
2005-'07	James K. Christie		
2008-'10	David L. Menning		
2011-	Virginia R. Prevosto		

VICE PRESIDENTS, CONT.

YEAR VICE PRESIDENT-PROFESSIONAL EDUCATION

2002-'03Christopher S. Carlson2004-'05Beth E. Fitzgerald2006-'08Andrew E. Kudera2009-Chester John Szczepanski

YEAR VICE PRESIDENT-RESEARCH & DEVELOPMENT

 1989
 Albert J. Beer

 1990-'92
 Allan M. Kaufman

 1993-'95
 Michael J. Miller

 1996-'98
 Robert S. Miccolis

 1999-'01
 Gary R. Josephson

 2002-'04
 Donald F. Mango

 2005-'07
 Roger M. Hayne

 2008-'10
 Louise A. Francis

 2011 Alice M. Underwood

YEAR VICE PRESIDENT-ERM 2005-'06 John J. Kollar 2007-'10 Kevin G. Dickson

2011- Barry A. Franklin

OTHER OFFICERS

YEAR	SECRETARY-TREASURER	YEAR	LIBRARIAN
1914-'17	*Claude E. Scattergood	1914	*Winfield W. Greene
1918-'52	*Richard Fondiller	1915	*Richard Fondiller
1953-'68	*Albert Z. Skelding	1916-'21	*L. I. Dublin
1969-'71	*Ronald L. Bornhuetter	1922-'24	*Edward R. Hardy
1909-71	*Robert B. Foster	1925-'36	*William Breiby
1)/4-75	ROUT D. 10301	1937-'47	*Thomas O. Carlson
YEAR	SECRETARY	1948-'50	*Samuel M. Ross
1974	*Robert B. Foster	1951-'57	*Gilbert R. Livingston
1975-'77	Darrell W. Ehlert	1958-'69	Richard Lino
1978-'80	David P. Flynn	1970	*William S. Gillam
1981-'82	Brian E. Scott	19/0	winnan 5. Ginam
		YEAR	GENERAL CHAIRMAN EXAMINATION
YEAR	TREASURER		COMMITTEE
1974-'78	Walter J. Fitzgibbon Jr.	1949-'51	*Roger A. Johnson
1979-'81	Michael A. Walters	1952-'56	John W. Wieder Jr.
1982	*Herbert J. Phillips	1957-'61	*William J. Hazam
		1962-'68	*Norman J. Bennett
YEAR	EDITOR	1969-'71	M. Stanley Hughey
1914	*Winfield W. Greene	1972-'73	George D. Morison
1915-'17	*Richard Fondiller	1974-'76	Charles F. Cook
1918	*Winfield W. Greene	1977-'79	Jeffrey T. Lange
1919-'21	*Gustav F. Michelbacher	1980-'82	Phillip N. Ben-Zvi
1922-'23	*Olive E. Outwater	1)00 01	
1924-'32	*Robert J. McManus		
1933-'43	*Clarence W. Hobbs		
1944-'54	*Emma C. Maycrink		
1955-'58	*Edward S. Allen		
1959-'60	*Russell P. Goddard		
1961-'64	*Harold W. Schloss		
1965-'69	Matthew Rodermund		
1970-'74	*Luther L. Tarbell Jr.		
1975-'78	David C. Forker		
1979-'81	C. K. Khury		

1982

*E. Frederick Fossa

MEMBE	RSHIP SI	ATISTIC	\$	
Membership, November 8, 2010	Fellows	Associates	Affiliates	Total
	3,665	1,736	26	5,417
Increased by:				

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	3,665	1,736	26	5,417
Increased by:				
Reinstatement	4	1		5
Examination	226	78		304
Affiliate Application			1	1
Mutual Recognition	4			4
Decreased by:				
Death	(10)	(6)		(16)
Withdrawal	(6)	(13)	(6)	(25)
Transfer from Associate to Fellow		(220)		(220)
Membership, November 7, 2011	3,873	1,576	21	5,470

ANALYSIS OF MEMBERSHIP BY EMPLOYMENT TYPE

	Fellows			Associates			Affiliates		
Type of Employment	Nov.	Nov.	Nov.	Nov.	Nov.	Nov.	Nov.	Nov.	
	1991	2001	2011	1991	2001	2011	2001	2011	
Insurance Company:									
Property/Liability	526	1,003	1713	400	641	653	5	4	
Life and Accident & Health	14	37	99	13	39	40		2	
Reinsurance*	83	306	435	48	150	128	5	3	
Organizations Serving Insurance Business**	40	59	182	28	47	103		3	
Consultants	247	449	643	143	219	251	8	5	
Government	18	39	56	27	39	33			
Academic	4	8	16	7	5	8			
Brokers and Agents*	13	48	79	19	44	40	1		
Other	18	99	410	29	87	220	1	3	
Retired	87	149	240	43	76	100		1	
Total	1,050	2,197	3,873	757	1,347	1,576	20	21	

* Category created in 1989

MEMBERSHIP DIRECTORY ON THE CAS WEB SITE

Ithough it is no longer printed in the newly combined *Yearbook/Proceedings*, the CAS Membership Directory is available through the "Member Services" section of the CAS Web Site. The Membership Directory database can be searched on a number of criteria, including last name, designation, year designated, title, company name, city, state, country, or employment type. The search results provide the complete membership directory information for those members matching the search criteria, including pictures of members if available.

The Web site's searchable Membership Directory is updated weekly to provide the most current listing of CAS Fellows, Associates, and Affiliates. Members can submit updates to their membership listing information by indicating changes via an online form. Access to the Membership Directory requires a user name and password. For more information, contact the Webmaster at the CAS Office by phone at (703) 276-3100, or by e-mail at webmaster@ casact.org.

DECEASED MEMBERS

The (†) denotes charter members at the date of organization—November 7, 1914. The (*) denotes date of death unknown

Member	Designation	Year	Died	Member	Designation	Year	Died
Acker, Milton	ACAS	1924	1956	Cameron, Freeland R.	FCAS	1932	1975
Ain, Samuel N.	ACAS	1939	1988	Cammack, Edmund E.	FCAS	†	1958
Ainley, John W.	FCAS	1930	1980	Carleton, John W.	FCAS	1938	1982
Allen, Austin F.	ACAS	1928	1969	Carlson, Thomas O.	FCAS	1930	1964
Allen, Edward S.	FCAS	1947	1994	Carpenter, Raymond V.	FCAS	†	1947
Alibalic, Jasmin	FCAS	2009	2011	Case, Gordon	FCAS	1915	1920
Amlie, William P.	FCAS	1972	1989	Cassity, H. Earl	ACAS	1976	1984
Andrews, Edward C.	ACAS	1955	1987	Cavanaugh, Leo D.	ACAS	1922	1965
Ankers, Robert E.	ACAS	1918	1964	Chen, Su Tu	ACAS	1927	1981
Archibald, A. Edward	ACAS	1930	1992	Cherlin, George Y.	ACAS	1961	1992
Atwood, Clarence R.	FCAS	1971	1994	Cima, Augustin V.	FCAS	1966	1971
Ault, Gilbert E.	FCAS	1931	1965	Clarke, John W.	FCAS	1949	1992
Bailey, Arthur L.	FCAS	1948	1954	Coates, Barrett N.	FCAS	1918	1976
Bailey, William B.	FCAS	1924	1952	Coates, Clarence S.	FCAS	1922	1997
Balcarek, Rafel J.	FCAS	1962	2010	Cogswell, Edmund S.	FCAS	1916	1957
Barber, Harmon T.	FCAS	1924	1983	Collins, Henry	FCAS	1915	1972
Barker, Loring Montgomery	y FCAS	1947	2009	Comstock, Walter P.	FCAS	1928	1951
Bart, Robert D.	FCAS	1942	1997	Constable, William J.	FCAS	1934	1959
Barter, John L.	FCAS	1932	1980	Conway, Charles T.	FCAS	†	1921
Bartik, Robert F.	FCAS	1972	2010	Cook, Edwin A.	FCAS	1934	1989
Batho, Bruce W.	ACAS	1940	1986	Cooper, Warren P.	ACAS	1969	2004
Batho, Elgin R.	FCAS	1931	1994	Copeland, John A.	FCAS	†	1953
Baxter, Don A.	ACAS	1915	1920	Corcoran, William M.	FCAS	1925	1977
Beckman, Woody R.	FCAS	1970	2007	Cowles, Walter G.	FCAS	†	1942
Benjamin, Roland	FCAS	†	1949	Craig, James D.	FCAS	†	1940
Bennett, Norman J.	FCAS	1956	2006	Craig, James McIntosh	FCAS	+	1922
Berkeley, Ernest T.	FCAS	1934	1969	Craig, Robert A.	FCAS	1964	1965
Bevan, John R.	FCAS	1953	1999	Crane, Howard G.	FCAS	1926	1978
Bittell, Harold W.	ACAS	1925	1993	Crawford, William H.	ACAS	1933	1979
Black, Nellas C.	ACAS	1920	1962	Critchley, Douglas	FCAS	1952	1997
Black, S. Bruce	FCAS	†	1968	Crouse, Charles W.	FCAS	1946	1981
Blackhall, John M.	ACAS	1940	1957	Crum, Frederick S.	FCAS	1916	1921
Blanchard, Ralph H.	FCAS	1917	1973	Curry, Harold E.	FCAS	1953	1997
Bomse, Edward L.	ACAS	1934	1981	Davies, E. Alfred	FCAS	1932	1967
Bond, Edward J.	FCAS	1921	1941	Davis, Malvin E.	ACAS	1925	1966
Bondy, Martin	FCAS	1956	1998	Dawson, Alfred Burnett	FCAS	†	1931
Bornhuetter, Ronald L.	FCAS	1957	2008	Dawson, Miles Menander	FCAS	†	1942
Boyajian, John H.	FCAS	1956	1999	Day, Elden W.	FCAS	1956	1969
Bradshaw, Thomas	FCAS	1915	1939	Dearth, Elmer H.	FCAS	†	1947
Brannigan, James F.	FCAS	1961	2011	DeKay, Eckford C.	FCAS	†	1951
Breiby, William	FCAS	†	1968	DeMelio, Joseph J.	FCAS	1965	2007
Brosmith,William	FCAS	1925	1937	Desjardins, Charles	ACAS	1989	1998
Brown, F. Stuart	FCAS	1927	1967	Deutschberger, Samuel	FCAS	1915	1929
Brown, Herbert D.	FCAS	1915	1958	Dickerson, O.D.	FCAS	1960	1974
Brown Jr., Nicholas M.	FCAS	1981	2008	Dorweiler, Paul	FCAS	1920	1968
Brunnquell, Helmuth G.	ACAS	1918	1958	Dowling, William F.	ACAS	1941	1968
Buck, George C., Sr.	FCAS	†	1961	Downey, Ezekiel Hinton	FCAS	†	1922
Budlong, William A.	FCAS	†	1934	Drobish, Miles R.	FCAS	1957	1991
Buffler, Louis	ACAS	1915	1963	Dunlap, Earl O.	FCAS	1915	1944
Bugbee, James M.	ACAS	1924	1981	Durkin, James H.	ACAS	1963	1982
Burhans, Charles H.	FCAS	1932	1942	DuRose Jr., Stanley C.	ACAS	1958	2010
Burhop,William H.	FCAS	1917	1963	Dye, M.L. "Butch"	FCAS	1987	2009
Burling, William H.	FCAS	1928	2001	Eaton, Karl F.	ACAS	1954	2004
Burns, F. Highlands	FCAS	1915	1935	Economidy, Harilaus E.	ACAS	1923	1948
Burt, Margaret A.	ACAS	1920	1989	Eddy, Jeanne H.	FCAS	1979	2007
Butler, Richard H.	ACAS	1959	1974	Edwards, John	FCAS	1933	1974
Cahill, James M.	FCAS	1929	1998	Eger, Frank A.	ACAS	1925	1972
Callahan, James J.	ACAS	1986	2001	Eide, Knut Arne	FCAS	1959	1997

Member	Designation	Year	Died	Member	Designation	Year	Died
Elliott, George B.	FCAS	1940	1990	Grossman, Eli A.	ACAS	1940	2009
Elston, James S.	FCAS	1922	1980	Guertin, Alfred N.	ACAS	1935	1981
Eppink, Walter T.	FCAS	1935	1984	Hachemeister, Charles A.	FCAS	1968	1993
Epstein, Michael B.	ACAS	1983	2011	Hagen, Olaf E.	ACAS	1939	2000
Ernst, Richard C.	FCAS	1978	1997	Haggard, Robert E.	ACAS	1921	1958
Espie, Robert G.	FCAS	1958	2005	Haley, James B.	FCAS	1953	1986
Fackler, David Parks	FCAS	†	1924	Hall, Hartwell L.	ACAS	1922	1971
Fackler, Edward B.	FCAS	+	1952	Hall, James A. "Jim", III	FCAS	1973	2011
Fairbanks, Alfred V.	FCAS	1955	1997	Hall, Leslie LeVant	ACAS	1924	1931
Fallow, Everett S.	FCAS	+	1976	Ham, Hugh P.	ACAS	1936	1984
Farley, Jarvis	FCAS	1940	1991	Hamilton, Robert Cowen Le	ees FCAS	†	1941
Farrer, Henry	FCAS	+	1972	Hammer, Sidney M.	ACAS	1963	2005
Faust, J. Edward	FCAS	1960	1996	Hammond, H. Pierson	FCAS	†	1963
Fellows, Claude W.	FCAS	1915	1938	Hardy, Edward R.	FCAS	1916	1951
Finkel, Daniel	ACAS	1962	1987	Harris, Scott	ACAS	1932	1975
Finnegan, Joseph H.	FCAS	1956	1976	Hart, Ward Van B.	ACAS	1924	1973
Fitzhugh, Gilbert W.	FCAS	1935	1998	Hart, Ward Van Buren, Jr.	FCAS	1956	2003
Fleming, Frank A.	ACAS	1923	1971	Hatch, Leonard W.	FCAS	1915	1958
Flynn, Benedict D.	FCAS	†	1944	Haugh, Charles J.	FCAS	1926	1988
Fondiller, Richard	FCAS	1915	1962	Haydon, George F.	ACAS	1919	1970
Forbes, Charles S.	FCAS	†	1943	Hazam,William J.	FCAS	1950	1995
Fossa, E. Frederick	FCAS	1973	1996	Hebert, Joseph	FCAS	2006	2010
Foster, Robert B.	FCAS	1955	2004	Heer, LeRoy E.	FCAS	1969	2001
Frankel, Lee K.	FCAS	1916	1931	Henderson, Robert	FCAS	1919	1942
Franklin, Charles H.	FCAS	†	1951	Hickman, James C.	ACAS	1959	2006
Franklin, N. Matthew	ACAS	1952	1979	Hillas, Robert J.	FCAS	†	1940
Fredrickson, C.H.	FCAS	1927	1969	Hinsdale, Frank Webster	FCAS	1918	1932
Froberg, John	ACAS	1924	1949	Hipp, Grady Hayne	ACAS	1927	1965
Froggatt, Joseph	FCAS	1916	1940	Hobart, Gary P.	ACAS	1976	2002
Fuller, Gardner V.	FCAS	1934	1982	Hobbs, Clarence W.	FCAS	1924	1944
Fulton, Clyde B.	ACAS	1966	2003	Hodges, Charles E.	FCAS	1926	1937
Fung, Charles C.	ACAS	1992	1993	Hodgkins, Lemuel G.	FCAS	1915	1951
Furnivall, Maurice L.	ACAS	1929	1962	Hoffman, Frederick L.	FCAS	†	1946
Furze, Harry	FCAS	†	1945	Holland, Charles H.	FCAS	1915	1951
Gaines, Nathaniel	ACAS	1954	2000	Holmes, Dave R.	ACAS	1997	1997
Gardiner, James B.	FCAS	1948	2003	Holzinger, Ernest	ACAS	1945	1956
Garrison, Fred S.	FCAS	1915	1949	Hooker, Russell O.	FCAS	1924	1987
Gately, John J.	ACAS	1934	1943	Hookstadt, Carl	FCAS	1919	1924
Gaty, Theodore E.	FCAS	†	1925	Hope, Francis J. "Frank"	FCAS	1950	2010
George, Harold J.	ACAS	1947	1952	Horowitz, Milton	ACAS	1961	1984
Gildea, James F.	ACAS	1923	1975	Huebner, Solomon S.	FCAS	1932	1964
Gill, James F.	ACAS	1963	1992	Hughes, Charles	FCAS	† 1020	1948
Gillam, William S.	FCAS	1957 1024	2004	Hull, Robert S.	FCAS	1929	1947
Ginsburgh, Harold J.	FCAS	1924	1994	Hunt, Burritt A.	FCAS	† +	1943
Glenn, Joseph Bryan	FCAS	1930	1988	Hunter, Arthur	FCAS	† 1055	1964
Glover, James W.	FCAS FCAS	1915	1941	Hurley, Robert L. Hutcheson, William Anderso	FCAS	1955	1998 1072
Goddard, Russell P.		1931	1987 1966	Jackson, Charles William	FCAS	1921 1916	1942 1950
Goodwin, Edward S.	FCAS	† 1020	1966	Jackson, Edward T.			1959
Gordon, Harold R. Gossrow, Robert W.	ACAS	1929	1948 2009	Jackson, Henry Hollister	ACAS	1917 1929	1939 1955
	ACAS	1967 †			FCAS		1955 1980
Gould, William H.	FCAS		1936	Jacobs, Carl N.	ACAS	1929	
Graham, Charles M.	FCAS FCAS	1926 1915	1981 1937	Jensen, Edward S. Jensen, James P	ACAS ACAS	1921 1996	1966 2001
Graham, George Graham Thompson B	FCAS FCAS		1937 1946	Jensen, James P. Jerabek Gerald J			
Graham, Thompson B.	FCAS	1915	1946 1063	Jerabek, Gerald J. Johe Richard J	FCAS FCAS	1979 1954	1990 2005
Graham, William J.	FCAS	† 1023	1963	Johe, Richard L.	FCAS	1954 1941	2005
Granville, William A. Graves, Clyde H	FCAS FCAS	1923 1953	1943 2005	Johnson, Roger A.	FCAS FCAS	1941 1915	1972 1943
Graves, Clyde H.	FCAS	1953	2005	Johnson, William C.	FCAS FCAS	1915 1928	
Green, John E. Green Walter C	FCAS	1998 1927	2007 1978	Jones, F. Robertson	FCAS	1928 1939	1941 2005
Green, Walter C. Greene, Winfield W.	ACAS FCAS	1927	1978 1965	Jones, Harold M. Jones, Nathan F.	FCAS ACAS	1939 1952	2005
orcene, winnerd w.	I CAS	†	1905	Jones, Nathall E	лсло	1994	2000
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Member	Designation	Year	Died	Member	Designation	Year	Died
Kates, Phillip B.	FCAS	1957	2000	McGuinness, John S.	FCAS	1960	1997
Kayton, Howard H.	FCAS	1976	2011	McIntosh, Kenneth L.	ACAS	1961	1995
Kearney, Thomas P.	FCAS	1921	1928	McIver, Rosswel A.	ACAS	1922	1959
Kelly, Gregory Cook	FCAS	1926	1948	McLean, George E.	FCAS	1964	2011
Kelton, William H.	FCAS	1926	1972	McManus, Robert J.	FCAS	1917	1960
Kime, Virgil Morrison	FCAS	1915	1918	McNamara, Daniel	FCAS	1962	2010
Kitzrow, Erwin W.	ACAS	1935	1983	Mean, Franklin B.	FCAS	1915	1933
Kline, Charles D.	FCAS	1990	2006	Meltzer, Marcus	FCAS	1917	1931
Kole, Morris B.	FCAS	1941	2011	Menzel, Henry W.	FCAS	1955	1984
Konopa, Milan E.	ACAS	1975	2009	Michelbacher, Gustav F.	FCAS	†	1974
Kopf, Edwin W.	FCAS	†	1933	Miller, David W.	FCAS	†	1936
Kormes, Mark	FCAS	1933	1985	Miller, John H.	FCAS	1938	1988
Kozik,Thomas J.	FCAS	1984	2009	Miller, Philip D.	FCAS	1975	2001
Kretsch, David J.	FCAS	1992	2003	Miller, Robert Anderson, III		1986	2004
Kuenkler, Arthur S.	FCAS	1953	1975	Miller, Robert L.	FCAS	1994	2008
Kulp, Clarence Arthur	FCAS	1928	1957	Milligan, Samuel	FCAS	+	1965
LaCroix, Harold F.	FCAS	1949	1976	Mills, John A.	FCAS	1937	1982
Laird, John M.	FCAS	1915	1942	Mills, Richard J.	FCAS	1957	2011
LaMont, Stewart M.	FCAS	1931	1960	Mitchell, James F.	FCAS	†	1941
Landis, Abb	FCAS	1915	1927	Moir, Henry	FCAS	†	1937
Lange, John Robert	FCAS	1933	1957	Montgomery, Victor	FCAS	1921	1960
LaRose, J. Gary	FCAS	1981	2005	Montgomery, William J.	FCAS	1915	1915
Latimer, Murray W.	FCAS	1961	1985	Mooney, William L.	FCAS	1926	1948
Lawrence, Arnette Roy	FCAS	1922	1942	Moore, George D.	FCAS	†	1959
Leal, James R., Sr.	FCAS	†	1957	Moore, Joseph P.	ACAS	1923	1981
Leight, Arthur S.	FCAS	1959	2001	Morris, Edward Bontecou	FCAS	1915	1929
Leslie, William	FCAS	†	1962	Moseley, Jack	FCAS	1961	2003
Leslie, William, Jr.	FCAS	1950	1990	Mothersill, Rolland V.	ACAS	1919	1949
Linden, John R.	FCAS	1961	2011	Mowbray, Albert H.	FCAS	†	1949
Linder, Joseph	FCAS	1924	1978	Mueller, Louis H.	FCAS	1920	1975
Linquanti, August J.	ACAS	1968	2009	Muir, Joseph M.	ACAS	1957	1989
Lis, Raymond S., Jr.	ACAS	1973	1994	Mullaney, Frank	FCAS	† 1020	1953
Liscord, Paul S., Jr.	FCAS	1955	2000	Muller, Fritz	ACAS	1929	1945
Little, James Fulton	FCAS	1921	1938	Munterich, George C.	FCAS FCAS	1950 1920	1997 1964
Livingston, Gilbert R.	FCAS . FCAS	1950 1951	1976 1989	Murphy, Ray D. Murray, Edward R.	FCAS	1920 1972	1904 1984
Longley Cook, Laurence H	FCAS	1931 1984	2010	Murrin, Thomas E.	FCAS	1972 1954	2000
Loper, Dennis J.	FCAS	1984	1920	Musante, Donald R.	ACAS	1934	2000
Lubin, Harry Lunt, Edward C.	FCAS	1913	1920 1941	Myers, Robert J.	FCAS	1980	2008
Lyons, Daniel J.	FCAS	1928	1941	Naffziger, Joseph V.	FCAS	1959	2010
MacKeen, Harold E.	FCAS	1930 1954	1997	Nelson, John K.	ACAS	1968	2009
Magoun, William N.	FCAS	1994	1970	Nelson, S.Tyler	FCAS	1963	1969
Magrath, Joseph J.	FCAS	1958	1994	Neuhauser, Frank, Jr.	ACAS	1905	2006
Malmuth, Jacob	ACAS	1938	1983	Newell, William	ACAS	1976	*
Manley, Laura J.	ACAS	1925	1995	Newhall, Karl	ACAS	1928	1944
Marsh, Charles V. R.	ACAS	1927	1967	Nicholas, Lewis A.	FCAS	†	1940
Marshall, Ralph M.	FCAS	1928	1987	Nichols, Richard W.	FCAS	1984	2008
Masterson, Norton E.	FCAS	1928	2000	Nicholson, Earl H.	ACAS	1925	1997
Matthew, Tracey Lynn	ACAS	1995	2000	Niles, Charles Lannon, Jr.	FCAS	1958	2006
Matthews, Arthur N.	FCAS	1926	1983	Oien, Robert G. "Gus"	FCAS	1965	2010
Mauro, Elizabeth M.	FCAS	2011	2011	Olifiers, Edward	FCAS	†	1962
Maycrink, Emma C.	FCAS	1915	1972	Ori, Kenneth R.	ACAS	1971	1977
Mayer,William H.	ACAS	1936	1990	Orr, Robert K.	FCAS	†	1967
Mayerson, Allen L.	FCAS	1958	1971	Otis, Stanley L.	FCAS	+	1937
McCarter, Michael G.	FCAS	1980	2011	Otteson, Paul M.	FCAS	1957	2007
McClure, Richard D.	FCAS	1963	1988	Otto, Walter E.	ACAS	1919	1976
McClurg, D. Ralph	FCAS	1923	1947	Outwater, Olive E.	FCAS	1919	1972
McConnell, Matthew H.	FCAS	1935	2003	Overholser, Donald M.	ACAS	1926	1972
McDonald, Milton G.	ACAS	1955	1981	Page, Bertrand A.	FCAS	1926	1941
McDougald, Alfred	FCAS	1919	1944	Panther, Philip J.	ACAS	2007	2010
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Member	Designation	Year	Died	Member	Designation	Year	Died
Parlin, Robert W.	FCAS	1962	1995	Sevilla, Exequiel S.	ACAS	1930	1985
Penniman, Kent T.	ACAS	1972	1988	Shapiro, George I.	FCAS	1937	1974
Pennock, Richard M.	ACAS	1924	1976	Shaver, C. Otis	ACAS	1957	1966
Perkins, Sanford B.	FCAS	1921	1945	Sheppard, Norris E.	ACAS	1924	1980
Perkins, William J.	FCAS	1957	2007	Sibley, John L.	ACAS	1918	1957
Perry, Robert C.	ACAS	1947	1998	Silverman, David	FCAS	1931	1980
Perry, William Thomas	FCAS	1918	1940	Simon, LeRoy J.	FCAS	1954	2010
Perryman, Francis S.	FCAS	1930	1959	Singer, Paul E.	ACAS	1963	1998
Peters, Stefan	FCAS	1941	1990	Sinnott, Robert V.	FCAS	1933	1952
Petersen, Loren V.	FCAS	1991	2002	Skelding,Albert Z.	FCAS	1929	1992
Phelps, Edward B.	FCAS	+	1915	Smick, Jack J.	FCAS	1932	1979
Phillips, Herbert J.	FCAS	1959	2005	Smith,Arthur G.	ACAS	1921	1956
Phillips, Jesse S.	FCAS	1926	1954	Smith, Charles Gordon	FCAS	1917	1938
Phillips, John H.	ACAS	1929	1989	Smith, Edward Merrill	FCAS	1958	2005
Pickett, Samuel C.	FCAS	1933	1970	Smith, Seymour E.	FCAS	1940	1980
Pike, Morris	ACAS	1920	1989	Sobel, Mark J.	FCAS	1979	2008
Pinney, Sydney D.	FCAS	1922	1973	Somerville, William F.	ACAS	1926	1965
Plunkett, Joseph A.	ACAS	1967	1978	Sommer, Armand	ACAS	1925	1976
Poorman, William F.	ACAS	1922	1984	Speers, Alexander A.	ACAS	1927	1941
Potter, John A.	ACAS	1976	2010	Spencer, Harold S.	ACAS	1918	1968
Provencher, Yves	ACAS	1993	2011	St. John, John B.	FCAS	1933	1970
Pruitt, Dudley M.	FCAS	1931	1967	Stankus, Leo M.	FCAS	1962	2004
Ratnaswamy, Rajaratnam	ACAS	1965	1986	Steinhaus, Henry W.	ACAS	1959	1966
Raywid, Joseph	ACAS	1918	1981	Stellwagen, Herbert P.	ACAS	1924	1981
Reiter, Charles Grant	FCAS	†	1921	Stern, Philipp K.	ACAS	1956	1999
Remington, Charles	FCAS	† 1055	1938	Stone, Edward C.	FCAS	1927	1964 1920
Resony, Allie V.	FCAS	1955	2006	Stone, John T.	FCAS	1915	1920 1942
Resony, John A.	FCAS	1949	2007	Strong, Wendell Melville	FCAS FCAS	1916 1915	1942 1946
Rice, Homer D.	FCAS FCAS	1951 1963	1967 2001	Strong, William R.	FCAS	1913	1940 1998
Richards, Harry R. Richardson, Frederick	FCAS	1905	1955	Strug, Emil J. Styczynski, Mary Jane	ACAS	1970 1987	1998 1988
Richardson, Harry F.	ACAS	1919	1933	Suchoff, Stuart	FCAS	1987 1984	2004
Richmond, Owen D.	ACAS	1952	2004	Sullivan, Robert J.	FCAS	1904	1934
Richter, Otto C.	FCAS	1995	1962	Sullivan, Walter F.	ACAS	1930	1934
Riegel, Robert	FCAS	1920	1970	Surrago, James	FCAS	1985	2003
Roach, Robert F.	ACAS	1975	2003	Tapley, David A.	FCAS	1956	1981
Roberts, James A.	ACAS	1932	1973	Tarbell, Luther L.	FCAS	1958	2006
Roberts, Lewis H.	FCAS	1958	2001	Tarbell, Thomas F.	FCAS	1920	1958
Rodermund, Matthew	FCAS	1947	2011	Taylor, Frank C.	FCAS	1979	2009
Roeber, William F.	FCAS	1923	1960	Thomas, James W.	FCAS	1956	1995
Rood, Henry F.	ACAS	1962	1994	Thompson, Arthur E.	ACAS	1921	1944
Ross, Samuel M.	FCAS	1943	1951	Thompson, John S.	FCAS	+	1979
Rosser, Harwood	ACAS	1971	1986	Thompson, Philip R.	ACAS	1963	2011
Roth, Richard J., Sr.	FCAS	1966	2010	Thompson, Walter H.	FCAS	1934	1935
Rowell, John H.	FCAS	1947	2000	Toja, Guido	FCAS	1921	1933
Rowland, William J.	FCAS	1980	2003	Train, John L.	FCAS	†	1958
Rubinow, Isaac M.	FCAS	†	1936	Traversi, Antonio Thomas	FCAS	1922	1961
Ryan, Harwood Eldridge	FCAS	†	1930	Trench, Frederick H.	ACAS	1919	1972
Sawyer, Arthur	ACAS	1923	1980	Trist, John A.W.	FCAS	1953	2005
Saxton, Arthur F.	FCAS	†	1921	Trudeau, Donald E.	FCAS	1962	1982
Scammon, Lawrence W.	ACAS	1947	1993	Turner, Paul A.	FCAS	1948	1961
Schauer, Cindy R.	ACAS	1996	2003	Uhl, M. Elizabeth	ACAS	1924	1976
Scheel, Paul J., Sr.	FCAS	1970	2005	Uhthoff, Dunbar R.	FCAS	1947	2002
Scheitlin, Emil	FCAS	†	1946	Valerius, Nels M.	FCAS	1928	1987
Schloss, Harold W.	FCAS	1948	1979	Vanderhoof, Irwin T.	ACAS	1964	2000
Schneiker, Henry C.	ACAS	1957	2000	Vantuyl, Hiram O.	FCAS	1919	1979
Schwartz, Max J.	ACAS	1947	1997	Verhage, Paul A.	FCAS	1965	1998
Scott, Gordon L.	FCAS	1993	2010	Vincent, Lewis A.	FCAS	1951	1990
Seiffertt, Barbara Ann	ACAS	1976	2006	Voogt, Walter G.	ACAS	1919	1937
Senior, Leon S.	FCAS	†	1940	Waite, Alan W.	FCAS	1920	1969
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	Designation	Year	Died	Member	Designation	Year	
Member					2.003.0000		
Waite, Harry V.	FCAS	1935	1951				
Walker, David	ACAS	1986	2010				
Walsh, Albert J.	FCAS	1962	1996				
Warren, Charles S.	ACAS	1919	1952				
Warren, Lloyd A. H.	FCAS	1925	1949				
Washburn, James H.	ACAS	1925	1946				
Watson, James J.	ACAS	1920	1937				
Weinstein, Max S.	ACAS	1932	1988				
Welch, Archibald A.	FCAS	1919	1935				
Welch, Eugene R.	ACAS	1921	1945				
Wellman, Alex C.	ACAS	1925	1981				
Wells, Walter I.	ACAS	1930	1986				
Wenitsky, Russell B.	ACAS	1989	2008				
Wermel, Michael T.	ACAS	1951	1962				
Wheeler, Charles A.	ACAS	1929	1956				
Wheeler, Roy A.	FCAS	1926	1932				
Whitbread, Frank G.	ACAS	1927	1979				
White, Frank T.	ACAS	1978	2011				
White, Hugh G.	FCAS	1970	2010				
Whitney, Albert W.	FCAS	+	1943				
Wilbert, Paul David	ACAS	2003	2006				
Wilcken, Carl L.	FCAS	1960	2008				
Wilkinson, Albert Edward	ACAS	1918	1930				
Williams, Dewey G.	FCAS	1963	1996				
Williams, Harry V.	FCAS	1935	1991				
Williams, P.Adger	FCAS	1957	2010				
Williamson, W. Rulon	FCAS	1941	1980				
Wittick, Herbert E.	FCAS	1931	1998				
Wittlake, J. Clarke	ACAS	1939	1980				
Wolfe, Lee J.	FCAS	†	1949				
Wolfe, S. Herbert	FCAS	† 10.(0	1927				
Wolfrum, Richard J.	FCAS	1949	1967				
Wood, Arthur B.	FCAS	1921	1952				
Wood, Donald M.	ACAS	1915	1971				
Wood, Donald M.	ACAS	1937	2000				
Wooddy, John C.	ACAS	1950	1987				
Woodman, Charles E.	ACAS	1915	1955				
Woodward, Barbara H.	ACAS	1934	1975				
Woodward, Joseph H.	FCAS	† 1025	1928				
Woolery, James M.	ACAS	1925	1999				
Wright, Byron	FCAS	1958	1997				
Young, William	FCAS	† 1052	1927				
Yount, Hubert W.	FCAS	1953	1997				

CASUALTY ACTUARIAL SOCIETY MISSION STATEMENT

(AS ADOPTED BY THE CAS BOARD OF DIRECTORS, NOVEMBER 7, 2010)

The purposes of the Casualty Actuarial Society are:

- to advance the body of knowledge of actuarial science applied to general insurance, including property, casualty, and similar risk exposures;
- to expand the application of actuarial science to enterprise risks and systemic risks;
- to establish and maintain standards of qualification for membership;
- to promote and maintain high standards of conduct and competence;
- to increase the awareness of actuarial science; and
- to contribute to the well being of society as a whole.

CASUALTY ACTUARIAL SOCIETY VISION STATEMENT

(AS ADOPTED BY THE CAS BOARD OF DIRECTORS, NOVEMBER 7, 2010)

Actuaries are recognized for their authoritative advice and valued comment wherever there is financial risk and uncertainty.

CASUALTY ACTUARIAL SOCIETY DEFINITION OF A CASUALTY ACTUARY

(AS ADOPTED BY THE CAS BOARD OF DIRECTORS, NOVEMBER 7, 2010)

A casualty actuary is a professional skilled in the analysis, evaluation, and management of the financial implications of future contingent events primarily with respect to general insurance, including property, casualty, and similar risk exposures. A casualty actuary has practical knowledge of how these various risks interact with each other and the environment in which these risks occur.

CAS CONSTITUTION

(As Amended September 2, 2011)

ARTICLE I.—Name

This organization shall be called the "Casualty Actuarial Society." (CAS)

ARTICLE II.—Statement of Purpose

The purposes of the Casualty Actuarial Society are to advance the body of knowledge of actuarial science applied to property, casualty, and similar risk exposures, to establish and maintain standards of qualification for membership, to promote and maintain high standards of conduct and competence for the members, and to increase the awareness of actuarial science.

ARTICLE III.—Membership

SECTION 1.—CLASSES OF MEMBERS

The membership of the Casualty Actuarial Society shall be composed of three classes:

a) Fellows

The Fellows of the Society shall be the present Fellows and those who may be duly admitted to Fellowship as hereinafter provided. Fellows shall be eligible to vote, hold office, make nominations, and generally exercise the rights of full membership. Fellows are authorized to append to their names the initials F.C.A.S.

b) Associates

The Associates shall be the present Associates and those who may be duly admitted to Associateship as hereinafter provided. Associates shall be entitled to attend meetings of the Casualty Actuarial Society and to participate at Society functions. Associates are authorized to append to their names the initials A.C.A.S.

c) Affiliates

The Affiliates shall be the present Affiliates and those who may be duly admitted as Affiliates. Affiliates are encouraged to refer to themselves as such, but are not authorized to append CAS initials to their name. In referring to themselves Affiliates may refer to themselves as "Affiliate of the Casualty Actuarial Society." They may not refer to themselves as "Member of the Casualty Actuarial Society."

SECTION 2.—REQUIREMENTS FOR ADMISSION TO MEMBERSHIP

a) Associateship

Any applicant shall be enrolled as an Associate upon notification by the Casualty Actuarial Society provided that:

- (i) the applicant successfully completes the examinations prescribed by the Board of Directors for Associateship and complies with any further requirements the Board may prescribe; and
- (ii) the applicant is approved by a majority vote of the Board of Directors.

b) Fellowship

An Associate shall be enrolled as a Fellow of the Society following notification of successful completion of the examinations prescribed by the Board of Directors for Fellowship, subject to any further requirements the Board may prescribe.

c) Affiliates

An actuary who is not otherwise a member shall be enrolled as an Affiliate upon action of the Board of Directors, subject to such requirements as the Board may prescribe.

d) Waiver of Examinations

The Board of Directors may waive, subject to such other requirements as it may prescribe, any examination of the Casualty Actuarial Society if the applicant has passed an examination required by another recognized actuarial organization that the Board of Directors deems equivalent to such examination of the Casualty Actuarial Society.

e) Mutual Recognition

The Board of Directors may negotiate and implement Mutual Recognition Agreements with other actuarial organizations that qualify actuaries through a process that includes rigorous testing of a comprehensive property and casualty specialization. Such Mutual Recognition Agreements will include requirements that applicants:

- (i) complete the property and casualty specialization requirements and all other requirements for full membership in their home organization,
- (ii) complete the CAS professionalism education requirements, and
- (iii) complete property and casualty experience requirements to be specified by the Board.

The Board may include additional requirements in the Mutual Recognition Agreements.

Any applicant who meets the Mutual Recognition requirements so agreed, and any other requirements prescribed by the Board, and who is approved by a majority vote of the Board of Directors shall be enrolled as a Fellow.

ARTICLE IV.—Officers

SECTION 1.—OFFICERS

The President, President-Elect, and the Vice Presidents, all of whom shall be Fellows, shall be Officers of the Society. The Chief Staff Executive is also an Officer. An Officer shall be designated by the Board as Secretary/Treasurer of the Society.

SECTION 2.—ELECTION AND TERM OF OFFICE

At the close of the annual meeting, the President-Elect shall assume the office of President for a term of one year. Annually, a new President-Elect shall be elected by the Fellows in a secret ballot for a term of one year. Before the close of the annual meeting, the Board of Directors shall, by majority vote of the Directors present and voting, elect the Vice Presidents for a term of one year.

The term of all Officers shall begin at the close of the annual meeting in the calendar year of their election and continue until their successors take office.

SECTION 3.—DUTIES

The duties of the Officers shall be such as are customarily incident to their respective offices and such other duties as specified in the Bylaws.

SECTION 4. REMOVAL FROM OFFICE

The process for the removal from office of the President-Elect or President can be initiated by either a petition of 5% of the Fellows, a two-thirds majority vote of the Officers of the CAS (with the person proposed to be removed not voting), or a majority vote of the Board of Directors (with the person proposed to be removed not voting). Reasons for the removal include: violation of the code of conduct; abuse of power; behavior materially incompatible with the proper function and purpose of the office.

Procedures relating to the removal process shall be adopted by the Board. Once the removal process has been initiated, a hearing and vote of the Board will be held within 45 days. A vote to recommend removal requires a two-thirds majority of the Board members voting (with the person proposed to be removed not voting). A Board recommendation for removal shall be subject to approval by a vote of the Fellows, to be held within 45 days of the Board vote. A two-thirds majority of the Fellows voting is required for removal.

ARTICLE V.—Board of Directors

SECTION 1.—COMPOSITION

The Board of Directors shall consist of the President, the President-Elect, the immediate past President, 12 other elected Fellows, and up to three additional appointed members.

SECTION 2.—ELECTION AND TERM OF OFFICE

Annually, in a secret ballot of the Fellows, four Fellows shall be elected to the Board of Directors for a term of three years. A retiring elected Director shall not be eligible for reelection for at least one year after the expiration of the term for which the Director was elected. Appointed Directors will be elected by the Board of Directors and will serve a term of one year, renewable for up to three years.

SECTION 3.—DUTIES

The duties of the Board of Directors shall be to pass upon candidates for membership, to supervise the publication of papers presented at meetings of the Society, to supervise the examination of candidates and prescribe fees for such examinations, to call meetings, to ratify such committee and other special appointments as may be made by the President, to authorize promulgation of statements of principles, and, in general, to manage the affairs of the Society, and, for the latter purpose, shall determine all questions arising with respect to the interpretation or administration of this Constitution and the Society's Bylaws not inconsistent therewith.

The Board of Directors may, at its discretion, delegate authority to fulfill specific duties to the Executive Council, subject to policies adopted by the Board of Directors and ongoing monitoring and oversight by the Board.

SECTION 4. REMOVAL FROM OFFICE

The process for the removal from the Board of the immediate past President or any elected Director can be initiated by either a petition of 5% of the Fellows, a two-thirds majority vote of the Officers of the CAS (with the person proposed to be removed not voting), or a majority vote of the Board of Directors (with the person proposed to be removed not voting). Reasons for the removal include: violation of the code of conduct; abuse of power; behavior materially incompatible with the proper function and purpose of the office.

Procedures relating to the removal process shall be adopted by the Board. Once the removal process has been initiated, a hearing and vote of the Board will be held within 45 days. A vote to recommend removal requires a two-thirds majority of the Board members voting (with the person proposed to be removed not voting). A Board recommendation for removal shall be subject to approval by a vote of the Fellows, to be held within 45 days of the Board vote. A two-thirds majority of the Fellows voting is required for removal.

ARTICLE VI.—Executive Council

SECTION 1.—COMPOSITION

The Executive Council shall consist of the President, the President-Elect, the Vice Presidents, and the Chief Staff Executive. The number and duties of Vice Presidents shall be determined by the Board of Directors.

SECTION 2.—DUTIES

The Executive Council shall act on matters specifically delegated to it by the Board of Directors. It shall act as the principal forum in which the operational activities of the Society are coordinated and monitored, subject to policies adopted by the Board of Directors and monitoring and oversight by the Board of Directors.

ARTICLE VII.—Meetings

There shall be an annual meeting of the Society on such date in the last quarter of each calendar year as may be fixed by the Board of Directors, but other Society meetings may be called by the Board from time to time and shall be called by the President at any time upon the written request of 5% of the Fellows. At least two weeks notice of all Society meetings shall be given to the members. At Society meetings, the presiding officer shall vote only in case of a tie.

ARTICLE VIII.—Quorum

A majority of the members of the Board of Directors shall constitute a quorum. Five percent of the Fellows of the Society shall constitute a quorum at every meeting of the Society.

ARTICLE IX.-Public Expression of Professional Opinion

No opinion with respect to questions of public interest shall be publicly expressed by, or on behalf of, the Casualty Actuarial Society, the Board of Directors, or any committee except on matters within the special professional competence of actuaries and then only in accordance with authority given and procedures determined in each instance by the Board and in accordance with the following conditions:

- (i) An opinion of the Casualty Actuarial Society (CAS) shall require advance approval by an affirmative vote of at least ninety percent of the Fellows who vote in a mail ballot. However, the Board of Directors of the CAS may, by a two-thirds vote of all members of the Board, direct the CAS's delegate to the International Actuarial Association (IAA) to vote on behalf of the CAS on a proposed public expression of professional opinion to be issued by the IAA and allow the IAA to list the CAS as a supporting organization of that public expression of professional opinion when the vote is positive.
- (ii) An opinion of the Board of Directors or a committee authorized by the Board to express an opinion shall indicate that it does not purport to represent the views of the Casualty Actuarial Society, but only of the Board of Directors or the committee, as the case may be.

ARTICLE X.—Resignation and Discipline of Members

Any member who is not in default in payment of dues, and against whom no complaints are pending, may resign at any time by filing a resignation request in writing with the Casualty Actuarial Society Office. Notwithstanding the foregoing, the Board of Directors may, in its discretion, approve the resignation of a member in default of payment of dues or against whom a complaint or charge is pending before the Actuarial Board for Counseling and Discipline, the Canadian Institute of Actuarias, or other appropriate investigatory body, or against whom a recommendation for public disciplinary action has been made to the Society by the Actuarial Board for Counseling and Discipline, the Canadian Institute of Actuaries, or other appropriate investigatory body. The Board, on written application of any member who has resigned, may reinstate such member subject to such conditions as it may prescribe.

No member of the Society shall be subject to public disciplinary action except upon action of the appropriate disciplinary body in accordance with the Bylaws of the Society.

ARTICLE XI.—Use of Financial Resources: Dissolution

The funds of the Casualty Actuarial Society shall be devoted exclusively to the purposes stated in Article II hereof. No part of the net earnings of the Society shall inure to the benefit of, or be distributable to, its members, Directors, Officers, or other private persons, except that the Society shall be authorized and empowered to pay reasonable compensation for services rendered and to make payments and distributions in furtherance of the purposes set forth in Article II hereof. If the Casualty Actuarial Society is dissolved, all of its remaining assets shall be transferred to one or more organizations organized and operating exclusively for purposes similar to those of the Casualty Actuarial Society and which qualifies as an exempt organization under section 501(c)(3) of the Internal Revenue Code of 1954 (or the corresponding provision of any future Internal Revenue Law).

ARTICLE XII.—Amendments

This Constitution may be amended by an affirmative vote of 10% of the Fellows or two-thirds of the Fellows voting, whichever is greater. Notice of such proposed amendment shall be sent to each Fellow by the Casualty Actuarial Society Office at least one month before the vote is taken.

An amendment to the Constitution can be proposed by a two-thirds majority vote of the Board members voting. Alternatively, an amendment can be proposed by a petition of 5% of the Fellows, unless such petition is vetoed by a two-thirds majority vote of the Board members voting.

BYLAWS

(As Amended September 2, 2011)

ARTICLE I.—Order of Business

The Board of Directors shall authorize the procedure for determining the agenda and order of business at all meetings.

ARTICLE II.—Meetings of the Board of Directors

Meetings of the Board of Directors shall be chaired by the immediate past President and shall be called whenever the immediate past President or three members of the Board so request. Notice shall be sent to each member of the Board seven or more days before the time appointed. Such notice shall state the objects intended to be brought before the meeting, and, should any other matter be passed upon, any member of the Board shall have the right to reopen the question at the next meeting. At Board meetings, the presiding officer may vote in all cases.

A two-thirds vote of the Board members voting is required for approval or promulgation of statements of principles.

ARTICLE III.—Duties of Officers

SECTION 1.—President

The President shall preside at meetings of the Society and at meetings of the Executive Council. The President shall appoint all committees and shall perform all duties customarily incident to the Office of President and such other duties as may be prescribed by the Board of Directors from time to time.

SECTION 2.—President-Elect

The President Elect shall have such duties as may be assigned by the President or the Board of Directors. In the absence of the President, or in the event of the President's inability or refusal to act, the President-Elect shall perform the duties of the President.

SECTION 3.—Vice Presidents

Each of the Vice Presidents shall have such duties as may be assigned by the President or the Board of Directors. In the absence of both the President and President Elect, one of the Vice Presidents shall be designated by the Board of Directors to preside at meetings of the Society.

ARTICLE IV.—Chief Staff Executive

The Chief Staff Executive shall be responsible for keeping a full and accurate record of the proceedings of meetings of the Society and of the Board of Directors and for sending notices of such meetings. Subject to the direction of the Board, the Chief Staff Executive shall have immediate charge of the archives of the Society, and shall have charge of the books, pamphlets, manuscripts, and other literary or scientific material collected by the Society.

The Chief Staff Executive shall also be responsible for collecting the annual dues of members, paying all bills for ordinary expenditures incurred by the Society and any other bills as authorized by the Board of Directors, keeping a detailed record of all receipts and expenditures, and presenting an accounting of same at the annual meetings. After the financial statements have been audited and reviewed by a committee appointed by the Board of Directors a financial report will be released reflecting the audited results.

The Chief Staff Executive shall have such other duties as may be assigned by the President or the Board of Directors.

ARTICLE V.—Elections and Filling of Vacancies

Procedures for nominations and elections shall be established by a majority vote of the Directors present and voting at a meeting of the Board of Directors. These procedures shall be provided to the membership annually at the beginning of the election process. A majority of the votes cast by Fellows shall be necessary for the election of the President-Elect. For the election of Directors, the four candidates with the highest number of votes cast shall be elected, subject to a requirement that one-third of the valid ballots cast for Director shall be necessary for the election of a Director.

The Board of Directors may fill vacancies in the term of any Officer or member of the Board. Any Officer so appointed shall serve until the next annual meeting. Any member of the Board so appointed shall serve, subject to ratification by the Fellows at the next meeting of the Society, until the expiration of the term of office of the Board member being replaced.

ARTICLE VI.—**Discipline of Members**

SECTION 1.—Complaints and Questions

- a. Complaints concerning alleged violations of the Code of Professional Conduct, and all questions which may arise as to the conduct of a member of the Society, in the member's relationship to the Society or its members, or in the member's professional practice, or questions affecting the interests of the actuarial profession, constitute matters for serious consideration.
- b. Such complaints, questions, or requests for advice shall be referred to the national organizations responsible for profession-wide investigation, counseling and/or discipline, e.g., the Actuarial Board for Counseling and Discipline (ABCD) and the Canadian Institute of Actuaries (CIA).

Bylaws

SECTION 2.—Referral and Consideration of Public Disciplinary Action

Acting pursuant to Section 1, and if circumstances warrant, the appropriate investigatory body shall present a recommendation for disciplinary action to the Society. The member whose activities are the subject of the disciplinary recommendation is referred to here as the subject actuary.

Disciplinary action includes a public or private reprimand by, or suspension or expulsion from, the Society.

If an appropriate investigatory body recommends disciplinary action to the Society, the matter shall be referred to the appropriate disciplinary body.

The CAS Discipline Committee shall be the appropriate disciplinary body for all CAS disciplinary actions unless the disciplinary action is recommended by an appropriate investigatory body and is covered by the terms of any joint agreement for discipline among various actuarial organizations including the CAS. In those cases the appropriate disciplinary body shall be the joint disciplinary panel or other body as provided in such an agreement. Such an agreement and any amendments to such agreement are only binding on the CAS if approved by a two-thirds majority vote of the CAS Board members voting, provided that:

- (a) No CAS member will be disciplined unless a majority of the panel judging that CAS member is composed of CAS members and a majority of those CAS members concur with the discipline.
- (b) The authority to impose penalties of expulsion or suspension for more than two years for any CAS member will remain with the CAS.

Appeals under such agreement will also be handled in accordance with the provisions of that agreement.

Should the recommended disciplinary action under such agreement require referral to the CAS for final disciplinary action, then the CAS Discipline Committee shall be the appropriate disciplinary body but only with regards to determining disciplinary action consistent with the terms of such agreement.

The remainder of this Article VI refers to matters for which the CAS Discipline Committee is the appropriate disciplinary body.

The CAS Discipline Committee shall consider the matter and may take such disciplinary action with respect to the CAS member (the subject actuary) as it deems appropriate in accordance with Rules of Procedure adopted from time to time by the Board of Directors.

The CAS Discipline Committee shall consist of ten Fellows. The Chairperson shall form a Discipline Committee Panel consisting of seven members of the Discipline Committee each time a recommendation for disciplinary action against a member is received from

- (a) an appropriate investigatory body and such recommendation is not covered by any joint agreement for discipline, or
- (b) an appropriate disciplinary body consistent with the terms of such an agreement.

The Discipline Committee Panel shall schedule a hearing at which the subject actuary shall have the right to appear personally and with counsel and/ or other advisor (at the subject actuary's expense) to explain why the recommendation of the investigatory body should not be followed. A hearing of the Discipline Committee Panel shall require a quorum to be present, which shall be five members of the Panel.

The Discipline Committee Panel shall provide written notice of this hearing, including the time, date, and place where the Discipline Committee will consider the matter, to the subject actuary not less than 45 days in advance of the hearing date. The 45-day time limit may be waived by mutual written consent of the parties.

A Discipline Committee Panel decision to render an order to publicly reprimand, suspend or expel the subject actuary requires an affirmative vote of at least five members of the Discipline Committee Panel. The decision of the Discipline Committee Panel shall include a written report of its findings and the rationale for the conclusion. The decision of the Discipline Committee Panel action shall be provided to the subject actuary within 30 days after the decision is reached.

The decision of the Discipline Committee Panel shall be considered final and binding unless written notice of appeal is submitted by the subject actuary within 45 days of receipt of the decision of the Panel.

SECTION 3.—Appeals

The subject actuary shall be entitled to appeal the decision of the Discipline Committee Panel by submitting a written request for an appeal to the CAS President within 45 days from receipt of the Discipline Committee Panel decision.

The CAS President shall designate five members of the Board of Directors as eligible to serve on an Appeals Panel, from which the subject actuary shall select three members to serve on the Appeals Panel. The Appeals Panel shall act on behalf of the CAS Board of Directors and in accordance with the Rules of Procedure.

The full written record, decision, findings and vote of the Discipline Committee Panel shall be made available to the Appeals Panel. The appeal shall be based entirely upon the written record and shall not include any appearance by the subject actuary but may include a written submission by the subject actuary, and any reply submission by the Chairperson of the Discipline Committee Panel.

The Appeals Panel shall conduct and complete the appeal within 90 days after receipt of the request for appeal. The Appeals Panel may affirm, modify or reverse the decision of the Discipline Committee Panel. A decision to do other than affirm shall require a determination by the Appeals Panel that: (1) the Discipline Committee Panel's factual determinations were clearly erroneous and, absent such errors, a different action is warranted; or (2) the Discipline Committee Panel failed to conform to the Rules of Procedure in a manner that was unduly prejudicial and which led to an unwarranted result; or (3) the disciplinary action imposed by the Discipline Committee Panel was clearly inconsistent with the magnitude of the Code of Professional Conduct violation or the harm that was done. The decision of the Appeals Panel shall require the vote of at least two members of the Appeals Panel.

The Appeals Panel decision shall include a written statement of the Panel's findings and conclusions and shall be provided to the subject actuary, the Chairperson of the Discipline Committee Panel, the Panel members, the CAS President and Chief Staff Executive, the CAS Board of Directors and the authorized representative of the relevant investigatory or disciplinary body. The Appeals Panel decision shall be final.

SECTION 4.—Reinstatement

An individual who has been expelled may be reinstated only upon request to and approval of the Board of Directors.

SECTION 5.—Confidentiality and Notification

All proceedings under this Article shall be confidential in accordance with the Rules of Procedure.

The Board of Directors shall notify the members in all instances in which the Discipline Committee Panel or other appropriate disciplinary body orders public disciplinary action. Notification shall not be given until the time to appeal has expired or, in the event of an appeal, until such appeal has been resolved. At the same time notification is given to the members, the Board of Directors shall also give notice of any public disciplinary action to the appropriate investigatory or disciplinary body, all other actuarial organizations of which the individual is a member, and to other persons and organizations, including government entities, which, in the opinion of the Board, should also receive notice of the action as being in the best interest of the public.

In the event of subsequent reinstatement of the member, the Board of Directors shall give notice of such action to all members and to entities previously advised by the Board of the public disciplinary action.

SECTION 6.—Case Reviews

The Board of Directors retains the right to review a decision by a national organization responsible for profession-wide counseling and discipline which does not result in a recommendation for disciplinary action with respect to a CAS member.

ARTICLE VII.—Indemnification of Officers, Members of the Board of Directors, Committee Members, Presidential Appointees and Employees

Persons who at any time shall serve, or shall have served, as Officers, members of the Board of Directors, committee members, Presidential appointees, members of any disciplinary board of the Society, or who are employees, or who were employees of the Casualty Actuarial Society (and their heirs, executors, administrators, and personal representatives) shall be indemnified by the Society against all costs and expenses (including but not limited to legal fees, amounts of judgments paid, and amounts paid in settlements) reasonably incurred in connection with the defense of any claim, action, suit, or proceeding, whether civil, criminal, administrative, or other, in which they may be involved by virtue of such persons being or having been Officers, members of the Board of Directors, committee members, Presidential appointees, members of any disciplinary board of the Society, or who are employees, or who were employees of the Casualty Actuarial Society, or in connection with any appeal therein; provided, however, that in the event of a settlement the indemnification herein provided shall apply only when the Board of Directors approves such settlement; and provided further that such indemnity shall not be operative with respect to any matter as to which such person shall have been finally adjudged liable in such claim, action, suit, or proceeding on account of their own willful misconduct.

The rights accruing to any persons under this Article shall be without prejudice to any rights or benefits given by the Board of Directors inconsistent therewith in special cases and shall not exclude any other rights or benefits to which they may be lawfully entitled.

ARTICLE VIII.—Dues

SECTION 1.—Amount

The Board of Directors shall fix the annual dues for Fellows, Associates and Affiliates.

SECTION 2.—Failure to Pay

The Casualty Actuarial Society shall be responsible for notifying by mail any Fellow, Associate or Affiliate whose dues may be six months in arrears, and to accompany such notice by a copy of this Article. If a Fellow, Associate or Affiliate shall fail to make payment within three months from the date such notice is mailed, the Fellow, Associate or Affiliate shall cease to be a member, except at the discretion of the Board of Directors this provision may be waived.

SECTION 3.- Exemption, Deferral or Waiver

The Board of Directors may, at its discretion and in accordance with established policy, exempt, defer or waive, partially or fully, the dues of any member who submits a written request to the Board of Directors before dues have become six months in arrears, citing the reason for the request.

SECTION 4.—Reinstatement

A Fellow, Associate or Affiliate who has ceased to be a member because of failure to pay dues, or by voluntary resignation, may be reinstated by a majority vote of the Board of Directors upon payment of a reapplication fee, to be set by the Board of Directors, and such payment may be partially or fully waived by the Board at its discretion.

ARTICLE IX.—Amendments

These Bylaws may be amended by an affirmative vote of 10% of the Fellows or two-thirds of the Fellows voting, whichever is greater. Notice of such proposed amendment shall be sent to each Fellow by the Casualty Actuarial Society at least one month before the vote is taken.

An amendment to the Bylaws can be proposed by a two-thirds majority vote of the Board members voting. Alternatively, an amendment can be proposed by a petition of 5% of the Fellows, unless such petition is vetoed by a two-thirds majority vote of the Board members voting.

CAS CENTENNIAL GOAL

(Adopted by CAS Board, March 2007)

The CAS will be recognized globally as a leading resource in educating casualty actuaries and conducting research in casualty actuarial science. CAS members will advance their expertise in pricing, reserving, and capital modeling, and leverage their skills in risk analysis to become recognized as experts in the evaluation of enterprise risks, particularly for the property and casualty insurance industry.

CASUALTY ACTUARIAL SOCIETY RULES OF PROCEDURE FOR DISCIPLINARY ACTIONS

(As Amended May 3, 2009)

The Board of Directors of the Casualty Actuarial Society (CAS) has promulgated these Rules of Procedure to govern the consideration and recommendations for disciplinary action against members presented by the appropriate investigatory body, e.g., the Actuarial Board for Counseling and Discipline (ABCD) or the Canadian Institute of Actuaries (CIA). These Rules are intended to provide fundamental fairness and due process in the procedure for disciplinary action by requiring adequate notice, an opportunity to respond, and a fair and impartial decision maker in the discipline process.

The Board reserves the right to amend or otherwise alter these Rules of Procedure as it deems necessary and delegates the interpretation of these rules to the CAS Discipline Committee.

Introduction

The CAS Discipline Committee shall consist of 10 Fellows. The Chairperson shall form a Discipline Committee Panel consisting of 7 members of the Discipline Committee each time a recommendation for disciplinary action against a member is received from an investigatory body. If 7 members of the Committee without a conflict of interest cannot be found the President shall appoint (a) special member(s) to the Discipline Committee Panel to complete the formation of the Panel.

The Discipline Committee Panel shall be responsible for considering recommendations for disciplinary actions against members presented by the appropriate investigatory body and for taking actions on those recommendations as it deems appropriate. The member whose activities are the subject of the disciplinary recommendation is referred to here as the subject actuary.

A. Consideration of Disciplinary Action

- 1. When the CAS receives from the appropriate investigatory body a written report recommending reprimand, suspension, or expulsion of a member of the CAS (the subject actuary) the matter shall be referred to the Chairperson of the Discipline Committee.
- 2. The Chairperson shall review the recommendation and record provided by the investigatory body and may seek further information from them or delegate further fact-finding or investigation to other members of the Committee.
- 3. The Chairperson shall schedule a hearing at which the subject actuary shall have the right to appear personally and with counsel and/or other advisor (at the subject actuary's expense) to explain why the recommendation of the investigatory body should not be followed.
- 4. The Chairperson, with the assistance of the CAS Executive Director, may engage legal counsel to advise the CAS and to explain relevant legal principles.
- 5. The Chairperson shall provide written notice of this hearing, including the time, date, and place where the Discipline Committee Panel will consider the matter to the subject actuary not less than 45 days in advance of the hearing. The 45-day time limit may be waived by mutual written consent of the parties.
- 6. The notice shall also be provided to the members of the CAS Discipline Committee, the CAS President, the CAS Executive Director and the authorized representative of the investigatory body that recommended discipline. The notice shall:
 - a. advise the subject actuary that disciplinary action has been recommended by the investigatory body, state the charge(s) made, and cite the specific Code of Professional Conduct violations that are alleged;
 - b. advise the subject actuary of the right to submit any new evidence which was not previously made available to or considered by, the investigatory body;
 - c. advise the subject actuary of the right to appear at the Discipline Committee Panel hearing with or without counsel and/or other advisor at the expense of the subject actuary;
 - d. list the Fellows who will serve on the Discipline Committee Panel and advise the subject actuary of the right to object to any Panel member he or she believes might have an actual or potential conflict of interest, provided that he or she must state the basis for that conflict in writing within 30 days of receipt of the written notice from the Chairperson; in the event that the subject actuary objects to a Panel member, the Chairperson (or, in the event that the person alleged to have the conflict is the Chairperson, the President of the CAS) shall determine if an actual conflict exists and if determined so to exist, shall appoint a replacement Panel member without a conflict of interest to consider the matter.
 - e. The Chairperson of the Discipline Committee shall serve as the Chairperson of the Discipline Committee Panel. If the Chairperson has a conflict of interest the CAS President shall designate one of the Panel members as the Panel Chairperson.

This notification may be made by certified mail or in such other manner in which receipt may be verified as the Discipline Committee Chairperson may direct.

- 7. If the subject actuary does not request an appearance, the Chairperson shall so advise the Panel members and the Panel shall then meet in person or by teleconference to consider the matter under review and render a decision in accordance with these Procedures.
- 8. If the subject actuary requests an appearance before the Discipline Committee Panel, any additional factual materials or new evidence which he or she wishes to be considered by the Panel must be submitted in writing at least 15 days in advance of the hearing.
- 9. A hearing of the Discipline Committee Panel shall require a quorum to be present, which shall be 5 members of the Panel. A Discipline Committee Panel decision to render an order to reprimand, suspend or expel the subject actuary requires the affirmative vote of at least 5 members of the Discipline Committee Panel. Members of the Committee Panel who were not in attendance at the hearing may not vote on the outcome.
- 10. A transcript shall be made of the hearing of the Discipline Committee Panel by a court reporter selected by the CAS. No other recording of the hearing will be permitted. However, since the hearing is intended to address the professional conduct of the subject actuary, professional dialogue between the subject actuary and Panel members should not be impeded by formal legal rules of evidence or procedure. Accordingly, there shall be no discovery, no depositions or interrogatories, and no new information or testimony presented by the subject actuary that was not provided in writing at least 15 days prior to the appearance.
- 11. The subject actuary may make an oral presentation of reasonable length and respond to any questions posed by the Discipline Committee Panel members. The subject actuary may be accompanied by legal counsel or other advisor, and may consult with such counsel. However, the role of such counsel shall be limited to providing advice to the client and explaining relevant legal principles.
- 12. The deliberations of the Discipline Committee Panel shall be limited to Panel members and counsel to the CAS. The Discipline Committee Panel has discretion to accept, reject, or modify the recommendation received from the investigatory body.
- 13. The Discipline Committee Panel decision shall be based on the investigative report, written record and any further information provided by the investigatory body as well as any additional fact-finding or investigation by the Discipline Committee Panel, and any new evidence submitted in writing by the subject actuary at least 15 days in advance of the hearing. In reaching its decision the Panel shall consider without limitation the intent of the subject actuary, whether the violation was willful, the economic loss or other harm caused by the conduct alleged, the seriousness of the violation, the experience of the subject actuary, any alleged prejudicial material errors in the process of the investigatory body, and any other factors the Panel deems appropriate. The Panel may also take into consideration whether the subject actuary has been disciplined before and the Chairperson is authorized to inquire with the CAS Executive Director or any other body in this regard.
- 14. The decision of the Discipline Committee Panel shall include a written report of its findings and the rationale for the conclusion. If the Panel determines that a violation of the Code of Professional Conduct has not occurred the decision should explain why the Panel's conclusion differs from that of the investigatory body. If the Panel determines that a violation has occurred the decision should cite the specific Code provisions violated and explain how the subject actuary's conduct constituted a Code violation. The Panel decision should also contain the rationale for the disciplinary action chosen.
- 15. The decision of the Discipline Committee Panel, including the vote, shall be provided to the subject actuary within 30 days after the decision is reached. Copies of the Panel decision shall be provided to the CAS President and the CAS Executive Director. The decision of the Panel shall be considered final and binding unless written notice of appeal is submitted by the subject actuary within 45 days of receipt of the decision of the Panel. If there is no request for appeal submitted by the subject actuary, the President shall then also provide notice of the decision of the Discipline Committee Panel to the Board of Directors.

B. Appeals

- 1. The subject actuary shall be entitled to appeal the decision of the Discipline Committee Panel by submitting a written request for an appeal to the CAS President within 45 days from receipt of the Discipline Committee Panel decision.
- 2. Upon receipt of the written request for appeal, the CAS President shall designate 5 members of the Board of Directors who do not have a conflict of interest as eligible to serve on an Appeals Panel and provide those names to the subject actuary.
- 3. Within 5 days of receipt of those names the subject actuary shall select three of those designated Board members to serve on the Appeals Panel and provide those choices to the CAS President. The President shall select one of those three to serve as the Chairperson of the Appeals Panel and shall so notify the three panel members, the subject actuary and the CAS Executive Director. The Appeals Panel shall act on behalf of the CAS Board of Directors.
- 4. In the event of a request for appeal by the subject actuary, the full written record, decision, findings and vote of the Discipline Committee Panel shall be made available to the Appeals Panel. The appeal shall be based entirely upon the written record and shall not include any appearance by the subject actuary but may include a written submission by the subject actuary, and any reply submission by the Chairperson of the Discipline Committee Panel.
- 5. The Appeals Panel shall conduct and complete the appeal within 90 days after receipt of the request for appeal. The Appeals Panel may affirm, modify or reverse the decision of the Discipline Committee Panel. A decision to do other than affirm shall require a determination by the Appeals Panel that: (1) the Discipline Committee Panel's determinations were clearly erroneous and, absent such errors, a different action is warranted; or (2) the Discipline Committee Panel failed to conform to the Rules of Procedure in a manner that was unduly

prejudicial and which led to an unwarranted result; or (3) the disciplinary action imposed by the Discipline Committee Panel was clearly inconsistent with the seriousness of the Code of Professional Conduct violation(s) or the harm that was done. The decision of the Appeals Panel shall require the vote of at least 2 members of the Appeals Panel.

The Appeals Panel decision shall include a written statement of the Panel's findings and conclusions and shall be provided to the subject actuary, the Chairperson of the Discipline Committee Panel, the Panel members, the CAS President and Executive Director, and the CAS Board of Directors. The Appeals Panel decision shall be final.

C. Confidentiality of Process

- 1. All proceedings with respect to communications, investigations, and deliberations as provided in these Rules, shall be confidential. This requirement shall not preclude the investigatory body from advising, at its discretion, complainants about the outcome of their complaints. And, this requirement of confidentiality shall not preclude the investigatory body from reviewing previously closed files as they relate, in any manner, to the consideration of a new matter before it.
- 2. Notwithstanding the above, should there be any unauthorized disclosure of information with respect to these confidential proceedings, the CAS shall have the right to respond to such disclosure by providing factual information about the deliberations and proceedings.
- 3. In all cases, except with respect to the specific notification authorized pursuant to Section D., the matter shall continue to be treated in a confidential manner, with all records of the hearing and any appeal sealed and retained by the CAS Office under the control of the Executive Director. The Discipline Committee Panel Chairperson, the President, or the Executive Director may, however, be required to divulge such records by court order or other legal process in some circumstances, or as necessary to fulfill their appointed functions.

D. Disposition

- 1. The Board of Directors shall notify the members in all instances in which the Discipline Committee Panel orders public disciplinary action. Notification shall not be given until the time to appeal has expired or, in the event of an appeal, until such appeal has been resolved. Specifically, such notification shall not take place until after the subject actuary has received notice of the decision of the Discipline Committee Panel or Appeals Panel, as applicable, or otherwise reasonable efforts have been made to effect that notification.
- 2. At the same time notification of public disciplinary action is given to the members, the Board of Directors shall also give notice of any such disciplinary action to the appropriate investigatory body, all other actuarial organizations of which the actuary is a member, and to other persons or organizations, including governmental entities, which, in the opinion of the Board, should also receive notice of the action as being in the best interest of the public.
- 3. The President on behalf of the Board shall initiate and direct the action necessary to comply with the final decision and the determination of appropriate notification by the Board in cases of public disciplinary action. In the event that the Discipline Committee Panel hearing or the appeal results in no public disciplinary action, the President shall authorize the specified private disciplinary action, if any.
- 4. In the event of subsequent reinstatement of the subject actuary, the Board of Directors shall give notice of such action to all then current members and to entities previously advised by the Board of the public disciplinary action.

E. Report on Activities

The Discipline Committee shall issue an annual report to the Board of Directors and to the membership that shall include a description of its activities, including commentary on the types of cases pending, resolved, and dismissed. This annual report shall be subject to the confidentiality requirements and provisions set forth above.

CROSS-BORDER DISCIPLINE AGREEMENT

(Effective November 1, 2005)

This is an agreement between the Canadian Institute of Actuaries ("CIA") and the American Academy of Actuaries ("AAA"), the American Society of Pension Professionals and Actuaries, the Casualty Actuarial Society, the Conference of Consulting Actuaries, and the Society of Actuaries (collectively "the U.S.-based organizations"). The CIA and the U.S.-based organizations agree that it is in the best interests of their members to reduce the risk that their members will be subjected to multiple disciplinary investigations arising out of a single complaint, inquiry or incident involving an alleged breach of the professional standards of the CIA and/or the U.S.-based organizations. Consequently, with regard to their members practicing in the United States and Canada, the CIA and the U.S.-based organizations agree as follows:

- 1. Members of the U.S.-based organizations practicing in Canada are required by the U.S.-based organizations to comply with the Rules of Professional Conduct, Standards of Practice and eligibility requirements of the CIA. Members of the CIA practicing in the United States are required by the CIA to comply with the Codes of Professional Conduct, Qualification Standards and Actuarial Standards of Practice of the U.S.-based organizations. The location(s) of the member's practice in each case is determined by the ultimate purpose(s) of the member's work, as determined by the facts and circumstances of the case. As between the United States and Canada, the ultimate purpose(s) of a member's work is determined by whether the work is performed pursuant to the legal or regulatory requirements of the United States or Canada, or whether it is intended for use in the United States or Canada. (Thus, for example, an actuary who performed work to be filed with a United States governmental body would be deemed to have practiced in the United States when performing that work; similarly, an actuary who performed work to be filed with a Canadian governmental body would be deemed to have practiced in the united states or be actuary has practiced in the United States or Canada. The residence or physical location of the actuary is irrelevant to the determination of whether the actuary has practiced in the United States or Canada.
- 2. Questions concerning members' practice in Canada are investigated by the CIA in accordance with its rules and bylaws. Questions concerning members' practice in the United States are investigated by the Actuarial Board for Counseling and Discipline and acted upon by the U.S.-based organizations in accordance with their rules and bylaws.
- 3. If a question arises concerning a CIA member's practice in the United States and the CIA member is not also a member of one or more of the U.S.-based organizations, the question will be investigated by the Actuarial Board for Counseling and Discipline and reviewed by the Academy in accordance with its rules and bylaws as if the CIA member were a member of the Academy.
- 4. The parties hereby agree that, in instances where it is unclear whether a complaint, inquiry, or incident involving a member should be investigated by the CIA or by the ABCD, the CIA's executive director and legal counsel to the ABCD will initiate discussions between the CIA and ABCD to determine which organization will undertake the investigation.
- 5. A determination by the CIA that a member of one or more of the U.S.-based organizations breached the applicable rules of the CIA when practicing in Canada will be made solely by the CIA, and will be deemed final by all the parties to this agreement when the appeal process of the CIA has been exhausted. A determination by one or more of the U.S.-based organizations that a member of the CIA breached the applicable rules of the U.S.-based organizations (s) when practicing in the United States will be made solely by the U.S.-based organizations pursuant to findings and recommendation of the ABCD, and will be deemed final by all the parties to this agreement as to each U.S.-based organization when the appeal process of that U.S.-based organization has been exhausted.
- 6. The CIA will retain sole authority to determine the penalty to be imposed by the CIA upon one of its members based upon a finding by one or more of the U.S.-based organizations that a CIA member breached applicable rules when practicing in the United States. Each of the U.S.-based organizations will retain sole authority to determine the penalty to be imposed by that organization upon one of its members based upon a finding by the CIA that the member breached applicable rules when practicing in Canada.
- 7. The CIA agrees to communicate to the relevant U.S.-based organizations any public finding that a member of the U.S.-based organizations breached applicable rules when practicing in Canada, regardless of whether the member is also a member of the CIA, and to provide each of the relevant U.S.-based organizations with a copy of the Appeal Tribunal transcript, if any, or the transcript of the Disciplinary Tribunal and the findings of the Appeal Tribunal, if any, or the findings of the Disciplinary Tribunal. The CIA will also provide to the U.S.-based organizations upon request any and all additional documents and evidence considered by the tribunal in rendering its decision not subject to the solicitor-client or litigation privileges. Each of the U.S.-based organizations agrees to communicate to the CIA any finding that a member of that U.S.-based organization who is also a member of the CIA breached applicable rules when practicing in the U.S., and to provide a copy of the ABCD's findings and conclusions and a summary of the U.S.-based organization breached applicable rules when practicing in the U.S., and to provide a to the CIA any finding that a CIA member who is not also a member of any U.S.-based organization breached applicable rules when practicing in the CIA. The Academy agrees to communicate to the CIA any finding that a CIA member who is not also a member of any U.S.-based organization breached applicable rules when practicing in the United States, and to provide a copy of the ABCD's findings and conclusions, as well as other documents not subject to the attorney-client or acory of the ABCD's findings and conclusions, and a summary of the CIA. The Academy agrees to communicate to the CIA any finding that a CIA member who is not also a member of any U.S.-based organization breached applicable rules when practicing in the United States, and to provide a copy of the ABCD's findings and conclusions and a summary of the Academy's conclusions, as well as other documents not subject to the attorney-client

Cross-Border Disciplinary Agreement

municate or provide copies of documents generated through investigation of a complaint or question concerning an actuary's conduct that did not result in public discipline.

- 8. The CIA and each of the U.S.-based organizations will not recommend to each other that any specific penalty be imposed upon a member based upon a finding that a member breached applicable rules of conduct, qualification or practice, but they will recommend that public disciplinary action be considered against a member if that member has been found to have breached applicable rules of conduct, qualification or practice.
- 9. Where, in accordance with the Cross-Border Discipline Agreement, the CIA communicates to the relevant U.S.-based organization(s) a finding that a member of one or more of the U.S.-based organizations has breached applicable rules of conduct, qualification or practice when practicing in Canada, or the U.S.-based organization communicates to the CIA a finding that a CIA member has breached applicable rules of conduct, qualification, or practice when practicing in the United States, the parties hereby agree that each of the recommending organization(s) designates the following representative to assist in answering any questions that the penalizing organization(s) may have with respect to the recommendation(s):

Academy:	Executive Director
ASPPA:	Executive Director
CAS:	Executive Director
CCA:	Executive Director
CIA:	Executive Director
SOA:	Executive Director

Nothing in this agreement prevents a penalizing organization, when it receives a recommendation for discipline pursuant to this agreement, from undertaking whatever action it deems necessary, consistent with its own disciplinary procedures, for the limited purpose of determining whether a material breach of its own Code of Professional Conduct or Rules of Professional Conduct warranting discipline occurred.

10. The parties will each take the necessary steps to amend their rules and bylaws to implement this agreement.

This agreement will take effect for all complaints, inquiries or incidents involving members; practice as between the United States and Canada that are under consideration by the parties as of November 1, 2005.

DUES

DUES SCHEDULE: The schedule of CAS membership dues as approved by the Board of Directors for 2011 is as follows:

	Full Dues
Fellows, Associates	\$450.00
Affiliate Members	\$225.00

For U.S. members who are not also members of the American Academy of Actuaries, an additional \$80.00 is added to the CAS dues for the cost of operating the Actuarial Standards Board (ASB) and the Actuarial Board for Counseling and Discipline (ABCD).

LATE FEE: A late fee of \$75 will be assessed to member dues that have not been paid by January 31, 2012.

WAIVER OR DEFERRAL OF DUES: As prescribed by the CAS bylaws, a member may submit a written request for waiver of dues to the Board of Directors before dues have become six months in arrears citing the reason for the request.

The request for a dues waiver, either partial or full, will be granted in the following situations:

Permanent Dues Waivers:

- 1. Attainment of age 70 (full dues waiver).
- 2. Attainment of age 55 and deriving little or no earned income (full dues waiver).

Temporary Dues Waivers:

- 1. Retiring before the age of 55, deriving little or no earned income, and volunteering on a committee (CAS or Regional Affiliate), authoring a paper, participating as a panelist, or otherwise contributing to the Society (full dues waiver).
- 2. Retiring before the age of 55, deriving little or no earned income, and not actively contributing to the Society (50% partial dues waiver).
- 3. A Member on temporary leave from the actuarial profession because of active military service. This waiver is for one year and may be renewed each year upon written request.
- 4. A Member on temporary leave from the actuarial profession and deriving little or no earned income because of
 - a. a disability, or
 - b. full-time attendance at an accredited school of higher education, or
 - c. participating in a voluntary humanitarian service (Peace Corps, etc.), or
 - d. raising children or caring for another family member.

A Temporary Waiver granted for any of the reasons listed under item 4 above is for one year and may be renewed four additional years upon written request (maximum of five). Thereafter, additional requests for a temporary dues waiver for the reasons identified in item 4a-4c will require special consideration by the Board. Additional temporary full dues waivers for item 4d, may be granted to a member who is currently volunteering on a committee (CAS or Regional Affiliate), authoring a paper, participating as a panelist, or otherwise contributing to the Society. If not actively contributing to the Society, those members applying under item 4d may be granted unlimited additional 50% partial dues waivers.

There is no lifetime limit imposed for temporary waivers granted under the reasons identified in items 1, 2, 3, and the extension to 4d described in the preceding paragraph.

Dues Deferral: A member who is unemployed and actively seeking employment may submit a written request for deferral of dues to the Board of Directors before dues have become six months in arrears. The request will be granted for one year and may be renewed for one additional year upon written request. Deferred dues are payable when the member becomes employed.

Other Dues Waiver Requests: The Board will consider written requests for waivers for other reasons and may, at its discretion, by a majority vote waive the dues of a member.

Failure to Pay: Failure to pay dues when no waiver or deferral has been granted will cause the member to be dropped from the rolls and be subject to the reinstatement policy.

Publications for Member with Dues Waived: The rights and privileges appertaining to membership are not affected by a member's dueswaived or deferred status, with the exception that members in a full dues-waived status may elect to receive the *Variance* Journals for a fee of \$50.00 U.S. Members in a partial dues waived status will continue to receive *Variance* at no additional charge.

AFFILIATE MEMBERSHIP

The Casualty Actuarial Society (CAS) has a class of membership, Affiliate, to serve qualified actuaries who practice in the general insurance field and wish to be active in the CAS, but do not meet the qualifications to become an Associate or Fellow of the CAS. Affiliate Membership recognizes that the Affiliate Member has been granted professional status as an actuary by another actuarial organization and practices in the property/casualty field.

Affiliates are governed by the CAS Constitution, Bylaws, and Code of Professional Conduct, and are subject to CAS disciplinary procedures (documents may be viewed on the CAS Web Site). Practice rights are not granted to Affiliate Members, rather they must adhere to U.S., Canadian, or other nation-specific qualification standards to determine eligibility to practice.

Affiliates are entitled to attend meetings and seminars of the CAS by paying the fees specified for members, participate at Society functions, and serve on CAS committees (except for Admissions and Board committees). Affiliates are assessed 50% of the annual dues for Associates and Fellows. Affiliate dues for 2012 are \$225 (U.S. funds).

Affiliates receive all CAS publications including *Actuarial Review* (a quarterly newsletter) and *Variance* (a scientific journal). They also are granted access to the Member Directory on the CAS Web Site (upon application for a password).

They are not authorized to append CAS initials to their name or to refer to themselves as "Member of the Casualty Actuarial Society." Rather, they can refer to themselves as "Affiliate Member of the CAS." Affiliates do not have CAS voting rights.

Applicants for Affiliate Membership must be sponsored by a CAS Fellow (including a letter of recommendation from the sponsoring Fellow); provide evidence of attaining membership of an organization that is a member of the International Actuarial Association; and provide evidence of significant practice in the property/casualty field.

The requirement for significant practice in the property/casualty field can be met by practice in any application of actuarial science other than life insurance or pensions. If the candidate does not practice outside the life or pension fields on a fulltime basis, significant practice should be demonstrated through recent, responsible actuarial work on several projects, indicating an intention to continue practice outside the life and pension fields.

To apply for Affiliate Membership, please print and complete the application (http://www.casact.org/join/affiliate.pdf), and provide documentation as prescribed. The CAS Board of Directors will review each application for Affiliate membership.

SUBSCRIBER PROGRAM

The Subscriber Program is for nonmembers (other than Academic Correspondents) who have an interest in the activities of the Casualty Actuarial Society. Individuals and organizations (e.g., companies or state insurance departments) are eligible for the Program. Enrollment as a Subscriber requires payment of \$515 per year (U.S. funds) and acceptance of the guidelines regarding activities at CAS meetings and Society-sponsored seminars.

Subscribers receive *Variance* (a scientific journal), the *Actuarial Review* (a quarterly newsletter), and notices of CAS meetings and seminars. Subscribers may attend CAS meetings and seminars by paying the standard registration fee. For an organization, one person may attend each meeting or seminar for each paid subscribership.

An additional benefit to the program is the ability to obtain a username and password to access certain password-protected areas of the CAS Web Site, such as the searchable Directory of Members, the membership list by employer type, and the online dues payment area. Also, when subscribers log in, meeting registration forms and online store order forms are automatically populated with their names and addresses. Interested individuals should indicate their preferred usernames and passwords on the application form.

Subscribership does not bestow upon the designated individual the professional status attained by those fulfilling the examination and other requirements for membership in the Society, nor does it grant to the individual or the participating organization recognition in the regular membership roster of the Society.

ACADEMIC CORRESPONDENTS

The Academic Correspondent program is for nonmembers who are involved in teaching actuarial science, mathematics, economics, business, or related courses, and who have an interest in the Casualty Actuarial Society. Such persons, by indicating their teaching involvement and their interest, and by payment of an annual fee of \$75 (U.S. funds) to the Society, are enrolled as Academic Correspondents. Academic Correspondents receive copies of *Variance* (a scientific journal), the *Actuarial Review* (a quarterly newsletter), *Future Fellows* (the candidate newsletter), and other publications of the Society. Academic Correspondents also receive notice of CAS meetings and seminars. Registration fees for up to three CAS meetings and continuing education seminars annually will be waived for Academic Correspondents. The CAS will make a grant to an Academic Correspondent's educational institution when the Academic Correspondent attains a CAS designation (\$7,500 for Fellow and \$5,000 for Associate).

Any organization, such as a university mathematics department, may become an Academic Correspondent and have one person attend each meeting. It should be noted that the Academic Correspondent program does not bestow upon a nonmember the professional status attained by those fulfilling the examination and other requirements for membership in the Society, nor does it grant to the individual or the participating organization recognition in the regular membership roster of the Society or privileges of membership other than specified above.

Academic Correspondents

Jing Ai

University of Hawaii 2404 Maile Way Honolulu, HI 96822 (808)956-9519 Fax: (808)956-9887 jinga@hawaii.edu

Bonnie Averbach

Temple University Alter Hall Room 627 (00600) Philadelphia, PA 19122 (215)204-8153 bonnie.averbach@temple.edu

Donald F. Behan

Georgia State University 13020 Bucksport Ct. Roswell, GA 30075-6313 (770)645-9336 Fax: (770)645-9337 dbehan@gsu.edu

May M. Boggess

Texas A&M University Dept. of Mathematics 3368 TAMU College Station, TX 77843 (979)229-1493 Fax: (979)862-4190 may.boggess@gmail.com

Patrick L. Brockett

University of Texas at Austin University of Texas 1 University Station McCombs School of Business Austin, TX 78712 (512)293-1009 Fax: (512)471-0587 brockett@mail.utexas.edu

Robert E. Buck

Slippery Rock University Department of Mathematics Slippery Rock, PA 16057 (724)738-2515 robert.buck@sru.edu

Wai-Sum Chan

The Chinese University of Hong Kong Department of Finance Shatin, HONG KONG 01185226097715 Fax: 01185226036586 chanws@cuhk.edu.hk

Albert Cohen

Michigan State University A336 Wells Hall East Lansing, MI 48824 (317)355-4592 albert@math.msu.edu

Helene Cossette

Laval University 1045 Avenue de la Médecine Pavillon Alexandre-Vachon, local 1620 Université Laval Quebec, QC G1V 0A6 CANADA (418)656-2603 Fax: (418)656-7790 helene.cossette@act.ulaval.ca

Samuel H. Cox Jr.

University of Manitoba Asper School of Business Warren Ctr, 638 Drade 181 Freedman Cr Winnipeg, MB R3T 5V4 CANADA (204)474-8130 scox@cc.umanitoba.ca

Dennis M. Crossen

LaSalle University Box 1018 Huntington Valley, PA 19006 (215)951-1036 crossend@lasalle.edu

Richard A. Derrig

Opal Consulting LLC 91 Fosdyke Street Providence, RI 02906 (401)861-2855 richard@derrig.com

Francois Dufresne

HEC Lausanne Ecole des H.E.C. Lausanne, CH-1015 SWITZERLAND fdufresn@hec.unil.ch

Diane L. Evans

Rose-Hulman Institute of Technology 5500 Wabash Ave. Terre Haute, IN 47803 (812)877-8354 Fax: (812)877-8883 diane.evans@rose-hulman.edu

Joel S. Foisy

State University of NY - Potsdam Department of Mathematics Potsdam, NY 13676

Edward W. Frees

University of Wisconsin 975 University Ave Madison, WI 53706 (608)262-0249 Fax: (608)265-4195 jfrees@bus.wisc.edu

Jose Garrido

Concordia University Dept. of Math & Statistics 1455 de Maisonneuve Blvd West Montreal, QC H3G 1M8 CANADA (514)848-2424 (3252) Fax: (514)848-2831 garrido@mathstat.concordia.ca

Vincent Goulet

Ecole d'Actuariat Ecole d'actuariat 1045, avenue de la Medecine Quebec, QC G1V 0A6 CANADA (418)656-5736 vincent.goulet@act.ulaval.ca

Don Hong

Middle Tennesee State University Box 34, MTSU, Dept. of Math Sci. Murfreesboro, TN 37132 (615)904-8339 dhong@mtsu.edu

Robert E. Hoyt

University of Georgia Terry College of Business Brooks Hall 206 Athens, GA 30602-6255 (706)542-4290 Fax: (706)542-4295 rhoyt@terry.uga.edu

Timothy J. Huffman

Northwestern College Department of Mathematics 101 7th St SW Orange City, IA 51041 (712)737-7058 timh@nwciowa.edu

Curtis E. Huntington

University of Michigan Dept of Mathematics 2864 East Hall 525 East University Ann Arbor, MI 48109-1109 (734)763-0293 Fax: (734)764-7048 chunt@umich.edu

Dan C. Jones

University of Houston 334 Melcher Hall Houston, TX 77204-6021 (713)743-4773 Fax: (713)743-4789 djones@uh.edu

Stuart A. Klugman

Society of Actuaries 475 N Martingale Road Suite 600 Schaumburg, IL 60173 (847)706-3590 Fax: (847)273-8590 Stuart.Klugman@Drake.edu

Linda B. Lawton

Northern Michigan University 701 College Rd Lebanon, IL 62254 (906)227-2020 llawton@nmu.edu

Robert D. Lieberthal

Thomas Jefferson University Jefferson School of Population Health 1015 Walnut street Curtis Bldg, Suite 115 Philadelphia, PA 19107 (215)503-3852 Fax: (215)923-7583 robert.lieberthal@jefferson.edu

Warren Luckner

University of Nebraska Actuarial Science Program CBA 210A Lincoln, NE 68588-0490 (402)472-1981 Fax: (402)472-5140 wluckner2@unl.edu

Petr Mandl

Univerzity Karlovy v Praze Div of Financial & Actuarial Math Sokolovska 83 Prague 8, 18675 CZECH REPUBLIC 011-420-22191-3281 Fax: 011-420-22232-3316 mandl@karlin.mff.cuni.cz

Eduardo Melinsky

University of Buenos Aires Paraguay 754 2do B Buenos Aires, 1057AAJ ARGENTINA 011541143123543 Fax: 011541143113617 edumel@melpel.com.ar

Gary Michalek

LaSalle University 1900 Olney Ave Box #258 Philadelphia, PA 19141 (215)951-1133 Fax: (215)951-1805 michalek@LaSalle.edu

Dean Nelson

University of Pittsburgh at Greensburg 150 Finoli Dr. Greensburg, PA 15601 (724)837-7040

Krzysztof Ostaszewski

Illinois State University Campus Box 4520 Normal, IL 61790-4520 (309)438-7226 Fax: (309)438-5866 krzysio@ilstu.edu

Jeffrey Pai

University of Manitoba 430 Drake Center 181 Freedman Crescent Winnipeg, MB R3T 5V4 CANADA (204)474-7426 Fax: (204)474-7545

Rahul A. Parsa

Drake University 3416 SW 24th St Des Moines, IA 50321 (515)271-3770 Fax: (515)271-4518 rahul.parsa@drake.edu

Maijian Qian

California Štate University 800 N. St College Blvd Math Department - CSUF Fullerton, CA 92834 (714)278-3680 Fax: (714)278-3972 mqian@fullerton.edu

Jiandong Ren

University of Western Ontario 23-400 Skyline Ave London, ON N5X0B3 CANADA (519)661-2111 (88209) Fax: (519)661-3813 jren@stats.uwo.ca

Troy D. Riggs

Union University 1050 Union University Drive Jackson, TN 38305-3697 (731)661-5257 triggs@uu.edu

Aaron Robertson

Colgate University Math Dept, 202 McGregory Hall 13 Oak Dr Hamilton, NY 13346-1398 (315)228-7229 Fax: (315)228-7004 arobertson@colgate.edu

Klaus D. Schmidt

Technische Universitat Dresden Lehrstuhl für Versicherungsmathematik Technische Universität Dresden D-01062 Dresden, GERMANY 0114935146337092 Fax: 0114935146337251 klaus.d.schmidt@tu-dresden.de

David J. Schmitz

North Central College 30 N. Brainard Street Naperville, IL 60540 (630)637-5232 Fax: (630)637-5180 djschmitz@noctrl.edu

David P.M. Scollnik

University of Calgary 2500 University Drive N.W. Department of Math & Statistics Calgary, AB T2N 1N4 CANADA (403)220-7677 Fax: (403)282-5150 scollnik@ucalgary.ca

Michael Sherris

University of New South Wales School of Actuarial Studies Australian School of Business Sydney, Kensington, NSW, 2052 AUSTRALIA 01161293852333 Fax: 01161293851883 m.sherris@unsw.edu.au

Mark R. Snavely

Carthage College 2001 Alford Park Dr Kenosha, WI 53140 (262)551-5714 snavely@carthage.edu

Ranee Thiagarajah

Illinois State Üniversity Department of Mathematics Stevenson Hall - 303D Normal, IL 61790-4520 (309)438-7789 kthiaga@ilstu.edu

Gustavo Ventura

George Washington University 1336 Fairmont Street Northwest Washington, DC 20009 (202)297-0311 venturag@gwu.edu

Richard Verrall

Cass Business School City University 106 Bunhill Row London, ECIY 8TZ UNITED KINGDOM 01102070408601 Fax: 01102070408899 r.j.verrall@city.ac.uk

Mark C. Vonnahme

University of Illinois College of Business, Dept. of Finance 1206 S. Sixth St., 331 Wohlers Hall Champaign, IL 61820 (217)244-0350 Fax: (217)333-1144 mvonnahm@illinois.edu

Brazauskas Vytaras

University of Wisconsin Department of Math Science PO Box 413 Milwaukee, WI 53201 (414)229-5656 Fax: (414)229-4907 vytaras@uwm.edu

Thomas P. Wakefield

Youngstown State University One University Plaza Youngstown, OH 44512 (330)941-1395 Fax: (330)941-3170 tpwakefield@ysu.edu

Ben Zehnwirth

Insureware Pty Ltd. 40-44 St. Kilda Rd Suite 6 & 7 St Kilda, 3182 AUSTRALIA 01161395336333 Fax: 01161395336033 admin@insureware.com

CODE OF PROFESSIONAL CONDUCT

(As Amended November 12, 2000) (Effective Date: January 1, 2001)

The purpose of this Code of Professional Conduct ("Code") is to require Actuaries to adhere to the high standards of conduct, practice, and qualifications of the actuarial profession, thereby supporting the actuarial profession in fulfilling its responsibility to the public. An Actuary shall comply with the Code. An Actuary who commits a material violation of the provisions of the Code shall be subject to the profession's counseling and discipline procedures.

The Precepts of the Code identify the professional and ethical standards with which an Actuary must comply in order to fulfill the Actuary's responsibility to the public and to the actuarial profession. The Annotations provide additional explanatory, educational, and advisory material on how the Precepts are to be interpreted and applied.

In addition to this Code, an Actuary is subject to applicable rules of professional conduct or ethical standards that have been promulgated by a Recognized Actuarial Organization for the jurisdictions in which the Actuary renders Actuarial Services. Actuarial Services are considered to be rendered in the jurisdictions in which the Actuary intends them to be used unless specified otherwise by an agreement between a Recognized Actuarial Organization for any such jurisdictions that have adopted the Code.

Laws may also impose obligations upon an Actuary. Where requirements of Law conflict with the Code, the requirements of Law shall take precedence.

An Actuary must be familiar with, and keep current with, not only the Code, but also applicable Law and rules of professional conduct for the jurisdictions in which the Actuary renders Actuarial Services. An Actuary is responsible for securing translations of such Laws or rules of conduct as may be necessary.

Definitions:

As used throughout the Code, the following terms are capitalized and have the meanings indicated:

Actuarial Communication: A written, electronic, or oral communication issued by an Actuary with respect to Actuarial Services.

- <u>Actuarial Services:</u> 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.
- <u>Actuary</u>: An individual who has been admitted to a class of membership to which the Code applies by action of any organization having adopted the Code. When the term "actuary" is used without being capitalized, it refers to any individual practicing as an actuary, regardless of organizational membership or classification.
- <u>Confidential Information</u>: Information not in the public domain of which an Actuary becomes aware as a result of providing Actuarial Services to a Principal. It includes information of a proprietary nature and information that is legally restricted from circulation.

Law: Statutes, regulations, judicial decisions, and other statements having legally binding authority.

Principal: A client or employer of the Actuary.

<u>Recognized Actuarial Organization</u>: An organization that has been accepted for full membership in the International Actuarial Association or a standards setting, counseling, or discipline body to which authority has been delegated by such an organization.

Professional Integrity

PRECEPT 1. An Actuary shall act honestly, with integrity and competence, and in a manner to fulfill the profession's responsibility to the public and to uphold the reputation of the actuarial profession.

ANNOTATION 1-1. An Actuary shall perform Actuarial Services with skill and care.

- ANNOTATION 1-2. An Actuary shall not provide Actuarial Services for any Principal if the Actuary has reason to believe that such services may be used to violate or evade the Law or in a manner that would be detrimental to the reputation of the actuarial profession.
- ANNOTATION 1-3. An Actuary shall not use a relationship with a third party or with a present or prospective Principal to attempt to obtain illegal or materially improper treatment from one such party on behalf of the other party.
- ANNOTATION 1-4. An Actuary shall not engage in any professional conduct involving dishonesty, fraud, deceit, or misrepresentation or commit any act that reflects adversely on the actuarial profession.

Qualification Standards

PRECEPT 2. An Actuary shall perform Actuarial Services only when the Actuary is qualified to do so on the basis of basic and continuing education and experience and only when the Actuary satisfies applicable qualification standards.

ANNOTATION 2-1. It is the professional responsibility of an Actuary to observe applicable qualification standards that have been promulgated by a Recognized Actuarial Organization for the jurisdictions in which the Actuary renders Actuarial Services and to keep current regarding changes in these standards.

Code of Professional Conduct

ANNOTATION 2-2. The absence of applicable qualification standards for a particular type of assignment or for the jurisdictions in which an Actuary renders Actuarial Services does not relieve the Actuary of the responsibility to perform such Actuarial Services only when qualified to do so in accordance with this Precept.

Standards of Practice

PRECEPT 3. An Actuary shall ensure that Actuarial Services performed by or under the direction of the Actuary satisfy applicable standards of practice.

- ANNOTATION 3-1. It is the professional responsibility of an Actuary to observe applicable standards of practice that have been promulgated by a Recognized Actuarial Organization for the jurisdictions in which the Actuary renders Actuarial Services and to keep current regarding changes in these standards.
- ANNOTATION 3-2. Where a question arises with regard to the applicability of a standard of practice, or where no applicable standard exists, an Actuary shall utilize professional judgment, taking into account generally accepted actuarial principles and practices.
- ANNOTATION 3-3. When an Actuary uses procedures that depart materially from those set forth in an applicable standard of practice, the Actuary must be prepared to justify the use of such procedures.

Communications and Disclosure

PRECEPT 4. An Actuary who issues an Actuarial Communication shall take appropriate steps to ensure that the Actuarial Communication is clear and appropriate to the circumstances and its intended audience and satisfies applicable standards of practice.

- ANNOTATION 4-1. An Actuary who issues an Actuarial Communication shall ensure that the Actuarial Communication clearly identifies the Actuary as being responsible for it.
- ANNOTATION 4-2. An Actuary who issues an Actuarial Communication should indicate the extent to which the Actuary or other sources are available to provide supplementary information and explanation.

PRECEPT 5. An Actuary who issues an Actuarial Communication shall, as appropriate, identify the Principal(s) for whom the Actuarial Communication is issued and describe the capacity in which the Actuary serves.

PRECEPT 6. An Actuary shall make appropriate and timely disclosure to a present or prospective Principal of the sources of all direct and indirect material compensation that the Actuary or the Actuary's firm has received, or may receive, from another party in relation to an assignment for which the Actuary has provided, or will provide, Actuarial Services for that Principal. The disclosure of sources of material compensation that the Actuary's firm has received, or may receive, is limited to those sources known to, or reasonably ascertainable by, the Actuary.

- ANNOTATION 6-1. An Actuary who is not financially and organizationally independent concerning any matter related to the performance of Actuarial Services should disclose to the Principal any pertinent relationship that is not apparent.
- ANNOTATION 6-2. An Actuary employed by a firm that operates in multiple locations is subject to the requirement of disclosure of sources of compensation that the Actuary's firm may receive in relation to Actuarial Services with respect to a specific assignment for that Principal, regardless of the location in which such compensation is received.

Conflict of Interest

PRECEPT 7. An Actuary shall not knowingly perform Actuarial Services involving an actual or potential conflict of interest unless:

- (a) the Actuary's ability to act fairly is unimpaired;
- (b) there has been disclosure of the conflict to all present and known prospective Principals whose interests would be affected by the conflict; and
- (c) all such Principals have expressly agreed to the performance of the Actuarial Services by the Actuary.

Control of Work Product

PRECEPT 8. An Actuary who performs Actuarial Services shall take reasonable steps to ensure that such services are not used to mislead other parties.

ANNOTATION 8-1. An Actuarial Communication prepared by an Actuary may be used by another party in a way that may influence the actions of a third party. The Actuary should recognize the risks of misquotation, misinterpretation, or other misuse of the Actuarial Communication and should therefore take reasonable steps to present the Actuarial Communication clearly and fairly and to include, as appropriate, limitations on the distribution and utilization of the Actuarial Communication.

Confidentiality

PRECEPT 9. An Actuary shall not disclose to another party any Confidential Information unless authorized to do so by the Principal or required to do so by Law.

Courtesy and Cooperation

PRECEPT 10. An Actuary shall perform Actuarial Services with courtesy and professional respect and shall cooperate with others in the Principal's interest.

- ANNOTATION 10-1. Differences of opinion among actuaries may arise, particularly in choices of assumptions and methods. Discussions of such differences between an Actuary and another actuary, or in observations made by an Actuary to a Principal on the work of another actuary, should be conducted objectively and with courtesy and respect.
- ANNOTATION 10-2. A Principal has an indisputable right to choose a professional advisor. An Actuary may provide service to any Principal who requests it, even though such Principal is being or has been served by another actuary in the same matter.
- ANNOTATION 10-3. An Actuary in the course of an engagement or employment may encounter a situation such that the best interest of the Principal would be served by the Actuary's setting out an alternative opinion to one expressed by another actuary, together with an explanation of the factors that lend support to the alternative opinion. Nothing in the Code should be construed as preventing the Actuary from expressing such an alternative opinion to the Principal.
- ANNOTATION 10-4. An Actuary may be requested to advise a Principal for whom the Actuary knows or has reasonable grounds to believe that another actuary has provided, or is providing, Actuarial Services with respect to the same matter. In such event, the Actuary may choose to consult with such other actuary both to prepare adequately for the assignment and to make an informed judgment as to whether there are circumstances involving a potential violation of the Code that might affect acceptance of the assignment. The Actuary should request the Principal's consent prior to such consultation.
- ANNOTATION 10-5. When a Principal has given consent for a new or additional actuary to consult with an Actuary with respect to a matter for which the Actuary is providing or has provided Actuarial Services, the Actuary shall cooperate in furnishing relevant information, subject to receiving reasonable compensation for the work required to assemble and transmit pertinent data and documents. The Actuary shall not refuse to consult or cooperate with the prospective new or additional actuary based upon unresolved compensation issues with the Principal unless such refusal is in accordance with a pre-existing agreement with the Principal. The Actuary need not provide any items of a proprietary nature, such as internal communications or computer programs.

Advertising

PRECEPT 11. An Actuary shall not engage in any advertising or business solicitation activities with respect to Actuarial Services that the Actuary knows or should know are false or misleading.

ANNOTATION 11-1. Advertising and business solicitation activities encompass all communications by whatever medium, including oral communications, that may directly or indirectly influence any person or organization in deciding whether there is a need for Actuarial Services or in selecting a specific Actuary or firm to perform Actuarial Services.

Titles and Designations

PRECEPT 12. An Actuary shall make use of membership titles and designations of a Recognized Actuarial Organization only in a manner that conforms to the practices authorized by that organization.

ANNOTATION 12-1. "Title" refers to any title conferred by a Recognized Actuarial Organization related to a specific position within that organization. "Designation" refers to a specific reference to membership status within such organization.

Violations of the Code of Professional Conduct

PRECEPT 13. An Actuary with knowledge of an apparent, unresolved, material violation of the Code by another Actuary should consider discussing the situation with the other Actuary and attempt to resolve the apparent violation. If such discussion is not attempted or is not successful, the Actuary shall disclose such violation to the appropriate counseling and discipline body of the profession, except where the disclosure would be contrary to Law or would divulge Confidential Information.

- ANNOTATION 13-1. A violation of the Code is deemed to be material if it is important or affects the outcome of a situation, as opposed to a violation that is trivial, does not affect an outcome, or is one merely of form.
- ANNOTATION 13-2. An Actuary is not expected to discuss an apparent, unresolved material violation of the Code with the other Actuary if either Actuary is prohibited by Law from doing so or is acting in an adversarial environment involving the other Actuary.

PRECEPT 14. An Actuary shall respond promptly, truthfully, and fully to any request for information by, and cooperate fully with, an appropriate counseling and disciplinary body of the profession in connection with any disciplinary, counseling or other proceeding of such body relating to the Code. The Actuary's responsibility to respond shall be subject to applicable restrictions on Confidential Information and those imposed by Law.

CAS CODE OF PROFESSIONAL ETHICS FOR CANDIDATES

(Approved by the CAS Board of Directors on November 12, 2006)

The purpose of the Casualty Actuarial Society (CAS) Code of Professional Ethics for Candidates (Candidate Code) is to require actuarial candidates to adhere to the high standards of conduct, practice, and qualifications of the actuarial profession, thereby supporting the actuarial profession in fulfilling its responsibility to the public. An actuarial candidate shall comply with the Candidate Code. An actuarial candidate who commits a material violation of the provisions of the Candidate Code shall be subject to the counseling and discipline procedures of the CAS.

"Actuarial candidates" are those persons who have registered for a CAS specific exam but have yet to fulfill all of the requirements for admission into the CAS. In situations where actuarial candidates perform actuarial work, their "principal" is defined as their client or employer. "Actuarial services" are 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.

- RULE 1: An actuarial candidate shall act honestly, with integrity and competence, to uphold the reputation of the actuarial profession.
- RULE 2: An actuarial candidate shall not engage in any professional conduct involving dishonesty, fraud, deceit, or misrepresentation or commit any act that reflects adversely on the actuarial profession.
- RULE 3: An actuarial candidate shall perform actuarial services with courtesy and professional respect and shall cooperate with others in the principal's interest.
- RULE 4: An actuarial candidate shall adhere to the CAS Policy on Examination Discipline.
- Rule 5: Actuarial candidates are not authorized to use membership designations of the CAS until they are admitted to membership by the CAS Executive Council.
- RULE 6: An actuarial candidate shall not disclose to another party any confidential information unless authorized to do so by the principal or required to do so by law, statute, or regulation. Confidential information includes information of a proprietary nature and information that is legally restricted from circulation.
- RULE 7: An actuarial candidate shall respond promptly, truthfully, and fully to any request for information by, and cooperate fully with, appropriate counseling and disciplinary body of the CAS in connection with any disciplinary, counseling or other proceeding of such body relating to the Candidate Code. The actuarial candidate's responsibility to respond shall be subject to applicable restrictions listed in Rule 6 and those imposed by law, statute, or regulation.

Candidates may obtain a copy of the Casualty Actuarial Society Rules of Procedure for Disciplinary Actions Involving Candidates by sending a written request to the CAS Office.

USE OF TITLES AND DESIGNATIONS

Precept 12 of the Code of Professional Conduct and Section 1 of Article III of the Constitution are concerned primarily with the use of titles by members and, in particular, with designations related to the Society. The purpose of this material is to clarify the proper use of a designation. For this purpose, the term title means any title conferred by an employer or actuarial organization related to a specific position within that employer or actuarial organization. The term designation means a reference to a specific membership status within an actuarial organization.

(a) Society Titles and Designations

The designation "EC.A.S." or "A.C.A.S." may be signed, whichever is applicable, or may be written as "Fellow of the Casualty Actuarial Society," or "Associate of the Casualty Actuarial Society," respectively. No person is authorized to use these designations until such use has been approved by action of the Casualty Actuarial Society. As an example of the use of titles by a member, consider a member who has the title of "Vice President-Administration" conferred by the Society and is also a Fellow of the Society. The member would sign as follows:

J.H. Jones, F.C.A.S.

Vice President-Administration

or

J.H. Jones, Fellow of the Casualty Actuarial Society

Vice President-Administration

An Affiliate may refer to him/herself as "Affiliate of the Casualty Actuarial Society" or "Affiliate Member of the Casualty Actuarial Society." An Affiliate may not refer to him/herself as a "Member of the Casualty Actuarial Society" and is not authorized to append CAS initials to his/her name.

The use of a Society membership designation is optional.

(b) Employment Titles

A member may have an employment title conferred by an employer in addition to the titles and designations conferred by the Society. As an example of the use of employment titles by a member, consider a member who has the employment title "Assistant Actuary" and is also a Fellow of the Society. The member would sign as follows:

J.H. Jones, F.C.A.S.

Assistant Actuary

or

J.H. Jones, Fellow of the Casualty Actuarial Society

Assistant Actuary

The use of a Society membership designation is optional.

(c) Society Business

A member of the Board of Directors may use the designation "Member of the Board of Directors, Casualty Actuarial Society" only when dealing with Society business or when authorized to speak for the Society. This authorization principle applies to all elective or appointive positions in the Society. Regardless of offices held, either elected or appointed, the member may never speak for the Society or for one of its committees unless authorized to do so by the Board of Directors.

(d) Non-Society Activities

A member may not include on a letterhead or signature block any references to Society titles and committee membership held in the Society, except when used for Society business.

(e) References

It would not be a violation of Precept 12 to refer to offices held in the Society in biographical material of any type (including material in connection with a book or article written by a member) or in connection with other generally published material. It would not be a violation to refer to offices held in the Society when giving testimony in a court of law or before a public body, provided it is made clear that the member does not speak for the Society or one of its committees unless specifically authorized to do so.

It would not be a violation to use such biographical material when appropriate in announcing a member's promotion or change in employment or on any similar occasion. The ultimate test is whether the reader could be led to conclude that the member is speaking for the Society or one of its component parts.

1	Statement of Principles
2	Regarding
3	Property and Casualty
4	Loss and Loss Adjustment
5	Expense Reserves
6	(Adopted by the Board of Directors of the CAS, May 1988)
7 8 9 10 11	The purpose of this Statement is to identify and describe principles applicable to the evaluation and review of loss and loss adjustment expense reserves. Because of their size and the uncertainties in the estimation process, the evaluation of these reserves requires the use of proper actuarial and statistical procedures. The financial condition of a property and casualty insurer cannot be assessed accurately without sound reserve estimates.
12	This Statement consists of three parts:
13 14 15	I. Definitions II. Principles III. Considerations
16 17 18 19	The definitions in the next section apply to both loss reserves and loss adjustment expense reserves. For the purpose of this statement the terms loss and claim are used interchangeably, and the term insurer is meant to represent any risk bearer for property and casualty exposures, whether an insurance company, self-insured entity, or other.
20	I. Definitions
21 22	A loss reserve is a provision for its related liability. A total loss reserve is composed of five elements, although the five elements may not necessarily be individually quantified:
23 24 25 26 27	 case reserve provision for future development on known claims reopened claims reserve provision for claims incurred but not reported provision for claims in transit (incurred and reported but not recorded)
28	Before these five elements are discussed, certain key dates and terms need to be defined.
29 30 31	The accounting date is the date that defines the group of claims for which liability may exist, namely all insured claims incurred on or before the accounting date. The accounting date may be any date selected for a statistical or financial reporting purpose.
32 33 34 35 36	The valuation date is the date through which transactions are included in the data base used in the evaluation of the liability, regardless of when the analysis is performed. For a defined group of claims as of a given accounting date, reevaluation of the same liability may be made as of successive valuation dates. A valuation date may be prior to, coincident with or subsequent to the accounting date.
37 38	The carried loss reserve is the amount shown in a published statement or in an internal statement of financial condition.
39 40 41	An indicated loss reserve is the result of the application of a particular loss reserving evaluation procedure. An indicated loss reserve for a given accounting date likely will change from one valuation date to another.

42 A division is often required between reserves for known claims and reserves for claims which 43 have been incurred but not reported (IBNR). The reserve for known claims* represents 44 the amount, estimated as of the valuation date, that will be required for future payments on 45 claims that already have been reported to the insurer. The IBNR reserve represents the amount 46 that must be provided for future payments on insured losses that have occurred but that have not 47 been reported.

48 The case reservet is defined as the sum of the values assigned to specific known claims 49 whether determined by claims adjusters or set by formula. Adjusters' estimates are the aggregate of 50 the estimates made by claims personnel for individual claims, based on the facts of the particular 51 claims. Formula reserves are reserves established for groups of claims for which certain classifying 52 information is provided. Formula reserving may be applied to individual claims or to aggregations of 53 claims with similar characteristics through use of average claim values or factors applied to 54 representative statistics (for example, premiums in force or earned premiums).

55 Development is defined as the change between valuation dates in the observed values of 56 certain fundamental quantities that may be used in the loss reserve estimation process. For 57 example, the observed number of reported claims associated with losses occurring within a 58 particular calendar period often will be seen to increase from one valuation date to the next until 59 all claims have been reported. The pattern of accumulating claims represents the development of 60 the number of claims.

61 In a similar fashion, the amount of claim payments for losses occurring within a specific 62 calendar period also will be seen to increase at succeeding valuation dates. In this case the 63 pattern of accumulating payments represents the development of claim costs and is usually 64 referred to by the term paid development. The concept of development also applies to incurred 65 losses. Incurred development is defined as the difference between estimates of incurred costs at 66 two valuation dates for a defined group of claims.

67 The provision for future development on known claims relates to incurred development on 68 those claims reported to an insurer on or before a specific accounting date that are still open on 69 that accounting date. Incurred development on such claims can be either increasing or 70 decreasing.

71 The reopened claims reserve is a provision for future payments on claims closed as of the 72 accounting date that may be reopened due to circumstances not foreseen at the time the claims 73 were closed. In some instances, post-closing payments or recoveries for claims not actually 74 reopened may be included with the development on known claims.

75 For many insurers a claim is considered to be reported when it is first recorded in the 76 accounting records of the insurer. Conceptually, two elements form the IBNR reserve. The first 77 of these elements is the provision for claims incurred but not reported, referred to as the "pure" 78 IBNR. This provision results from the normal delay that occurs in reporting losses. The second 79 element is the provision for claims in transit, which are incurred and reported but not recorded. This 80 provision represents the additional time consumed by the insurer's recording procedures. 81 As a practical matter it is not always feasible to measure these two elements separately, but it is 82 important to understand the effect reporting procedures can have on the amount of IBNR

The reserve for known claims is also sometimes referred to by other labels such as the

91

The term case reserve is sometimes used in place of the reserve for known claims.

[&]quot;reported reserve," the "reserve for claims adjusted or in the process of adjustment," or the

[&]quot;reserve for unpaid losses excluding IBNR."

⁸³ 84 85 86 87 88 89 90

However, as defined, the case reserve does not include the provision for future development on known claims.

92 reserve. For some insurers claims in transit are considered known claims. The IBNR reserve

93 must provide for the ultimate value of IBNR claims including the development which is

94 expected to occur on these claims after reporting.

95 Loss adjustment expenses include allocated loss adjustment expenses and unallocated loss 96 adjustment expenses. Allocated loss adjustment expenses are those expenses, such as attorneys' 97 fees and other legal costs, that are incurred in connection with and are assigned to specific claims. 98 Unallocated loss adjustment expenses are all other claim adjustment expenses and include salaries, 99 utilities and rent apportioned to the claim adjustment function but not readily assignable to specific 100 claims. The definition of allocated and unallocated loss adjustment expenses for reserving purposes 101 varies among insurers, and an individual insurer's practice for reserving may not always conform 102 to its definition for statistical reporting or ratemaking purposes.

103 Since allocated expenses are assigned to specific claims, all of the analyses performed on 104 loss data can also be performed on allocated loss expense data. Thus, the allocated loss 105 adjustment expense reserve can be divided into known and IBNR components. All of the 106 concepts discussed in the preceding paragraphs, as well as each of the five elements of the loss 107 reserve, have similar meanings with regard to the allocated loss adjustment expense reserve.

108 Although the same statistical procedures normally do not apply to unallocated expenses, the 109 unallocated loss adjustment expense reserve can still be divided into known reserve and IBNR 110 components, and the concept of a particular valuation date is meaningful.

- 111 II. Principles
- 112 1. An actuarially sound loss reserve for a defined group of claims as of a given valuation date 113 is a provision, based on estimates derived from reasonable assumptions and appropriate 114 actuarial methods for the unpaid amount required to settle all claims, whether reported or 115 not, for which liability exists on a particular accounting date.
- 116 2. An actuarially sound loss adjustment expense reserve for a defined group of claims as of a 117 given valuation date is a provision, based on estimates derived from reasonable 118 assumptions and appropriate actuarial methods, for the unpaid amount required to 119 investigate, defend, and effect the settlement of all claims, whether reported or not, for 120 which loss adjustment expense liability exists on a particular accounting date.
- 121 3. The uncertainty inherent in the estimation of required provisions for unpaid losses or loss 122 adjustment expenses implies that a range of reserves can be actuarially sound. The true 123 value of the liability for losses or loss adjustment expenses at any accounting date can be 124 known only when all attendant claims have been settled.
- 125 4. The most appropriate reserve within a range of actuarially sound estimates depends on 126 both the relative likelihood of estimates within the range and the financial reporting context 127 in which the reserve will be presented.

128 Although specific reserve requirements may vary, the same basic principles apply in each 129 context in which the reserves are stated, including statutory balance sheets, statements of 130 opinion on loss reserves, and reports to shareholders or securities regulators. Guidance in the 131 application of these principles is provided in the Considerations section of this statement.

132 III. Considerations

133 Understanding the trends and changes affecting the data base is a prerequisite to the 134 application of actuarially sound reserving methods. A knowledge of changes in underwriting, 135 claims handling, data processing and accounting, as well as changes in the legal and social 136 environment, affecting the experience is essential to the accurate interpretation and evaluation of 137 observed data and the choice of reserving methods.

138

A knowledge of the general characteristics of the insurance portfolio for which reserves are

139 to be established also is important. Such knowledge would include familiarity with policy 140 provisions that may have a bearing on reserving, as well as deductibles, salvage and 141 subrogation, policy limits, and reinsurance.

142 Data Organization

143 The categorization of claims by time unit is extremely important. The successful organization of a 144 data base for reserving revolves around five key dates:

- accident date, which is the date on which the loss occurred, or for those losses that cannot be identified with a single isolated event, the date on which the loss is deemed to have occurred
- report date, which is the date on which the loss is first reported to the insurer (in practice it is often taken to be the recorded date)
- recorded date, which is the date on which the loss is first entered in the statistical records of
 the insurer
- 152 accounting date
- 153 valuation date

Commonly, insurers compile claim data by accident periods (accident year, accident quarter, accident month, etc.), which group together all claims with accident dates falling within particular fiscal periods; or by policy periods, which group all claims relating to policies written during particular fiscal periods. Claim information by accident year is required for various financial reporting schedules. Many insurers also compile claim data by report periods, which group together all claims with report dates falling within specified fiscal periods.

160 Claims with report dates equal to or prior to a particular accounting date would be classified 161 as known or reported claims with respect to the accounting date, but claims with report dates 162 later than a particular accounting date and with accident dates equal to or earlier than the 163 accounting date would be classified as IBNR with respect to the accounting date.

164 The preceding paragraph gives the precise definition of IBNR claims. In practice a broader 165 definition is sometimes used in which the IBNR reserve denotes the provision for late reported 166 claims, development on known claims, and a provision for reopened claims.

167 The ambiguity regarding the definition of IBNR can result from the differing strategies 168 insurers may employ in approaching loss reserving. The two common strategies are the report 169 period approach and the accident period approach. In the report period approach the adequacy 170 of existing reserves on reported claims is estimated on the basis of the historical results. Further 171 analysis is required in order to measure the emergence of IBNR claim. In a pure accident 172 period approach, the ultimate cost of all claims, both reported and unreported, arising from each 173 accident period is estimated. This approach results in an estimate of the loss reserve without 174 segregation of claims incurred but not reported. The estimated loss reserve is then apportioned 175 between reserves for IBNR and known claims on a suitable basis. Because accident period 176 techniques do not necessarily require separate treatment of reported and unreported claims, 177 their use can lead to a broader definition IBNR as mentioned above.

178 The method of assigning report dates to reopened claims can also affect the IBNR reserve. 179 Because reopened claims are generated from claims previously reported and closed, there is 180 general agreement that the provision for this liability should be included in the reserve for 181 known claims. Some insurers, however, establish new report dates for reopened claims and 182 thereby consider the provision for these claims as a component of the IBNR reserve.

183 Homogeneity

184 Loss reserving accuracy often is improved by subdividing experience into groups exhibiting 185 similar characteristics, such as comparable claim experience patterns, settlement patterns or size 186 of loss distributions. For a heterogeneous product, such as commercial multi-peril or 187 miscellaneous liability insurance, consideration should be given to segregating the experience 188 into more homogeneous groupings. Other example applications concern the distinctions 189 between personal and commercial risks and between primary and excess coverage. 190 Additionally, subdividing or combining the data so as to minimize the distorting effects of 191 operational or procedural changes should be fully explored.

192 Credibility

193 Credibility is a measure of the predictive value that the actuary attaches to a body of data. 194 The degree to which consideration is given to homogeneity is related to the consideration of 195 credibility. Credibility is increased by making groupings more homogeneous or by increasing 196 the number of claims analyzed within each group. A group of claims should be large enough to 197 be statistically reliable. Obtaining homogeneous groupings requires refinement and partitioning of 198 the total data base. There is a point at which partitioning divides data into cells too small to 199 provide credible development patterns. Each situation requires a balancing of the homogeneity 200 and amount of data in each grouping. Thus, line and coverage definitions suitable for the 201 establishment of reserves for large insurers can be in much finer detail than in the case of small 202 insurers. Where a very small group of claims is involved, use of external information such as 203 industry aggregates may be necessary.

204 Data Availability

Data should meet requirements for the proper evaluation of reserves. Existing information systems may impose constraints while more suitable data are being developed. Whatever data are used in analysis of reserves, they must reconcile to the insurer's financial records. If reserves are established in less detail than necessary for reporting requirements, procedures for properly assigning the reserves to required categories must be developed.

210 Emergence Patterns

211 The delay between the occurrence of claims and the recording of claims depends upon both the 212 line of business and the insurer's practices. In general, property claims are reported quickly, 213 whereas the reporting of liability claims may be substantially delayed.

A review of the insurer's claims practices should be made to assure that assumptions regarding the claims process are appropriate. If a change in claims procedures is identified, its impact on emergence patterns should be evaluated.

217 Settlement Patterns

218 The length of time that it normally takes for reported claims to be settled will affect the 219 choice of the loss reserving methods. Lines of business for which claims settle quickly generally 220 are less subject to reserve uncertainty. A claim arising under collision coverage, for example, 221 tends to be settled quickly, and the amount of settlement is usually close to the original estimate. 222 Conversely, a bodily injury liability claim often requires a long time to settle. Moreover, the 223 amount of settlement often varies considerably from the original estimate, since it depends on 224 the interaction of complex variables such as the type and severity of the injury and the 225 intricacies of the judicial process.

226 Development Patterns

227 The pattern of development on known claims should be carefully reviewed. An insurer's 228 claims procedures will affect the manner in which the case reserves develop for any group of 229 claims, and changes in claims practices may affect the consistency of historical developments. 230 Further, the length of time to settlement may affect the observed development.

If reserves have been established at present values, the payments of claims, by themselves, cause an appearance of upward development apart from development due to other factors. To interpret development patterns correctly, the development history should be restated to remove the effect of discounting.

235 Frequency and Severity

The same total dollars of losses may arise from a few very large claims or from many small claims. Reserve estimates will tend to be more accurate for losses resulting from a high frequency/low severity group of claims than from a low frequency/high severity group of claims. Therefore, the evaluation of reserves for low frequency/high severity groups of claims will ordinarily require more extensive analysis. If the exposure for the group of claims being considered includes the potential for claims of a magnitude not present in historical data, adjustments should be made to reflect the expectation of such claims.

243 Reopened Claims Potential

244 The tendency for closed claims to reopen varies substantially among lines of business. 245 Judicial opinions and legislation can affect the reopening of claims, as can changes in an 246 insurer's procedures.

247 Claims-Made

248 Some coverages may be provided on a policy form covering claims reported during a 249 certain period rather than claims arising out of occurrences during that period. Claims-made 250 data should be segregated from experience on occurrence policies. It may be necessary to 251 augment claims-made statistics with appropriate report period statistics generated under 252 occurrence programs.

253 Certain provisions may modify the claims-made policy upon fulfillment of conditions 254 stipulated in the contract. Review of the contract wording is necessary to determine the 255 appropriate reserve, if any, for occurrences prior to the policy effective date or claims reported 256 after the policy expiration.

257 Aggregate Limits

For certain insurance coverages, such as products and professional liability, aggregate policy limits may act to restrict total potential incurred losses and therefore reserve requirements. In the review of groups of claims where aggregate limits apply, modeling techniques or audit tests of the data will reveal to what extent limit ceilings have been reached and assist in determining how reserve projections may have to be modified.

263 Salvage, Subrogation, and Collateral Sources

For a proper evaluation of an insurer's total reserve position, the potential impact of salvage and subrogation on the group of claims under consideration should be evaluated even though statutory accounting may prohibit a deduction from loss reserves. In addition, the impact of coinsurance, deductibles, coordination of benefits, second injury fund recoveries, as well as any other collateral sources, should be considered.

269 Generally Accepted Accounting Principles

270 Reports to shareholders and to securities regulators are governed by generally accepted 271 accounting principles (GAAP). GAAP reserves may be defined differently from statutory 272 reserves. For example, GAAP reserves are ordinarily reduced by anticipated salvage and 273 subrogation. The same principles of analysis used for statutory estimates can be applied to 274 GAAP reserve estimates.

275 Reinsurance

276 Reserves are affected by the types of reinsurance plans and retentions that were and are in 277 force, and the impact of changes in net retentions should be evaluated. To determine the effect 278 of reinsurance it may be appropriate to analyze direct and ceded experience separately. The 279 recoverability of ceded reinsurance is a further consideration; generally, it is addressed 280 separately from the reserve evaluation process.

281 Portfolio Transfers, Commutations, and Structured Settlements

282 Portfolio transfers, commutations, and structured settlements generally recognize the time
283 value of money. Such transactions should be evaluated for their impact on the loss reserves and
284 the development patterns.

285 Pools and Associations

286 The loss liabilities of an insurer depend to some degree on forces beyond its control, such as 287 business obtained through participation in voluntary and non-voluntary underwriting pools and 288 associations. The operating and reserving policies of these organizations vary, and adjustments 289 to reserves reported by the pools and associations may be warranted.

290 Operational Changes

The installation of a new computer system, an accounting change, a reorganization of claims responsibility or changes in claims handling practices or underwriting programs are examples of operational changes that can affect the continuity of the loss experience. The computation of the reserves should reflect the impact of such changes.

295 Changes in Contracts

296 Changes in contract provisions, such as policy limits, deductibles, or coverage attachment 297 points, may alter the amounts of claims against an insurer. Such contractual changes may affect 298 both the frequency and severity of claims.

299 External Influences

300 Due regard should be given to the impact of external influences. External influences include 301 the judicial environment, regulatory and legislative changes, residual or involuntary market 302 mechanisms, and economic variables such as inflation.

303 Discounting

There are circumstances where loss reserves are stated on a present value basis. To calculate or evaluate such reserves, it is generally appropriate to perform an analysis on an undiscounted basis and then apply the effect of discounting.

307 **Provision for Uncertainty**

308 A reserve estimate should take into account the degree of uncertainty inherent in its 309 projections. A reserve stated at its ultimate value may include an implicit provision for 310 uncertainty due to the time value of money. If a reserve is to be stated at a present value, it may 311 be appropriate to include an explicit provision for uncertainty in its undiscounted amount. 312 Further, an explicit provision for uncertainty may be warranted when the indicated ultimate

313 reserve value is subject to a high degree of variability.

314 Reasonableness

315 The incurred losses implied by the reserves should be measured for reasonableness against 316 relevant indicators, such as premiums, exposures, or numbers of policies, and expressed 317 wherever possible in terms of frequencies, severities, and loss ratios. No material departure from 318 expected results should be accepted without attempting to find an explanation for the variation.

319 Loss-Related Balance Sheet Items

320 The loss reserve analysis may have implications for other loss-related balance sheet items.
321 These include contingent commissions, retrospective premium adjustments, policyholder
322 dividends, premium deficiency reserves, minimum statutory reserves and the deduction for
323 unauthorized reinsurance.

324 Loss Reserving Methods

Detailed discussion of the technology and applicability of current loss reserving practices is beyond the scope of this statement. Selection of the most appropriate method of reserve estimation is the responsibility of the actuary. Ordinarily the actuary will examine the indications of more than one method when estimating the loss and loss adjustment expense liability for a specific group of claims.

330 Standards of Practice

This statement provides the principles of loss reserving. The actuary should also be familiarwith standards of practice, which address the application of these principles.

1 2 3 4	Statement of Principles Regarding Property and Casualty Insurance Ratemaking (Adopted by the Board of Directors of the CAS May 1988)
5 6 7 8	The purpose of this Statement is to identify and describe principles applicable to the determination and review of property and casualty insurance rates. The principles in this Statement are limited to that portion of the ratemaking process involving the estimation of costs associated with the transfer of risk. This Statement consists of four parts:
9	I. Definitions
10	II. Principles
11	III. Considerations
12	IV. Conclusion
13 14 15 16	The principles contained in this Statement provide the foundation for the development of actuarial procedures and standards of practice. It is important that proper actuarial procedures be employed to derive rates that protect the insurance system's financial soundness and promote equity and availability for insurance consumers.
17 18	Although this Statement addresses property and casualty insurance ratemaking, the principles contained in this Statement apply to other risk transfer mechanisms.
19	I. Definitions
20 21 22 23 24 25	Ratemaking is the process of establishing rates used in insurance or other risk transfer mechanisms. This process involves a number of considerations including marketing goals, competition and legal restrictions to the extent they affect the estimation of future costs associated with the transfer of risk. This Statement is limited to principles applicable to the estimation of these costs. Such costs include claims, claim settlement expenses, operational and administrative expenses, and the cost of capital. Summary descriptions of these costs are as follows:
26	• Incurred losses are the cost of claims insured.
27 28	• Allocated loss adjustment expenses are claims settlement costs directly assignable to specific claims.
29 30	• Unallocated loss adjustment expenses are all costs associated with the claim settlement function not directly assignable to specific claims.
31	• Commission and brokerage expenses are compensation to agents and brokers.
32 33	• Other acquisition expenses are all costs, except commission and brokerage, associated with the acquisition of business.
34	• Taxes, licenses and fees are all taxes and miscellaneous fees except federal income taxes.
35 36	• Policyholder dividends are a non-guaranteed return of premium charged to operations as an expense.
37	• General administrative expenses are all other operational and administrative costs.
38 39	• The underwriting profit and contingency provisions are the amounts that, when considered with net investment and other income, provide an appropriate total after-tax return.

40 II. Principles

Ratemaking is prospective because the property and casualty insurance rate must bedeveloped prior to the transfer of risk.

- 43 Principle 1: A rate is an estimate of the expected value of future costs.
- 44 Ratemaking should provide for all costs so that the insurance system is financially sound.
- 45 Principle 2: A rate provides for all costs associated with the transfer of risk.

46 Ratemaking should provide for the costs of an individual risk transfer so that equity among 47 insureds is maintained. When the experience of an individual risk does not provide a credible 48 basis for estimating these costs, it is appropriate to consider the aggregate experience of similar 49 risks. A rate estimated from such experience is an estimate of the costs of the risk transfer for 50 each individual in the class.

51 Principle 3: A rate provides for the costs associated with an individual risk transfer.

Ratemaking produces cost estimates that are actuarially sound if the estimation is based on Principles 1, 2, and 3. Such rates comply with four criteria commonly used by actuaries: reasonable, not excessive, not inadequate, and not unfairly discriminatory.

55 Principle 4: A rate is reasonable and not excessive, inadequate, or unfairly discriminatory 56 if it is an actuarially sound estimate of the expected value of all future costs associated with an 57 individual risk transfer.

58 III. Considerations

59 A number of ratemaking methodologies have been established by precedent or common 60 usage within the actuarial profession. Since it is desirable to encourage experimentation and innovation in ratemaking, the actuary need not be completely bound by these precedents. 61 62 Regardless of the ratemaking methodology utilized, the material assumptions should be 63 documented and available for disclosure. While no ratemaking methodology is appropriate in all 64 cases, a number of considerations commonly apply. Some of these considerations are listed 65 below with summary descriptions. These considerations are intended to provide a foundation 66 for the development of actuarial procedures and standards of practice.

67 Exposure Unit

68 The determination of an appropriate exposure unit or premium basis is essential. It is desirable 69 that the exposure unit vary with the hazard and be practical and verifiable.

Data

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71 Historical premium, exposure, loss and expense experience is usually the starting point of 72 ratemaking. This experience is relevant if it provides a basis for developing a reasonable 73 indication of the future. Other relevant data may supplement historical experience. These other 74 data may be external to the company or to the insurance industry and may indicate the general 75 direction of trends in insurance claim costs, claim frequencies, expenses and premiums.

76 Organization of Data

77 There are several acceptable methods of organizing data including calendar year, accident year, 78 report year and policy year. Each presents certain advantages and disadvantages; but, if 79 handled properly, each may be used to produce rates. Data availability, clarity, simplicity, and 80 the nature of the insurance coverage affect the choice.

81 Homogeneity

Ratemaking accuracy often is improved by subdividing experience into groups exhibiting similar characteristics. For a heterogeneous product, consideration should be given to segregating the experience into more homogeneous groupings. Additionally, subdividing or combining the data so as to minimize the distorting effects of operational or procedural changes should be fully explored.

87 Credibility

88 Credibility is a measure of the predictive value that the actuary attaches to a particular 89 body of data. Credibility is increased by making groupings more homogeneous or by increasing 90 the size of the group analyzed. A group should be large enough to be statistically reliable. 91 Obtaining homogeneous groupings requires refinement and partitioning of the data. There is a 92 point at which partitioning divides data into groups too small to provide credible patterns. Each 93 situation requires balancing homogeneity and the volume of data.

94 Loss Development

95 When incurred losses and loss adjustment expenses are estimated, the development of 96 each should be considered. The determination of the expected loss development is subject to the 97 principles set forth in the Casualty Actuarial Society's Statement of Principles Regarding 98 Property and Casualty Loss and Loss Adjustment Expense Reserves.

99 Trends

100 Consideration should be given to past and prospective changes in claim costs, claim 101 frequencies, exposures, expenses and premiums.

102 Catastrophes

103 Consideration should be given to the impact of catastrophes on the experience and procedures 104 should be developed to include an allowance for the catastrophe exposure in the rate.

105 Policy Provisions

106 Consideration should be given to the effect of salvage and subrogation, coinsurance, 107 coverage limits, deductibles, coordination of benefits, second injury fund recoveries and other 108 policy provisions.

109 Mix of Business

110 Consideration should be given to distributional changes in deductibles, coverage 111 limitations or type of risks that may affect the frequency or severity of claims.

112 Reinsurance

113 Consideration should be given to the effect of reinsurance arrangements.

114 Operational Changes

115 Consideration should be given to operational changes such as changes in the underwriting 116 process, claim handling, case reserving and marketing practices that affect the continuity of the 117 experience.

118 Other Influences

119 The impact of external influences on the expected future experience should be considered. 120 Considerations include the judicial environment, regulatory and legislative changes, guaranty 121 funds, economic variable, and residual market mechanisms including subsidies of residual 122 market rate deficiencies.

123 Classification Plans

124 A properly defined classification plan enables the development of actuarially sound rates.

125 Individual Risk Rating

126 When an individual risk's experience is sufficiently credible, the premium for that risk 127 should be modified to reflect the individual experience. Consideration should be given to the 128 impact of individual risk rating plans on the overall experience.

129 Risk

130 The rate should include a charge for the risk of random variation from the expected costs. This 131 risk charge should be reflected in the determination of the appropriate total return consistent with 132 the cost of capital and, therefore, influences the underwriting profit provision. The rate should also 133 include a charge for any systematic variation of the estimated costs from the expected costs. This 134 charge should be reflected in the determination of the contingency provision.

135 Investment and Other Income

136 The contribution of net investment and other income should be considered.

137 Actuarial Judgment

138 Informed actuarial judgments can be used effectively in ratemaking. Such judgments may 139 be applied throughout the ratemaking process and should be documented and available for 140 disclosure.

141 IV. Conclusion

142 The actuary, by applying the ratemaking principles in this Statement, will derive an estimation 143 of the future costs associated with the transfer of risk. Other business considerations are also a part 144 of ratemaking. By interacting with professionals from various fields including underwriting, 145 marketing, law, claims, and finance, the actuary has a key role in the ratemaking process.

1 2 3 4	Statement of Principles Regarding Property and Casualty Valuations (As ADOPTED SEPTEMBER 22, 1989)
5 6 7 8 9	The purpose of this Statement is to identify and describe principles applicable to property and casualty valuations. The Statement establishes fundamental concepts for research and education regarding valuation techniques. The principles in this Statement provide the foundation for actuarial procedures and standards of practice regarding valuations. These principles apply to valuations regarding any risk bearer of property and casualty contingencies.
10	This Statement consists of three parts: I. Definitions
11	II. Principles
12	III. Discussion
13	I. Definitions
14 15 16 17	Valuation is the process of determining and comparing, for the purpose of assessing a risk bearer's financial condition as of a given date, called the valuation date, the values of part or all of a risk bearer's obligations and the assets and considerations designated as supporting those obligations.
18 19	A valuation is carried out in accordance with specified rules or assumptions selected or prescribed in accordance with the purpose of the valuation.
20 21	A risk bearer is a person or other entity that is exposed to the risk of financial losses that may arise out of specified contingent events during a specified period of exposure.
22	Cash flows are receipts or disbursements of cash.
23 24	An asset is cash held or any other resource that can generate receipts or reduce disbursements.
25 26 27	An obligation is a commitment by or requirement of a risk bearer to make disbursements with respect to financial losses arising out of specified contingent events or with respect to any type of other expense or investment commitment.
28 29 30	A consideration is a receipt or a reduction in disbursements in exchange for accepting the risk of financial losses that may arise out of specified contingent events during a specified period of exposure.
31	II. Principles
32 33	1. Every obligation, consideration or asset, with the exception of cash held, is associated with one or more items of cash flow.
34 35	2. The value of every item of cash flow depends upon the following valuation variables, each of which may involve uncertainty:
36	a. the occurrence of the item of cash flow,
37	b. the amount of the item of cash flow,
38 39	c. the interval of time between the valuation date and the date of occurrence of the item of cash flow, and
40 41	d. a rate of interest related to the interval of time between the valuation date and the date of occurrence of the cash flow.

- 42 3. The degree of uncertainty affecting each valuation variable for any item of cash43 flow associated with a given asset, obligation or consideration depends upon:
- 44 a. the nature of the asset, obligation or consideration,
- 45 b. the various environments (e.g. regulatory, judicial, social, financial and 46 economic environments) within which the valuation is being performed, and
 - c. the predictive value of the data used to estimate the valuation variables associated with each item of cash flow.
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 4. In general, the values of items of cash flow associated with a given asset, obligation or consideration, and the values of assets, obligations and considerations themselves are not only uncertain, they are also not independent of each other. Consequently, the degree of uncertainty relative to the combined value of items of cash flow or of assets, obligations and considerations reflects the uncertainties affecting the underlying valuation variables and arising out of the interaction of those variables in the process of combination.
- 56 5. The value of an asset, obligation or consideration is equal to the combined values57 of its constituent items of cash flow.
- 58 6. The result of a valuation is the combined value of the assets, obligations
 59 and considerations involved in the valuation with due recognition of the offsetting
 60 characteristics of receipts and disbursements.
- 61 7. These valuation principles apply to any valuation whether it involves a risk bearer's total
 62 assets, obligations and considerations as of a given valuation date or only identified
 63 segments of the risk bearer's assets, obligations and considerations including:
 - a. commitments made on or before the valuation date, or
- b. the commitments in (a) and commitments projected to be made after the valuation date, or
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- c. only those commitments projected to be made after the valuation date.
- 68 III. Discussion

Although no valuation methodology is appropriate in all situations, a number of
considerations commonly apply. Some of these considerations are discussed in this section.
These discussions are intended to provide a foundation for the development of actuarial
procedures and standards of practice.

73 Data

74 Data to be used in valuation include descriptions of the characteristics of the risk bearer's 75 assets, obligations and considerations. The descriptions should be sufficiently detailed to permit 76 reasonable projections of cash flows from these assets, obligations and considerations.

77 The actuary may use a risk bearer's own experience relative to its assets, obligations and 78 considerations if this provides a basis for developing a reasonable indication of the future. 79 Moreover, the actuary may use external data drawn from relevant experience of the insurance 80 industry, other financial institutions or surrounding environments.

81 Organization of Data

82 Organization of data for valuation is affected by the characteristics of the assets, 83 obligations and considerations involved and the characteristics of the valuation variables

84 connected with them.

85 Much of the data organizational work relative to obligations and considerations begins 86 with data used in connection with the reserving and ratemaking processes. However, it may be 87 necessary to adjust the results of those processes so as to take into account differences between 88 cash flow dates and the various dates used in those processes. It may also be necessary to 89 identify any relevant expenses that fall outside the data used in the reserving and ratemaking 90 processes and reflect them in the valuation process. It is important, too, to identify potential 91 adjustments to considerations like retrospective premiums or audit premiums that may be 92 received or paid in the future.

93 If a valuation deals with detailed analyses of cash flows, data organization relative to assets 94 involves principally the work of classifying the assets and developing projections of contractual or 95 anticipated cash flows from them. It is also often necessary to divide assets into classes of 96 investment by such things as time to maturity or quality and to project flows of anticipated receipts 97 into particular classes of investment in accordance with an assumed investment strategy.

98 Homogeneity

Valuation accuracy is often improved by dividing the data on assets, obligations and
 considerations into groups exhibiting similar characteristics. Homogeneous groupings recognize,
 when appropriate, the interrelationships between those assets, obligations and considerations.

102 Credibility

103 Credibility is a measure of the predictive value attached to a body of data. Credibility is 104 increased by defining groups of assets, obligations or considerations so as to increase their 105 homogeneity or to increase the volume of data relative to the groups. Increasing homogeneity 106 may fragment the groups to such an extent that their predictive value is reduced to an 107 unacceptable level. Each situation requires balancing homogeneity and the volume of data.

108 Operating Conditions

109 Operating conditions should be reflected in valuation. Operating conditions include mix
 110 of business, underwriting, claims handling, marketing, accounting, premium processing,
 111 portfolio of investments, investment strategy, and reinsurance programs.

112 Environmental Conditions

113 Environmental conditions should be reflected in valuation. The regulatory, judicial, 114 social, financial, and economic environments are some of the major ones to be considered.

115 Losses and Loss Adjustment Expenses

116 The major obligations of a risk bearer are usually those relating to the future payment of 117 losses and loss adjustment expenses. When these obligations are estimated for purposes of a 118 valuation, their future development may be a factor for consideration. Development of losses 119 and loss adjustment expenses is defined in the Casualty Actuarial Society's Statement of 120 Principles Regarding Property and Casualty Loss and Loss Adjustment Expense Reserves.

121 Rules and Assumptions

122 The objective of a valuation is to produce an assessment of a risk bearer's financial 123 condition that will be useful for the purpose for which the valuation is performed. The purpose 124 of the valuation affects the rules and assumptions used.

Cash flow analyses produce projections of receipts and disbursements. These analyses are conceptually the most fundamental of the forms of valuation. The other forms of valuation

127 can be derived from cash flow analysis by suitable selection of rules and assumptions relative to 128 the valuation variables.

Balance sheets and income statements are often produced internally by a risk bearer using rules and assumptions established by its management to assess financial strength and earning performance.

Appraisals are intended to help determine the value of all or a part of a risk bearer's assets, obligations and considerations related to property and casualty contingencies, taking into account not only financial statement items but also off-balance-sheet items such as investment in staff, leases and so on. Appraisals are usually made in connection with mergers and acquisitions and the sale of parts of a risk bearer's business.

GAAP accounting rules or assumptions are intended to produce financial statements thatthe financial community believes are useful for assessing a risk bearer's earning capacity.

139 Statutory accounting rules or assumptions are intended to produce financial statements 140 that regulators believe are useful for assessing whether an insurer's financial condition warrants 141 its being allowed to write insurance.

The value of any of the valuation variables with respect to a given set of items of cash flow may be determined on the basis of any set of rules and assumptions that is appropriate to the purpose of the valuation. Rules and assumptions relative to different classes of assets, obligations or considerations need not necessarily be consistent with each other as long as the differences are consistent with the purpose of the valuation, or the effect of the inconsistencies is not great enough to invalidate the valuation.

Assumptions are based on a reasonable review of whatever appropriate facts are available supplemented by the actuary's experience and judgement as necessary. Rules are helpful to the assurance of appropriately consistent treatment of facts and assumptions in valuation. Both rules and assumptions can be helpful to achieving a result with a degree of refinement consistent with the purpose of the valuation. Anticipated changes in operating and environmental conditions should be reflected in the rules and assumptions applied to a valuation.

154 Valuation Variables

The valuation variables of occurrence, amount, interval of time and rate of interest describe the quantitative characteristics of all cash flows for purposes of financial analysis. All of the valuation variables are conceptually involved in the determination of the values of all assets, obligations and considerations. The roles of the valuation variables in the determination of values may be limited by the selection of rules or assumptions.

160 The value of any item of cash flow changes with the passage of time. This implies that 161 valuations of the same sets of items of cash flow performed at different valuation dates will in 162 general produce different results. It further implies that a valuation of one set of items of 163 cash flow performed as of a given valuation date will produce a result that is not directly 164 comparable with that of a second valuation of the same or a different set of items of cash flow 165 performed as of a different date.

166 Uncertainty

167 The result of a valuation involves uncertainty because of the uncertainty connected with 168 the valuation variables themselves and because the result of combining valuation variables is 169 affected by whatever relationships may exist among them.

170 Valuation Risks

171 172	The classes:	risks associated with valuation can be summarized into the following three broad
173	1.	Asset Risk
174 175 176		The risk that the occurrence, amount or timing of items of cash flow connected with assets will differ from that anticipated as of the valuation date for reasons other than a change in the interest environment.
177		There are several factors that affect asset risk:
178 179 180 181 182 183		a. Type—This factor relates to whether the asset is, for example, a bond, a mortgage, a preferred or common stock, an agent's balance, a recoverable reinsurance item or interest accrued but not paid. It also relates to such things as whether a bond is callable and, if so, at what premiums; whether a bond has a sinking fund provision; or whether prepayments can be made on a mortgage and, if so, what penalty may apply.
184 185 186		b. Quality—This factor relates to the financial strength of the entity from which the cash flow is to be received and the relative standing of the type of asset in the hierarchy of financial instruments.
187 188 189 190		c. Deferred Acquisition Expenses, Goodwill and Similar Assets—This factor relates to the valuation question of whether any asset of these or similar types involves cash flows that are not explicitly or implicitly recognized elsewhere in the valuation.
191 192 193 194 195		d. Investment Strategy—This factor relates to plans for investment of receipts in various types of security, taking into account such things as the insurer's needs for funds to meet obligations as they mature, market conditions at the time the investments are made, and the overall condition of the insurer's investment portfolio at the time the investments are made.
196 197 198		e. Trends—This factor relates to changes over time in the valuation variables other than interest, insofar as they affect assets, and in the degree of uncertainty affecting them.
199	2.	Obligation and Consideration Risk
200 201 202		The risk that the occurrence, amount or timing of items of cash flow connected with obligations and considerations will differ from that anticipated as of the valuation date for reasons other than a change in the interest environment.
203		There are several factors that affect obligation and consideration risk:
204		a. Coverage—This factor relates to the riskiness of the coverage involved.
205 206 207 208 209 210		b. Type—This factor relates to whether the obligation is, for example, a loss or loss adjustment reserve, an unearned premium reserve, a contingent commission reserve, a retrospective premium adjustment reserve, a policyholder or shareholder dividend reserve, a premium deficiency reserve, an income tax liability, an investment commitment or an account payable for something such as expenses, taxes, licenses, fees and assessments.
211 212 213		c. Commitment Provisions—This factor relates to the extent to which the range of the valuation variables may be effectively limited by terms of the commitments out of which the obligations arise. Examples of such commitment provisions are basic

- 214 limits, increased limits, aggregate limits, claims made, salvage and subrogation,
 215 coinsurance, deductibles, coordination of benefits and second injury fund
 216 recoveries.
- 217 d. Reinsurance Programs-This factor relates to the extent to which the range of the 218 valuation variables may be effectively limited by the terms of reinsurance programs 219 applicable to the commitments out of which the obligations arise. Examples of such 220 programs are those involving surplus, excess of loss and catastrophe reinsurance. 221 Frequency and severity of losses, attachment points and upper limits of reinsurance 222 are features of the programs relating to their limiting effect. On the other hand, 223 reinsurance programs also involve uncertainty as to whether reinsurance will be 224 collectible.
- 225 Exposure-This factor relates to the uncertainty involved in measuring or e. 226 projecting levels of exposure, and for periods beginning after the valuation date, the 227 considerations for those periods and the obligations to arise out of them. 228 Obligations and considerations related to these periods of exposure may be offset 229 against each other in recognition of the fact that the obligations would not arise if 230 the considerations were not received. Determination of whether obligations and 231 considerations relative to such periods should be recognized in a valuation depends 232 upon the timing relative to the valuation date of the commitments to accept risks 233 for those periods.
- f. Loss Development—This factor relates to the uncertainty arising out of
 changes over time in patterns of emergence, development, reopening,
 settlement and payment of claims.
 - g. Trends—This factor relates to changes over time in the valuation variables other than interest, insofar as they affect obligations and considerations, and in the degree of uncertainty affecting them.
- h. Large Latent Losses—This factor relates to the treatment of identifiable
 classes of very serious potential losses for which probable frequency and
 severity can not be reasonably estimated for a considerable period of time.
- i. Off-Balance-Sheet Items Such as Long-Term Leases and Commitments to Buy
 Securities—This factor relates to the valuation question of whether any
 obligation of these or similar types involve cash flows that are not explicitly
 or implicitly recognized elsewhere in the valuation.

247 3. Interest Risk

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- 248The risk that different amounts of change in the anticipated values, and the degree of249uncertainty therein, of obligations and of the assets and considerations with which the250obligations are being compared will occur:
 - i. simply because of a change in the interest environment, or
- ii. because a change in the interest environment brings about a change from expected
 experience as to the occurrence, amount or timing of items of cash flow connected
 with assets, obligations or considerations.
- 255 There are several factors that affect interest risk:
- a. Mismatch of Asset and Obligation Cash Flows—This factor relates to the
 development of an excess of a risk bearer's receipts over its required

258	disbursements or	vice versa.
200	anobalocificities of	vice versa.

- 259If an excess of receipts over required disbursements develops, the risk260bearer may not be able to invest the excess cash at yields that will produce261future cash flows large enough to meet its obligations as they mature. This is
"reinvestment" risk.
- 263If an excess of required disbursements over receipts develops, the risk264bearer may have to borrow or liquidate assets with yields below then current265market rates to make up the difference. Borrowing at a relatively high266interest rate, or inability to invest the difference at then current market rates267produces a reduction in the risk bearer's future profits. This is "market" risk.
- b. Changes in the Timing of Receipts and Disbursements—This factor relates to
 the preference of borrowers to prepay debt carrying high rates of interest
 when rates go down and to defer repayments of debt carrying low rates of
 interest when rates go up. For risk bearers of property and casualty
 contingencies, this risk affects mainly their assets.
- c. General Economy—This factor relates to the way in which things such as
 liquidity, inflation, demand for cash to fund expansion, government debt,
 trade imbalances and distortions in the yield curve affect the general level of
 interest rates.
- 277 d. Trends—This factor relates to changes over time in the interest valuation
 278 variable and in the degree of uncertainty affecting it and how those changes
 279 affect the other asset and obligation valuation variables.

280 Interaction with Other Professionals

The uncertainties that affect other actuarial fields, such as ratemaking and reserving, also affect valuation. In addition, valuation is affected by uncertainties met in other fields, such as marketing, underwriting, finance, regulation, risk management and so on. This implies that professionals working in other fields can be helpful in gathering information and developing rules and assumptions to be used in valuation.

286 Actuarial Judgment

287 It is important to apply actuarial judgment based on education and experience in selecting and 288 organizing data and making rules and assumptions to be used in the valuation process and in 289 assessing the reasonableness of the results.

PROCEDURES FOR RESPONDING TO QUESTIONS REGARDING CAS PRINCIPLES

(As Amended Februart 23, 1998)

The Casualty Actuarial Society has developed Principles for Loss and Loss Adjustment Expense Reserves (May 1988), Ratemaking (May 1988), and Valuations (September 1989). Discussion of the Principles is encouraged to stimulate the advancement of actuarial science, and the Society welcomes inquiries regarding the Principles from members and nonmembers. The procedure for dealing with such inquiries as approved by the Casualty Actuarial Society's Board of Directors on May 10, 1992, and amended by the Board of Directors on February 23, 1998, is described below.

Maintenance of the Principles is the responsibility of the Research and Development Committees. Inquiries should be directed to the Vice President-Research & Development for dissemination to the appropriate committee for analysis. Questions may arise from an actuary's own experience or from observed use of Principles by others.

The Vice President-Research & Development will send the inquiry to the appropriate research committee. The committee will prepare a proposed response which might involve elements such as the following:

- 1. Develop a committee interpretation of the Principles.
- 2. Identify areas of research required to resolve the inquiry.
- 3. Recommend discussion programs at CAS meetings to identify membership views on potentially complex issues.
- 4. Refer the inquiry to the appropriate practice council of the American Academy of Actuaries if the inquiry relates to the Standards of Practice rather than to the Principles. Refer the inquiry to the Actuarial Board for Counseling and Discipline if the inquiry relates to the appropriateness of conduct in a particular situation.
- 5. Consider revisions in the wording of the Principles.

The Vice President-Research & Development will review the committee-proposed response and submit it to the Executive Council for its approval. Interpretations of Principles, or changes to the wordings of the Principles, also require Board approval. The committee chairperson will communicate the status and resolution of each inquiry to its originator. Where appropriate, the nature of the resolution of the inquiry will also be communicated to the Society membership. In particular, any interpretation of Principles shall be published and made available to all members.

ANTITRUST COMPLIANCE POLICY

(As Adopted February 12, 1993)

Policy

The antitrust laws are among the most important of all federal and state laws affecting associations such as the Casualty Actuarial Society. The purpose of the antitrust laws is to preserve fair and honest competition. It is the long-standing and undeviating policy of the Casualty Actuarial Society to comply in all respects with the letter and spirit of the antitrust laws.

Education

To ensure compliance with federal and state antitrust laws, CAS members are responsible for understanding those laws. The CAS Guidelines for Antitrust Compliance are adopted as a part of this Antitrust Compliance Policy. Members of the Casualty Actuarial Society are urged to become familiar with the antitrust laws as set forth in the Guidelines. It is also the policy of the Society that educational presentations on antitrust issues are periodically presented to the membership.

Agenda

A detailed agenda is prepared for each meeting planned by the Society. If potential antitrust questions are raised by agenda items, they are reviewed in advance by legal counsel. The agenda is distributed to participants prior to the meeting.

Meetings

Meetings of the Casualty Actuarial Society are regularly scheduled. Meetings follow the prepared agenda. Counsel is invited to be present at meetings at which antitrust-sensitive issues are to be discussed.

Minutes

Accurate minutes are kept of all Casualty Actuarial Society Board of Directors and Executive Council meetings. The minutes of the preceding meeting are read and adopted before the start of the following meeting. After the minutes have been adopted, they are promptly distributed to attendees.

Recordkeeping

Records of the CAS reflect a factual, objective, and businesslike account of the activities of the Society without retaining useless or outdated information. Notes taken at meetings and drafts of documents having no further lasting value are discarded.

Other Sessions

All meetings or sessions held by the Casualty Actuarial Society shall fully comply with this Antitrust Compliance Policy.

GUIDELINES FOR ANTITRUST COMPLIANCE

(As Adopted February 12, 1993)

Introduction

The antitrust laws were first created nearly a century ago to preserve and promote free and fair competition throughout the United States economy. Antitrust laws advance competition by preventing businesses and professionals from engaging in anticompetitive conduct such as price-fixing, market allocation, boycotts, monopolies, and other activities that limit free trade. Associations like the Casualty Actuarial Society, by bringing together actuarial professionals and facilitating the exchange of ideas and information among those professionals, have the potential to undermine competition. It should be no surprise that associations are examined with a suspicious eye by government enforcers under the antitrust laws. Because associations are watched so carefully, the CAS must be especially vigilant to be sure all of its policies and programs are in compliance with antitrust requirements.

The Casualty Actuarial Society recognizes the importance of the antitrust laws. It is the long-standing and undeviating policy of the Casualty Actuarial Society to comply strictly with both the letter and spirit of these laws. To help assure that every aspect of the CAS is in accord with antitrust strictures, these guidelines address: (1) the areas of antitrust which may relate to the CAS and its members, (2) the dangers that must be avoided to minimize the risk of antitrust liability, and (3) policies and procedures to follow in the area of competition. Members should be aware, however, that these guidelines cannot address every potential area of antitrust concern for the CAS and its members. Whenever there is doubt, it is the policy of the CAS to seek the assistance of legal counsel experienced in antitrust matters.

Antitrust Laws in General

The basic federal antitrust statutes are the Sherman Act, the Clayton Act, the Federal Trade Commission Act, and the Robinson-Patman Act.

The Sherman Act prohibits contracts, combinations, and conspiracies in restraint of trade in interstate commerce. Among the agreements prohibited by the Sherman Act are those that involve price fixing; allocation of markets or customers; and boycotts of competitors, suppliers, or customers. The Sherman Act also condemns monopolization.

Guidelines for Antitrust Compliance

The Clayton Act prohibits various kinds of business behavior which tend to lessen competition or monopolize trade. Among the activities prohibited by the Clayton Act are exclusive dealing arrangements, acquisitions, and mergers which tend to lessen competition.

The Federal Trade Commission Act, in addition to prohibiting the anticompetitive activities made illegal by the Sherman and Clayton Acts, bans unfair methods of competition and unfair or deceptive acts and practices. Unlike the Sherman and Clayton Acts, where most of what is prohibited requires the action of two or more parties, individuals or firms can be liable under the Federal Trade Commission Act even though they did not act in concert with others.

The Robinson-Patman Act prohibits price discrimination where the effect is to lessen competition.

In addition to the federal laws, most states have enacted statutes similar to the Sherman Act, the Clayton Act, and the Federal Trade Commission Act. The federal antitrust laws may not apply to some otherwise anticompetitive activities of the Casualty Actuarial Society and its members because there is an exemption under the McCarran-Ferguson Act for those engaged in the "business of insurance." However, state antitrust laws might well still be applicable in those situations. It is impossible for these summary guidelines to outline each state's antitrust laws. When particular questions arise, the Casualty Actuarial Society and its members must look to their own states' antitrust laws and enforcement mechanisms. In the meantime, it is prudent to use the federal antitrust laws for general guidance.

Antitrust Enforcement

The Sherman Act is enforced by the Antitrust Division of the United States Department of Justice and by the Bureau of Competition of the Federal Trade Commission, as well as through private suits for three times actual damages ("treble damages") that can be brought by those who claim they have been injured as a result of antitrust violations. The government may bring either civil or criminal suits. The remedy for a civil suit in an action brought by the government is an injunction prohibiting the offender from future violations. Criminal penalties can include fines, imprisonment, or both.

Sherman Act violations carry stiff fines with the added deterrent of significant jail terms. A violation of the Act is a felony, punishable by up to three years in prison. In addition, steep fines can be imposed for Sherman Act violations.

The Federal Trade Commission enforces the Federal Trade Commission Act by issuing cease and desist orders to stop practices found to violate the law. The violation of a Commission order may result in a penalty of as much as \$10,000 per day. Any association, such as the Casualty Actuarial Society, that is adjudged to be in violation of the antitrust laws can be dissolved by court order.

It is important to note that each party found liable, no matter how small a role that party played, can be held liable for all damages caused by all participants in the antitrust conspiracy. The legal costs incurred in defending an antitrust challenge, beyond the penalties that might ultimately be imposed, frequently run into the hundreds of thousands of dollars. Some associations have paid millions of dollars to defend themselves in especially long or complex antitrust suits.

Antitrust Laws Applicable to the Casualty Actuarial Society

Focusing on the federal antitrust laws, of principal concern to the Casualty Actuarial Society and its members is Section 1 of the Sherman Act, which renders illegal all "contracts, combinations, and conspiracies" in restraint of trade in interstate commerce. Section 1 is interpreted to prohibit only agreements which have the effect of unreasonably restraining trade. A violation of the law occurs when, upon examination of all the facts and circumstances surrounding the conduct in question, it is determined that trade is unreasonably restrained.

Certain activities are regarded by courts as unreasonable by their very nature and are considered illegal per se. When an activity is designated a per se antitrust violation, a conclusive presumption is created that the activity was engaged in for no other purpose than to restrain trade. Practices within the per se category include agreements to fix or set prices, fees, rates, or commissions, as well as certain kinds of agreements to boycott competitors, suppliers, or customers. Note that the concept of "price fixing" encompasses agreements not only to raise prices but also to lower or stabilize prices. Virtually any agreement, arrangement, or understanding among competitors that involves tampering with free market prices, fees, rates, or premiums is a per se antitrust law violation.

The Sherman Act prohibition extends to any such agreement, whether written or oral, formal or informal, express or implicit. Only rarely is an anticompetitive agreement set out clearly in a written document. Antitrust liability is more often found by examining a course of business conduct from which a jury can infer the existence of an illegal conspiracy. The circumstances may be entirely innocent and lawful when viewed separately. But the same circumstances, when viewed in the aggregate, may be held to constitute an antitrust conspiracy.

Under the McCarran-Ferguson Act, the "business of insurance" is exempted from the federal antitrust laws when a state has regulated particular insurance activity. The McCarran-Ferguson Act exemption applies to three kinds of practices within the insurance business: practices that transfer or spread policyholders' risks, practices that are integral to the policy relationship between the insurer and the insured, and practices that are limited in effect to entities in the insurance industry. Under the McCarran-Ferguson Act, if an activity involves one of these three kinds of practices, and if the state has regulated that aspect of the insurance industry (as most have), federal antitrust laws do not apply. But state antitrust laws will apply unless the state also specifically exempts the "business of insurance" from its antitrust laws (many have not).

Despite the exemption from federal antitrust law in some instances, Casualty Actuarial Society members cannot afford to ignore the federal laws. Interpretation of the McCarran-Ferguson Act has narrowed the scope of the three "business of insurance" practices. For this reason, it is the policy of the CAS not to rely exclusively on the McCarran-Ferguson exemption, but also to carefully undertake all activities to avoid anticompetitive effects.

Basic Antitrust Rules for Members of the Casualty Actuarial Society

Guidelines for Antitrust Compliance

The legality of activities of associations and their members under the antitrust laws is determined according to standards no different from those used to determine the legality of the activities of other persons or firms. Special problems do arise, however, from the basic nature of an association. Many of an association's most fundamental policies and valuable programs directly impinge upon areas of particular antitrust concern.

The essential principle which should guide the policies and programs of the Casualty Actuarial Society and its members in order to avoid antitrust violations is that no illegal agreements, arrangements, or understandings should be reached or carried out through the Society. Conduct which might even give the appearance of an illegal agreement should also be avoided. Officers, directors, members and staff of the CAS should be alert to conduct that might fall into areas of particular antitrust concern.

In analyzing whether information to be exchanged at any Casualty Actuarial Society meeting or seminar is acceptable under antitrust guidelines, two critical questions must be asked. These are:

- 1. How does the information relate to the competitive behavior of the companies or firms represented by participants?
- 2. How does the information affect the independent business decisions of the companies or firms represented by participants?

As a general rule, if the exchange of information relates to the future competitive behavior of an individual company or will affect the independent business decisions of an individual company, then it is prohibited by these guidelines. More specific guidelines are as follows:

- 1. Discussion or exchange of information at Casualty Actuarial Society meetings or seminars concerning future price information or future competitive positions of an individual company or companies are prohibited.
- 2. Discussions or exchange of information at Casualty Actuarial Society meetings or seminars concerning current and future underwriting rules that deal with the eligibility for insurance with a particular company are prohibited.
- 3. Information concerning current experience of an individual competitor may, in some circumstances, be viewed as a means of "signaling" future pricing or business decisions. It is, therefore, potentially suspect, and should not be presented or exchanged without an affirmatively stated purpose that is consistent with current industry-wide data or experience and with competitive objectives.
- 4. Where an interpretation or analysis of information concerning past or current experience or prices is exchanged, the risk that the collective action will be linked to future market conduct is substantially increased. The prediction of a trend and its implications is, as a general rule, a matter for individual and independent decision-making.
- 5. A description of an actuarial methodology or mode of analysis of data and its logical internal consistency and past predictive accuracy is not a violation of the antitrust laws. Such a description, however, must be undertaken with extreme care to avoid being viewed as a means of "signaling" future pricing decisions. Any application or example of the methodology or analysis should be presented using insurance company experience that is generally available to the public or is hypothetical in nature rather than the past or current experience of any actual individual competitor.

In conclusion, the Casualty Actuarial Society policy prohibits any activities that could be considered anticompetitive or in violation of the antitrust laws. Any questions about the issues should be addressed to legal counsel.

GUIDE FOR THE SUBMISSION OF PAPERS TO VARIANCE

(As Updated November 3, 2006)

Introduction

The purpose of the guides is two-fold: To assist all authors in the preparation of papers and to acquaint authors with procedures and rules governing the submission, evaluation, and acceptance of papers for inclusion in *Variance*.

Mission Statement for Variance

Variance is a peer-reviewed journal published by the Casualty Actuarial Society to disseminate work of interest to casualty actuaries worldwide. The focus of *Variance* is original practical and theoretical research in casualty actuarial science. Significant survey or similar articles are also considered for publication. Membership in the Casualty Actuarial Society is not a prerequisite for submitting papers to the journal and submission by non-CAS members is encouraged.

Who May Submit Papers

Papers are welcomed from anyone regardless of their profession, education, geographic location, etc. Submissions will be evaluated based upon the merits of the paper and not authorship.

Paper Subject Matter

Papers must meet the following standards in order to be eligible for further consideration:

1. The topic selected must be relevant to casualty actuarial science.

2. The subject matter must fit into one or more of the following categories:

- **Research**—contains original ideas or new material
- Educational—for actuaries or others involved in the analysis, modeling, or management of risk
- **Practical**—provides synthesis of existing distinct processes, solutions to substantive problems, expositions of actuarial practices, compilation of current techniques, etc.

Papers on a wide variety of subjects are welcome. Casualty actuarial science is a broad and dynamic field and casualty actuaries must be knowledgeable about many subjects.

Guides for Preparation of Papers

Authors should observe the following guides in preparing papers:

1. **Style.** The form, clarity, and literary quality of the paper must meet scholarly standards that will reflect credit upon *Variance*. The paper should show care in preparation including special attention to grammar, spelling, and related editorial items. It should not be considered as a draft to which extensive alterations will be made. Care should be taken so that papers are not unnecessarily complex in their wording. It may be helpful to the author to have a peer review prior to submission.

2. Length. As a general rule, papers should be fewer than 10,000 words exclusive of tables and appendices.

3. Language. Papers should be in English.

4. **Abstract.** Each paper must begin with an abstract of not more than 200 words. This abstract should provide an overview of the paper. When a paper is accepted for publication in *Variance*, the abstract may be published elsewhere.

5. Format.

- Papers must be typed double-spaced on 8-1/2" by 11" stationery on one side of each sheet. Tables and footnotes may be single-spaced. Major captions should be centered and typed in capitals. Subcaptions must appear in the left-hand margin. Footnotes must be numbered consecutively throughout the paper.
- Appendices: Use letters (A, B, ...) to distinguish different appendices. Begin each appendix on a new page.
- Exhibits: All charts, exhibits, and tables in a paper should be numbered with Arabic numerals (1, 2,...). So far as possible, tables should be arranged so that they can be printed on a single page of the journal without undue reduction in size of type. Generally, tables will be incorporated into the body of the text when printed. References to the tables should be specific, ("Table 3") instead of general ("the table below").
- Figures: Figures are graphs, pictures, etc. They should be numbered with Arabic numerals (e.g., "Figure 3"). Generally, figures are photoreduced, not typeset; therefore, high-quality originals must be submitted to the CAS Publications Production Coordinator.
- Footnotes: Footnotes should be numbered with Arabic numerals. They should be numbered sequentially even through appendices. An asterisk may be used if there is only one footnote in the entire paper. Superscripts indicating footnotes should never be appended to numbers or formulae.
- Footnotes should not be used when they only include a bibliographic reference. In that case, use brackets to enclose a reference number.

6. **References.** Authors are encouraged to include a suitable bibliography in their papers. The works cited should be pertinent. References to books, periodicals, and journals of professional societies should be sufficiently complete to permit obtaining a copy of the source. References should list the publisher, publication, dates, and page numbers for the first and last pages.

7. Mathematical formulae, variables, and symbols.

- Every effort should be made to use mathematical formulae and symbols that are generally accepted in the actuarial profession and, most particularly, to use symbols that have been used previously in papers in *Variance*.
- Formulae: If formulae are to be numbered, numbers must be in the form of S.N., where S is the section number and N is a sequential number for the formula within the section. Avoid complex notation.
- Variables: Avoid using the same variable for different references; e.g., *i* for an index and an interest rate; *r* for risk load and rate of return; *v* for variance and discount rate, etc. Authors must italicize all variables.
- Symbols: When life contingency symbols are applicable, the international actuarial notation should be used. This notation is as described in The *Theory of Interest and Life Contingencies with Pension Applications: A Problem-Solving Approach*, by M.M. Parmenter.

8. **Complete.** Authors must provide enough information, either in the paper or through citations of references, so that peer reviewers and readers can assess the validity of the author's results. Statements that data or derivations cannot be provided because they are proprietary are unacceptable and will lead to rejection of the paper for publication.

9. Miscellaneous. Papers are expected to be free of criticism of a personal nature.

Procedures for Submission of Papers

Authors must submit their paper in electronic format, preferably as a PDF file or Microsoft Word document, to the Editor in Chief of *Variance* in care of the CAS Office. E-mail the file to Elizabeth Smith, CAS Manager of Publications at esmith@casact.org. The subject line should say "New Submission to *Variance*." If you have any questions, you can contact Elizabeth Smith.

The paper should not contain any information that might reveal the name or affiliation of the author. Instead, a transmittal document should be included containing the name, professional or educational designations, affiliation, email address, and telephone number of the author. The *Variance* Editorial Board will try to maintain anonymity of the author during the review process. The transmittal document should include responses to the following:

1. What is the title of paper?

2. Has the paper been published in a CAS *Discussion Paper Program*? Authors of discussion papers are encouraged to submit their papers for possible inclusion in *Variance*.

3. **Has the paper been published elsewhere, in whole or in part, in identical or similar form?** If the answer is "yes," the author should provide a copy of the previously published paper and a waiver by the publisher. In addition, the author should indicate whether the paper was reviewed for technical accuracy by the publisher. The author should set forth the special circumstances that merit its consideration for *Variance*. As a general rule, a paper that has been published in a refereed journal, or a paper that has been published or widely distributed elsewhere, will not be accepted for *Variance*.

4. Is the paper being simultaneously submitted elsewhere or will it be so submitted before the decision by the Editorial **Board of** *Variance*? If the answer is "yes," the author must provide the name of the journal and, if the paper is subject to copyright, provide a statement of willingness of the publisher to waive copyright. The CAS is unable to publish copyrighted material without a waiver from the copyright holder.

5. Does the paper contain any material that is copyrighted? This may include factual data, charts, graphs, etc. If so, has the author obtained a copyright waiver from the publisher or copyright holder? This waiver should be attached to the submitted paper.

6. Does the paper contain any material that is proprietary? This may include factual data, charts, graphs, etc. If so, has the author obtained permission from the relevant party to release the proprietary information? This permission sheet should be attached to the submitted paper.

7. Has the author read the Guides for the Submission of Papers and does the submission comply with these guides? If so, this should be stated affirmatively.

8. Is the author prepared to execute a copyright assignment agreement with the CAS (see copyright form appended to the Guides for the Submission of Papers)? If so, this should be stated affirmatively. A paper will not be accepted without a copyright agreement.

A copy of the transmittal document is available at www.casact.org/about/index.cfm?fa=transmittal. It is recommended that authors use this form. The CAS Publications Production Coordinator will acknowledge the receipt of the paper.

Exceptions

In specific instances, the Variance Editorial Board may recommend exceptions to these guides to the Vice President-Administration.

Initial Screening of Papers

Upon receipt of the paper, the CAS Publications Production Coordinator will determine whether the paper complies with the Procedures for Submission of Papers. If it does not, the paper will be returned to the author with comments as to the deficiencies. If the paper does comply, the paper will be forwarded on to the Editor in Chief and Associate Editor-Peer Review for initial review. If the paper is found to be relevant for publication in *Variance* the paper will be assigned to peer reviewers and the author will be informed of this decision.

It is the nature of refereed journals that it takes a considerable amount of time to review a paper. Authors may expect a preliminary response within 60 days. This preliminary response will concern the paper's probable acceptance or rejection and an estimate of the work required to ready the paper for acceptance. Authors can help the committee expedite the process by submitting carefully written and edited papers.

Procedure for Reviewing Papers

The Managing Editors determine the acceptability of the paper by evaluating the votes of the designated reviewers. The paper will be accepted or rejected based upon a majority decision of the reviewers. The Editorial Board's decision will place the paper in one of the following categories:

1. Accept. The Editorial Board will accept the paper unconditionally. The author will be notified of this decision through the Editor.

2. Accept with suggestions for improvement. The Editorial Board will suggest to the author ways in which the paper may be improved. The Editorial Board will communicate to the author its decision and its suggestions and will ask for affirmative action by the author either to revise the paper or to confirm the original submission.

3. Accept conditionally. The Editorial Board will require conditions that must be met by the author in order to make the paper acceptable. The Editorial Board will communicate to the author its decision, the reasons therefor and its conditions, and will ask the author either to revise the paper or to withdraw it from consideration.

4. **Request resubmission.** The Editorial Board will not accept the paper but will provide the author with general suggestions on how to reconstruct the paper to make it acceptable. This action contemplates papers with ideas acceptable for the journal but with inadequate presentation. The Editorial Board will communicate to the author its decision and reasons therefor along with its suggestions, and invite resubmission.

5. **Reject.** The Editorial Board will reject the paper and notify the author of its decision and the reasons therefor. An author, in case of rejection, may appeal to the Editor in Chief of *Variance*, who will conduct such inquiries as he/she deems appropriate and will make a binding decision based on one of the above four categories or rejection.

The following general principles will be observed by the Editorial Board in evaluating papers. Neither disagreement by the Editorial Board with opinions of the author nor unorthodoxy in the views expressed by the author will be a bar to acceptance of an otherwise suitable paper. The Editorial Board welcomes candor and genuine debate subject to the usual expectations of clarity, pertinence, and courtesy. The paper should recognize other viewpoints and explore its subject in sufficient depth to contribute to general enlightenment. Where the paper is found to be fallacious in logic or misleading in matters of fact, the Editorial Board will reject it.

When a paper includes material that the Editorial Board finds itself not qualified to evaluate, the Editors may seek advice or opinion from recognized experts.

Guidelines for Resubmitting Papers

When an author decides to resubmit a paper in connection with guidelines, all the rules and procedures for original submission will apply. The revised paper should be accompanied by a cover letter titled "RESUBMISSION." To expedite the resubmission review, authors are required to indicate in the resubmission cover letter how they have responded to the comments contained in the individual reviews. If an author does not agree with a recommended change, the author will provide a detailed explanation of the disagreement in the letter.

Discussions of Papers

As a general rule, discussions of previously published papers are subject to the guides in the same manner as papers, with the following exceptions:

1. Length. Discussions of papers should generally be fewer than 2,500 words. No abstract is required.

2. **Procedure for submission.** All requirements pertaining to anonymity of authors are waived. In general, authors of discussions should adhere to the Guidelines for Preparation of Papers explained above.

3. **General.** The author of a discussion should send a copy to the author of the paper being discussed with enough advance notice to allow the author of the paper to analyze and, if he or she wishes, prepare a reply to the discussion.

Authors' Replies

Authors will be given an opportunity to respond to discussions of their papers. Replies are treated in the same manner as discussion of papers.

Reprints

Twenty-five reprints will be provided by the Editorial Board of *Variance* to the author of a published paper soon after the distribution of the *Variance* volume in which the paper is printed.

Copyright

Before papers can be accepted for publication, authors are required to sign and return a CAS Copyright Assignment Agreement form to the CAS Office (see the following page for the form). This copyright agreement assigns the CAS exclusive right, title, and interest to the paper, including the right of the CAS to edit the paper and publish the author's name in connection with the publication of the paper in *Variance*. The CAS will grant back to the author certain rights under a limited license.

The Editorial Board of *Variance* will provide a Copyright Assignment Agreement form when notifying the author of the results of the committee's initial screening of a paper that falls into categories 1-3.

Authors will be asked to sign and return the Copyright Assignment Agreement form prior to official acceptance of the paper by the Editorial Board. Further consideration of the paper will be contingent upon the return of the signed Copyright Assignment Agreement form.

To protect the Casualty Actuarial Society's copyright, the following statement will be placed at the bottom of the first page of a paper after it has been accepted and before its reproduction:

"Reproduction in whole or in part without the written permission of the Casualty Actuarial Society is specifically prohibited, except that permission is granted to make copies for classroom or other educational use, but in no event for general distribution, advertising or promotional purposes, inclusion in new collective works, or for any commercial purposes."

Editing and Publication

Primarily, it is the responsibility of the author, working with the Editorial Board of *Variance*, to produce a final draft of the paper suitable for printing.

After the author has been notified that the paper has been accepted for publication and the editorial review phase has concluded, the author must supply the CAS Publications Production Coordinator with an electronic copy of the paper and its accompanying tables, appendices, etc. The electronic file should be prepared in a commonly used word processing software such as Microsoft Word or WordPerfect. The author should indicate the word processing program used to create the paper. If an author has any questions about the compatibility of a particular word processing system, he or she should contact the CAS Publications Production Coordinator.

The author will have an opportunity to read, revise, and comment on the first typeset copy of the paper. *Variance* will not publish a paper if the author has not approved the Editorial Board's suggestions at this stage. Any subsequent editing is normally minor and is not referred to the author.

COPYRIGHT ASSIGNMENT AGREEMENT

I am the author of _______ (the "work") to be published in *Variance*, the peer-reviewed journal of the Casualty Actuarial Society ("Society"). Based on good and valuable consideration, I grant to the Society all right, title and interest, including copyright, in and to the work. I authorize the Society to edit the work and to publish my name, photograph, and biographical data in connection with the Society's use and promotion of the work. I understand that I will receive no royalty or other compensation from the Society for the use of the work by the Society.

I understand that the Society grants back to me a limited permission to:

- 1) Present the work orally;
- 2) Distribute the work for educational, personal, noncommercial or commercial purposes or for my own professional use; and
- 3) Revise, adapt, or prepare derivative works and to present such works orally and distribute or authorize publication of the works for educational, personal, noncommercial or commercial purposes or for my own professional use;

provided that a) the works are not used in a manner that may be considered similar to the use or publication of the work by the Society, in which case the prior approval of the Society must be obtained, b) an appropriate written acknowledgment is included in the works that distribution is made with the permission of the Society, and c) the Society shall have the right of first refusal to use or publish any revised, adapted, or derivative works.

I also specifically grant a royalty-free license to any of the Society's members or other users of the Society's publications for use of any patents or other procedures described in the work.

I confirm to the Society that the work is my own, that I have the full right to make this assignment, that the work is factually accurate and lawful, that the work does not violate any copyright, proprietary or personal rights of others, and that I have obtained all necessary permissions from others.

E AUTHOR:	
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REED BY CASUALTY ACTUARIAL SOCIETY:	
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March 14, 2007 Publications/Variance Copyright Assignment 03-14-07

PRINCIPLES OF THE CASUALTY ACTUARIAL SOCIETY FOR BASIC EDUCATION

(As Adopted May 6, 2001)

The primary purpose of the Casualty Actuarial Society (CAS) basic education process is to ascertain whether candidates for the CAS designations have satisfied CAS learning objectives:

- 1. Basic education will remain a cornerstone of the CAS.
- 2. The CAS will assure that its members have the knowledge of those areas needed to practice effectively in the broad and expanding range of property, casualty, and similar business and financial risks (general insurance).
- 3. The CAS is committed to a depth of knowledge of techniques associated with the broad range of property, casualty, and similar business and financial risks.
- 4. The CAS will provide the basic education necessary to meet qualification standards to sign statements of actuarial opinion for general insurance and related specialties in at least the U.S. and Canada.
- 5. The education process will provide a balance among theoretical concepts, practical applications, and business acumen, to prepare our members to deliver high-quality service to meet current and projected future needs of employers and clients.
- 6. The CAS will approve the syllabus and examination standards used in determining eligibility for CAS membership.
- 7. Demonstration of mastery of the skill sets required of members is critical to basic education.
- 8. The CAS is committed to maintaining self-study as one route for attainment of designations.
- 9. The CAS will pursue strong working relationships with academia and professionals in related fields.
- 10. The CAS will attract a pool of strong candidates from a variety of backgrounds to the actuarial profession.
- 11. The CAS supports the goal of developing a global shared foundation of actuarial education, including joint sponsorship of examinations where consistent with other principles.
- 12. The CAS, as an educator of general insurance and related specialties, will remain a significant contributor to the worldwide actuarial profession.

EDUCATION POLICY STATEMENT

(As Adopted May 6, 2001)

The Casualty Actuarial Society is committed to the furtherance of actuarial knowledge through a comprehensive, integrated program of education and research, and to the establishment of related professional standards.

The basic educational objectives of the CAS shall be:

- 1. To provide and foster a program of actuarial education leading to Fellowship in the CAS
 - a. by defining the basic areas of knowledge and skills necessary to obtain the competence to practice in the various actuarial specialties,
 - b. by defining standards of educational achievement required for membership in the CAS,
 - c. by providing means of measuring educational achievement;
- 2. To provide and foster programs of actuarial education for members to update or expand their basic skills and knowledge;
- 3. To promote and foster educational activities and research that will expand and enhance the overall base of actuarial knowledge;
- 4. To provide mechanisms for disseminating to members and non-members resource material relating to actuarial topics of an educational nature.

CONTINUING EDUCATION POLICY STATEMENT

The Casualty Actuarial Society Board of Directors approved the CAS Continuing Education Policy at its May 23, 2010, meeting. Continuing professional education is an integral part of any profession. The Board believes that the CAS Continuing Education Policy represents a significant milestone in ensuring that CAS members stay accountable to their principals and the public by maintaining appropriate levels of relevant continuing education.

The CAS provides continuing education through live events and online content to actuaries and other professionals interested in property, casualty, and similar risk exposures. CAS works to create programs to enhance an actuary's skills and knowledge and help experienced professionals keep up to date on advances in the field.

Members are encouraged to review the complete CAS Continuing Education Policy for all of the details on the CE requirements. The Policy can be accessed through the CAS Web Site at http://www.casact.org/cms/files/CAS_CE_Policy.pdf.

SYLLABUS GOALS AND OBJECTIVES

(As Adopted February 3, 1986 and updated July 19, 2000)

One of the primary objectives of the Casualty Actuarial Society (CAS) is the development of qualified professionals in the field of casualty actuarial science. The CAS conducts an educational and examination program for prospective members in order to achieve this objective. The Syllabus goals and objectives are as follows:

- 1. To develop a general understanding of the social, political, regulatory, legal, economic, and financial environment of the business of property and casualty insurance and similar risk assessment as well as the historical development of that environment.
- 2. To develop a thorough understanding of the fundamental mathematical concepts applicable to solving insurance and similar risk assessment problems and to develop a high degree of skill in their applications.
- 3. To develop a comprehensive understanding of the business of property and casualty insurance, including underwriting, claims, marketing, and finance, as well as how these functions are performed and interrelate.
- 4. To develop a working knowledge of property and casualty insurance policies and contracts.
- 5. To develop an expert knowledge of a broad range of techniques to solve problems and to develop the ability to discern the appropriateness of techniques for particular applications based on a knowledge of the underlying assumptions, strengths, and weaknesses.
- 6. To develop an expert knowledge of a broad range of relevant and standard actuarial practices in order to present a framework for the use of problem-solving techniques.
- 7. To encourage a sense of inquisitiveness and creativity toward problem solving in order to foster an appreciation of the art in actuarial science.

EXAMINATIONS FOR ADMISSION

Admission to the Casualty Actuarial Society requires successful completion of a series of examinations designed to test a candidate's skills and knowledge of actuarial theory and practice.

The CAS sponsors examinations each year. To be eligible for Associateship, a candidate must have credit for three Validation by Educational Experience topics, pass the seven Associate-level examinations, successfully complete the Course on Professionalism, and submit an application with two letters of reference. Completion of the two additional Fellowship-level examinations is required to become a Fellow.

A syllabus of basic education is published annually. It details the study material for each examination. It also provides the examination and fee schedules, registration information, rules regarding the examination, and information on waivers, appeals, accommodations for those with disabilities, and other pertinent topics. The *CAS Syllabus of Basic Education* is available at no charge in the "Admissions/Exams" section of the CAS Web Site (www.casact.org/admissions/).

AMERICAN ACADEMY OF ACTUARIES

Successful completion of specified examinations of the Casualty Actuarial Society will satisfy the educational requirements of the American Academy of Actuaries. For further information, contact the Academy at:

American Academy of Actuaries 475 North Martingale Road, Suite 800 Schaumburg, Illinois 60173-2226 (847) 706-3513

2012 CAS BASIC EDUCATION SUMMARY

Associateship Requirements

Validation by Educational Experience

VEE-Applied Statistical Methods

VEE-Corporate Finance

VEE-Economics

Online Courses

Online Course 1 Risk Management and Insurance Operations (same as The Institutes Course CA1)⁺ Online Course 2 Insurance Accounting, Coverage Analysis, Insurance Law, and Insurance Regulation (same as The Institutes Course CA2)⁺

Examinations

Exam 1	Probability (same as SOA Exam P)*
Exam 2	Financial Mathematics (same as SOA Exam FM)*
Exam 3F	Models for Financial Economics (same as SOA Exam MFE) *
Exam 3L	Models for Life Contingencies and Statistics
Exam 4	Construction and Evaluation of Actuarial Models (same as SOA Exam C) *
Exam 5	Basic Techniques for Ratemaking and Estimating Claim Liabilities
Exam 6	Regulation and Financial Reporting (Nation-Specific)
	Actuarial Institute of Chinese Taipei

- Canada
- United States

Course on Professionalism

Fellowship Requirements

Fellowship requires all Associateship requirements plus the following:

- Exam 7 Estimation of Policy Liabilities, Insurance Company Valuation, and ERM
- Exam 8 Advanced Ratemaking
- Exam 9 Financial Risk and Rate of Return

CERA Requirements

The CERA designation requires all Associateship requirements plus the following:

- Exam 7 Estimation of Policy Liabilities, Insurance Company Valuation, and ERM
- Exam 9 Financial Risk and Rate of Return

Enterprise Risk Management and Modeling Seminar

Exam ST9 of the Institute and Faculty of Actuaries (U.K.) on Enterprise Risk Management

* Preliminary Actuarial Examinations administers the jointly sponsored Exams 1/P, 2/FM, 3F/MFE, and 4/C of the Canadian Institute of Actuaries, Casualty Actuarial Society, and the Society of Actuaries.

 \dagger The Institutes administer the exams for Online Courses 1/CA1 and 2/CA2.

2012 EXAMINATION SCHEDULE

	EXAM DATES	DURATION	START TIME	REGISTRATION DEADLINE
January Test Window	January 19-30, 2012	3 Hours	Various	December 8, 2011
- Limited paper/pencil sites	January 19, 2012	3 Hours	8:30 a.m.	December 8, 2011
March Test Window	March 15-26, 2012	3 Hours	Various	February 2, 2012
May Test Window	May 10-21, 2012	3 Hours	Various	March 29, 2012
- Limited paper/pencil sites	May 15, 2012	3 Hours	8:30 a.m.	March 29, 2012
July Test Window	July 19-30, 2012	3 Hours	Various	June 7, 2012
September Test Window	September 13-24, 2012	3 Hours	Various	August 2, 2012
- Limited paper/pencil sites	September 13, 2012	3 Hours	8:30 a.m.	August 2, 2012
November Test Window	November 8-19, 2012	3 Hours	Various	September 20, 2012

Exam 1/P by Computer-Based Testing

Note: Exam 1/P is administered by paper-and-pencil exam in limited sites outside the U.S. where CBT is not available on the dates indicated above.

Exam 2/FM by Computer-Based Testing

	EXAM DATES	DURATION	START TIME	REGISTRATION DEADLINE
February Test Window	February 8-18, 2012	3 Hours	Various	December 21, 2011
- Limited paper/pencil sites	February 8, 2012	3 Hours	8:30 a.m.	December 21, 2011
April Test Window	April 9-18, 2012	3 Hours	Various	February 27, 2012
June Test Window	June 4-14, 2012	3 Hours	Various	April 23, 2012
- Limited paper/pencil sites	June 4, 2012	3 Hours	8:30 a.m.	April 23, 2012
August Test Window	August 8-18, 2012	3 Hours	Various	June 27, 2012
October Test Window	October 8-18, 2012	3 Hours	Various	August 27, 2012
- Limited paper/pencil sites	October 8, 2012	3 Hours	8:30 a.m.	August 27, 2012
December Test Window	December 3-13, 2012	3 Hours	Various	October 22, 2012

Note: Exam 2/FM is administered by paper-and-pencil exam in limited sites outside the U.S. where CBT is not available on the dates indicated above.

Exam 3F/MFE by Computer-Based Testing

	EXAM DATES	DURATION	START TIME	REGISTRATION DEADLINE
April Test Window	April 19-25, 2012	3 Hours	Various	March 8, 2012
- Limited paper/pencil sites	April 19, 2012	3 Hours	8:30 a.m.	March 8, 2012
August Test Window	August 1-7, 2012	3 Hours	Various	June 20, 2012
- Limited paper/pencil sites	August 1, 2012	3 Hours	8:30 a.m.	June 20, 2012
November Test Window	November 1-7, 2012	3 Hours	Various	September 20, 2012
- Limited paper/pencil sites	November 7, 2012	3 Hours	8:30 a.m.	September 20, 2012

Note: Exam 3F/MFE is administered by paper-and-pencil exam in limited sites outside the U.S. where CBT is not available on the dates indicated above.

Exam 4/C by Computer-Based Testing

	EXAM DATES	DURATION	START TIME	REGISTRATION DEADLINE
February Test Window	February 1-7, 2012	3.5 Hours	Various	December 21, 2011
- Limited paper/pencil sites	February 1, 2012	3.5 Hours	8:30 a.m.	December 21, 2011
May Test Window	May 22-29, 2012	3.5 Hours	Various	April 10, 2012
- Limited paper/pencil sites	May 22, 2012	3.5 Hours	8:30 a.m.	April 10, 2012
October Test Window	October 19-25, 2012	3.5 Hours	Various	September 7, 2012
- Limited paper/pencil sites	October 19, 2012	3.5 Hours	8:30 a.m.	September 7, 2012

Note: Exam 4/C is administered by paper-and-pencil exam in limited sites outside the U.S. where CBT is not available on the dates indicated above.

Computer-Based Testing in Québec City, Québec

A mobile computer-based testing center will be available in Québec City, Québec on the dates listed below.

	EXAM DATES	DURATION	START TIME	REGISTRATION DEADLINE					
April Test Window	pril Test Window								
- Exam 2/FM	April 18-19, 2012	3 Hours	Various	February 27, 2012					
- Exam 3F/MFE	April 18-19, 2012	3 Hours	Various	March 8, 2012					
May Test Window	·								
- Exam 1/P	May 21-22, 2012	3 Hours	Various	March 29, 2012					
- Exam 4/C	May 21-22, 2012	3.5 Hours	Various	April 10, 2012					
October Test Window	` 								
- Exam 2/FM	October 18-19, 2012	3 Hours	Various	August 27, 2012					
- Exam 4/C	October 18-19, 2012	3.5 Hours	Various	September 7, 2012					
November Test Window (Computer-Based Testing in Québec City, Québec)									
- Exam 1/P	November 7-8, 2012	3 Hours	Various	September 20, 2012					
- Exam 3F/MFE	November 7-8, 2012	3 Hours	Various	September 20, 2012					

	EXAM DATES	DURATION	START TIME	EXAM REFUND DEADLINE
January-March Test Window	Jan. 15 – March 15, 2012	2 Hours	Various	Three business days prior to scheduled exam—fees apply.
April-June Test Window	April 15 – June 15, 2012	2 Hours	Various	Three business days prior to scheduled exam—fees apply.
July-September Test Window	July 15 – Sept. 15, 2012	2 Hours	Various	Three business days prior to scheduled exam—fees apply.
October-December Test Window	Oct. 15 – Dec. 15, 2012	2 Hours	Various	Three business days prior to scheduled exam—fees apply.

Exams for Online Courses 1 and 2 by Computer-Based Testing

May 2012 Exam Administration

	EXAM DATES	DURATION	START TIME	REGISTRATION DEADLINE	REFUND DEADLINE
Exam 3L	May 11, 2012	2.5 Hours	8:30 a.m.	March 29, 2012	May 7, 2012
Exam 5	May 9, 2012	4 Hours	8:30 a.m.	March 29, 2012	May 7, 2012
Transition Exams 5A and 5B*	May 9, 2012	2 Hours	8:30 a.m.	March 29, 2012	May 7, 2012
Exam 7	May 8, 2012	4 Hours	8:30 a.m.	March 29, 2012	May 7, 2012
Exam 9	May 10, 2012	4 Hours	8:30 a.m.	March 29, 2012	May 7, 2012

*For eligible candidates only

October-November 2012 Exam Administration

	EXAM DATES	DURATION	START TIME	REGISTRATION DEADLINE	REFUND DEADLINE
Exam 3L	November 1, 2012	2.5 Hours	8:30 a.m.	September 20, 2012	October 29, 2012
Exams 6-Canada and 6-U.S.	October 31, 2012	4 Hours	8:30 a.m.	September 20, 2012	October 29, 2012
Exam 8	October 30, 2012	3 Hours	8:30 a.m.	September 20, 2012	October 29, 2012

Important Schedule Notes

- Starting times listed for examinations refer to the local time.
- Candidates should arrive at the examination center at least 30 minutes prior to the scheduled exam time for the check-in process.
- Examinations administered exclusively by the CAS will have a reading time prior to the commencement of the timed exams. For Exam 3L, there will be a 10-minute reading period; for Exams 5-9, there will be a 15-minute reading period.
- Updated information for Exams 1/P, 2/FM, 3F/MFE, and 4/C that are jointly administered by the Casualty Actuarial Society and the Society of Actuaries will be incorporated as necessary and will be noted in the syllabus section for the specific exam.

THE ABOVE & BEYOND ACHIEVEMENT AWARD

The Above & Beyond Achievement Award (ABAA) is designed to celebrate the spirit of volunteerism, a core value of the Casualty Actuarial Society. Each year more than 25 percent of our members participate in one or more CAS volunteer activities. A number of individuals perform with exceptional merit. Since such efforts are typically not apparent or widely known to the vast majority of CAS members, the ABAA was created to recognize these achievements.

All members of the CAS, except current board members and officers, are eligible to receive the ABAA. Any CAS member may nominate a person for this award at any time. The only criterion is that the recipient performs conspicuously above and beyond what is normally and reasonably expected. Nominations may be submitted to the Committee on Volunteer Resources, which will forward on recommendations to the CAS Executive Council. The CAS Executive Council will decide annually on the award recipient(s), with the award(s) to be presented at the annual meeting each year.

The award will include a tangible reminder such as a plaque or an engraved item, as well as public recognition by the CAS.

Information about the ABAA and a nomination form can be found on the CAS Web Site at www.casact.org/aboutcas/abaa.htm.

Recipients of the Above & Beyond Achievement Award

2003	Sholom Feldblum Aaron M. Halpert Thomas Struppeck
2004	Ralph S. Blanchard III Kevin G. Dickson Stuart Suchoff
2005	David Menning Kristine Kuzora Jerome Vogel Michael Wacek
2006	Rudy A. Palenik Nancy P. Watkins
2007	Raji Bhagavatula Ralph S. Blanchard III Robert Campbell
2008	Thomas E. Hettinger
2009	Jacqueline Frank Friedland John T. Gleba
2010	Joanne Spalla
2011	Gareth L. Kennedy and Rhonda Port Walker

AMERICAN RISK AND INSURANCE ASSOCIATION PRIZE

This prize, established in 1997, is awarded to authors of papers published by the American Risk and Insurance Association (ARIA) that provide the most valuable contribution to casualty actuarial science.

Papers eligible for the prize include articles, workshop articles, and invited papers published in the Journal of Risk and Insurance during the preceding year. Papers published in new ARIA journals may also be eligible for this award.

Papers will be judged by a specially appointed committee of the Society whose decision will be final.

The presentation of the award will be made annually at the August ARIA Meeting. The author of the prize-winning paper will be invited to present the paper at a CAS meeting.

The amount of the ARIA Prize is currently \$1,000.

Recipients of the ARIA Prize

1997 Daniel Zajdenweber, "Extreme Values in Business Interruption Insurance"

- 1998 Joan Lamm-Tennant and Mary Weiss, "International Insurance Cycles: Rational Expectations/Institutional Intervention"
- 1999 **Richard D. Phillips, J. David Cummins,** and **Franklyn Allen**, "Financial Pricing of Insurance in the Multiple-Line Insurance Company"
- 2000 J. David Cummins, Martin F. Grace, and Richard D. Phillips, "Regulatory Solvency Prediction in Property-Liability Insurance: Risk-Based Capital, Audit Ratios, and Cash Flow Simulation"
- 2001 **Patrick L. Brockett, Hung-Gay Fung, Gene C. Lai, Richard MacMinn,** and **Robert C. Wit**, "Great (and not so Great) Expectations: An Endogenous Economic Explication of Insurance Cycles and Liability Crises"
- 2002 Stewart C. Myers and James A. Read Jr., "Capital Allocation for Insurance Companies"
- 2003 **Patrick L. Brockett, Richard A. Derrig, Linda L. Golden, Arnold Levine,** and **Mark Alpert**, "Fraud Classification Using Principal Component Analysis of RIDITs"
- 2004 Natacha Brouhns, Montserrat Guillén, Michel Denuit, and Jean Pinquet, "Bonus-Malus Scales in Segmented Tariffs With Stochastic Migration Between Segments"
- 2005 **Stephen P. D'Arcy** and **Richard W. Gorvett**, "The Use of Dynamic Financial Analysis to Determine Whether an Optimal Growth Rate Exists for a Property-Liability Insurer"
- 2006 David Cummins and Richard D. Phillips, "Estimating the Cost of Equity Capital for Property-Liability Insurers"
- 2007 Michael Sherris, "Solvency, Capital Allocation and Fair Rate of Return in Insurance"
- 2008 **Patrick L. Brockett** and **Linda L. Golden**, "Biological and Psychobehavioral Correlates of Risk Taking, Credit Scores, and Automobile Insurance Losses: Toward an Explication of Why Credit Scoring Works"
- 2009 Pierre Picard, "Natural Disaster Insurance and the Equity-Efficiency Trade-off"
- 2010 J. David Cummins and Phillipe Trainar, "Securitization, Insurance, and Reinsurance"
- 2011 George Zanjani, "An Economic Approach to Capital Allocation"

CHARLES A. HACHEMEISTER PRIZE

This prize was established in 1993 in recognition of Charles A. Hachemeister's many contributions to Actuarial Studies in Non-Life Insurance (ASTIN) and his efforts to establish a closer relationship between the CAS and ASTIN.

Papers eligible for the prize include articles, workshop articles, and/or invited papers published in the applicable November and April issues of the ASTIN Bulletin, in addition to papers and Speakers' Corner papers presented at the ASTIN Colloquium in the calendar year prior to the prize award. Future International Actuarial Association (IAA) Congress or Actuarial Approach for Financial Risks (AFIR) Colloquium papers may also be eligible for this award.

Papers will be judged by a specially appointed committee of the Society. Emphasis will be placed on the paper's impact for North American actuaries and practicality of application. The committee's decision will be final.

The announcement of the award will be made annually at the CAS Spring or Annual Meeting.

The amount of the Charles A. Hachemeister Prize is currently \$2,500. For further information about the Hachemeister Prize, contact:

CAS Hachemeister Prize Committee

Casualty Actuarial Society 4350 North Fairfax Drive, Suite 250 Arlington, Virginia 22203 Telephone: (703) 276-3100 Fax: (703) 276-3108 E-Mail: office@casact.org

Recipients of the Hachemeister Prize

- 1994 **Dr. Thomas Mack**, "Which Stochastic Model is Underlying the Chain Ladder Method?"
- 1995 **Michel Laparra**, **Isabelle Lion**, and **Christian Partrat**, "Design and Analysis of Market Price Indices for the U.S. Natural Catastrophe Excess Reinsurance Treaties"
- 1996 **Gregory C. Taylor**, "Modeling Mortgage Insurance Claims Experience: A Case Study"
- 1997 **Stephen P. Lowe** and **James N. Stanard**, "An Integrated Dynamic Financial Analysis and Decision Support System for a Property Catastrophe Reinsurer"
- 1998 James A. Tilley, "The Securitization of Catastrophic Property Risks"
- 1999 No Award
- 2000 Uwe Schmock, "Estimating the Value of the Wincat Coupons of the Winterthur Insurance Convertible Bond"
- 2001 Morton Lane, "Pricing Risk Transfer Transactions"
- 2002 Nicholas E. Frangos and Spyridon D. Vrontos, "Design of Optimal Bonus-Malus Systems with a Frequency and a Severity Component on an Individual Basis in Automobile Insurance"
- 2003 Shaun S. Wang, "A Universal Framework for Pricing Financial and Insurance Risks"
- 2004 Donald F. Mango, "Capital Consumption: An Alternative Methodology for Pricing Reinsurance"
- 2005 **Jon Holtan**, "Pragmatic Insurance Option Pricing"
- 2006 William H. Panning, "Measuring Loss Reserve Certainty"
- 2007 **Emmanuel Bardis, Christina Gwilliam, Stephen P. Lowe,** and **Atul Malhotra**, "Considerations Regarding Standards of Materiality in Estimates of Outstanding Liabilities"
- 2008 Thomas Wright, "A General Framework for Forecasting Numbers of Claims"
- 2009 Thomas Mack, "The Prediction Error of Bornhuetter/Ferguson"
- 2010 Edward W. Frees, Peng Shi, and Emiliano A. Valdez, "Actuarial Applications of a Hierarchical Insurance Claims Model"
- 2011 **Robert S. Miccolis** and **David E. Heppen**, "A Practical Approach to Risk Margins in the Measurement of Insurance Liabilities for Property and Casualty (General Insurance) under Developing International Financial Reporting Standards"

DORWEILER PRIZE

This award, commemorating the work of Paul Dorweiler, was subject to the same conditions as those specified for the Woodward-Fondiller Prize, except that the Dorweiler Prize was awarded each year to the best eligible *Proceedings* paper submitted by an Associate or Fellow who has attained his or her designation more than five years from submitting his or her paper.

Recipients of the Dorweiler Prize

- 1971 Charles C. Hewitt, "Credibility for Severity"
- 1972 No Award
- 1973 **LeRoy Simon**, "Actuarial Applications in Catastrophe Reinsurance"
 - Ronald L. Bornhuetter and Ronald E. Ferguson, "The Actuary and IBNR"
- 1974 **Jeffrey T. Lange** and **Wayne H. Fisher**, "Loss Reserve Testing: A Report Year Approach"
- 1975 Frank Harwayne, "Review of David Skurnick's Paper, 'The California Table L'"
- 1976 No Award
- 1977 No Award
- 1978 James R. Berquist and Richard E. Sherman, "Loss Reserve Adequacy Testing: A Comprehensive Systematic Approach"
- 1979 No Award
- 1980 **C. K. Khury**, "Loss Reserves: Performance Standards"

Richard G. Woll, "A Study of Risk Assessment Using Massachusetts Data"

- 1981 Michael A. Walters, "Risk Classification Standards"
- 1982 **Robert W. Sturgis**, "Actuarial Valuation of Property/Casualty Insurance Companies"
- 1983 Stephen P. D'Arcy, "Strategy for Property Liability Insurers in Inflationary Times"
- 1984 No Award
- 1985 James N. Stanard, "A Simulation Test of Prediction Errors of Loss Reserve Estimation Techniques"
- 1986 Gary G. Venter, "Classical Partial Credibility with Application to Trend"
- 1987 Howard C. Mahler, "Review of Glenn Meyer's Paper, 'An Analysis of Experience Rating'"
- Ronald F. Wiser, "The Cost of Mixing Reinsurance"
- 1988 Richard H. Snader, "Reserving Long-Term Medical Claims"
- 1989 Stephen J. Ludwig and Robert McAuley, "A Nonparametric Approach to Evaluating Reinsurers' Relative Financial Strength"
- 1990 **Glenn G. Meyers**, "An Analysis of the Capital Structure of an Insurance Company"
- 1991 No Award
- 1992 John P. Robertson, "The Computation of Aggregate Loss Distributions"
- 1993 Michael G. Wacek, "Review of Ronald Wiser's Paper, 'The Cost of Mixing Reinsurance'"
- 1994 Daniel F. Gogol, "An Actuarial Approach to Property Catastrophe Cover Rating"
- 1995 **Roger M. Hayne**, "Extended Service Contracts"
- 1996 Clive L. Keatinge, "Balancing Transaction Costs and Risk Load in Risk Sharing Arrangements"
- 1997 Sholom Feldblum, "Personal Automobile Premiums: An Asset Share Pricing Approach for Property-Casualty Insurance"
 Glenn G. Meyers, "The Competitive Market Equilibrium Risk Load Formula for Catastrophe Ratemaking"
- 1998 **Rodney E. Kreps**, "Investment-Equivalent Reinsurance Pricing"
- 1999 Gary G. Venter, "Testing the Assumptions of Age-to-Age Factors"

2000	No Award
2001	Thomas J. Kozik and Aaron M. Larson, "The N-Moment Insurance CAPM"
	Stephen P. D'Arcy and Richard W. Gorvett, "Measuring the Interest Rate Sensitivity of Loss Reserves"
2002	No Award
2003	Gary G. Venter, "Tails of Copulas"
2004	David L. Homer and David R. Clark, "Insurance Applications of Bivariate Distributions"
2005	Rodney E. Kreps, "Riskiness Leverage Models"
2006	Gordon F. Diss and Richard E. Sherman, "Estimating the Workers Compensation Tail"

2007 No Award

DYNAMIC FINANCIAL ANALYSIS PRIZE

This award is made to the authors of the best papers submitted in response to calls for dynamic financial analysis discussion papers whenever the program is conducted by the Casualty Actuarial Society. Papers are judged by a specially appointed review committee on the basis of quality of the overall content of the paper as an advancement to the published literature on dynamic financial analysis as well as other factors. Recipients need not be members of the Casualty Actuarial Society. The announcement of the award is made at the seminar at which the papers are discussed.

Recipients of the Dynamic Financial Analysis Prize

1996 Douglas M. Hodes, Tony Neghaiwi, J. David Cummins, Richard Phillips, and Sholom Feldblum, "The Financial Modeling of Property/Casualty Insurance Companies" Stephen P. Lowe and James N. Stanard, "An Integrated Dynamic Financial Analysis and Decision Support System for a Property Catastrophe Reinsurer" 1997 Gerald S. Kirschner and William C. Scheel, "Specifying the Functional Parameters of a Corporate Financial Model for Dynamic Financial Analysis" Stephen P. D'Arcy, Richard W. Gorvett, Joseph A. Herbers, Thomas E. Hettinger, Steven G. Lehmann, and Michael J. Miller, "Building a Public Access PC-Based DFA Model" 1998 Salvatore Correnti, Stephen M. Sonlin, and Daniel B. Isaac, "Applying a DFA Model To Improve Strategic Business Decisions" Stephen P. D'Arcy, Richard W. Gorvett, Thomas E. Hettinger, and Robert J. Walling III, "Using the Public Access DFA Model: A Case Study" Susan E. Witcraft, "Profitability Targets: DFA Provides Probability Estimates" 1999 Glenn G. Meyers, "Estimating Between Line Correlations Generated by Parameter Uncertainty" 2000 Elizabeth R. Wiesner and Charles C. Emma, "A Dynamic Financial Analysis Application Linked to Corporate Strategy" 2001 John C. Burkett, Thomas S. McIntyre, and Stephen M. Sonlin, "DFA Insurance Company Case Study, Part I: Reinsurance and Asset Allocation" Stephen W. Philbrick and Robert A. Painter, "DFA Insurance Company Case Study, Part II: Capital Adequacy and Capital Allocation" Lisa S. Ward and David H. Lee, "Practical Application of the Risk-Adjustment Return on Capital Framework" 2002 No Award 2003 2004 No Program Held 2005 No Program Held 2006 No Program Held 2007 No Award 2008 No Program Held

EMERGING ISSUES PRIZE

The Emerging Issues Prize is awarded to the best call paper to come out of a new, but not necessarily repeating, call paper program. The Emerging Issues Prize is not necessarily an annual prize and can be sponsored by a different committee each time.

Recipients of the Emerging Issues Prize

- 2010 CAS Committee on Valuation, Finance and Investments Call for Papers: Parameters of a Financial Crisis
 Neil M. Bodoff, FCAS, MAAA, "A Conceptual Proposal to Use Appraisal Value as a Supplementary Basis for Financial Valuation"
 Louise Francis, FCAS, MAAA, "Banking on Robbery: The Role of Fraud in the Financial Crisis"
- 2011 CAS Dynamic Risk Modeling Committee and the Committee on Reserves call for papers
 Kailan Shang, FSA, CFA, PRM, SCJP, "Loss Simulation Model Testing and Enhancement"

THE HALMSTAD PRIZE

The David Garrick Halmstad prize is given annually for actuarial research in memory of David Halmstad, an Associate of the Society of Actuaries, for his significant contributions to actuarial science and research. Funds for the prize were contributed in Mr. Halmstad's memory by his friends and colleagues. To select the best paper on actuarial research published each year, the SOA's Education and Research Section examines major English language actuarial journals, nominates outstanding papers, reviews the selected articles, and votes for the best paper. The results of these proceedings are submitted to the Research Committee of The Actuarial Foundation for the final selection. This award follows the year of publication rather than the actual calendar year.

Recipients of the Halmstad Prize

2008 Mickkel Dahl, Martin Teilman Melchior, Thomas Melchior, and Thomas Møllerz, "On Systematic Mortality Risk and Risk-Minimization with Survivor Swaps," *Scandinavian Actuarial Journal* 2008, (2): 114-146.

Edward W. Frees and Emiliano A. Valdez, "Hierarchical Insurance Claims Modeling," *Journal of the American Statistical Association*, December 1, 2008, 103(484): 1457-1469.

- 2007 **Philippe Artzner, Freddy Delbaen, Jean-Marc Eber, David Heath, and Hyejin Ku**, "Coherent Multiperiod Risk Adjusted Values and Bellman's Principle," *Annals of Operations Research* 152(1), July 2007, pp. 5-22(18).
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- 2005 **Geoffrey H. Hancock and John Manistre**, "Variance of the CTE Estimator," *NAAJ* 9(2), pp 129-156.
- 2004 Leslaw Gajek and Dariusz Zagrodny, "Reinsurance Arrangements Maximizing Insurer's Survival Probability," *Journal of Risk and Insurance* 71, pp. 421-435.
- 2003 A. S. Macdonald, BSc, PhD, FFA; H. R. Waters, DPhil, FIA, FFA; and C. T.Wekwete, BSc,MSc, PhD, "The Genetics of Breast and Ovarian Cancer I: A Model of Family History" and "The Genetics of Breast and Ovarian Cancer II: A Model of Critical Illness Insurance," *Scandinavian Actuarial Journal*, pp. 1-50.
- 2002 **Dr. Thomas Moller**, "On Valuation and Risk Management at the Interface of Insurance and Finance," *British Actuarial Journal* 8, IV, pp. 787–827.
- 2001 **Dr. Martin Schweizer,** "From Actuarial to Financial Valuation Principles," *Insurance: Mathematics and Economics* 28(1), 2001, pp. 31-47.
- 2000 Hans U. Gerber, PhD, ASA, and Elias S.W. Shiu, PhD., ASA, "Investing for Retirement: Optimal Capital Growth and Dynamic Asset Allocation," *NA4J* 4(1), April 2000, pp. 42-62.
- 1999 **Uwe Schmock**, "Estimating the Value of the WinCAT Coupons of the Winterthur Insurance Convertible Bond: A Study of the Model Risk," *ASTIN Bulletin* 29(1), 1999, pp. 101-163.
- 1998 Hans U. Gerber, PhD, ASA, and Elias S. W. Shiu, PhD, ASA, "On the Time Value of Ruin," *NAAJ* 2(1), January 1998, pp. 48-78 and "Pricing Perpetual Options for Jump Processes," *NAAJ* 2(3), July 1998, pp. 101-112.
- 1997 Edward W. Frees, PhD, FSA; Yueh-Chuan King, PhD; Marjorie Rosenberg, PhD, FSA; Virginia Young, PhD, FSA, Siu-Wai Lai, PhD, ASA, "Forecasting Social Security Actuarial Assumptions," *NAAJ* 1(4), October 1997, pp. 49-82.
- 1996 Edward W. Frees, PhD, FSA; Jacques Carriere, PhD, FSA; Emiliano Valdez, PhD, FSA, "Annuity Valuation with Dependent and Mortality," *Journal of Risk and Insurance* 63(2), June 1996, pp. 229-261.
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- 1994 Hans U. Gerber, PhD, ASA; and Elias S. W. Shiu, PhD, ASA, "Martingale Approach to Pricing Perpetual American Opinions," ASTIN Bulletin 24, 1994, pp. 195-220 and "Option Pricing by Esscher Transforms," Transactions of the Society of Actuaries XINI, 1994, pp. 99-140.
- 1993 **Knut K. Aase**, "Equilibrium in a Reinsurance Syndicate: Existence, Uniqueness and Characterization," *ASTIN Bulletin* 23(2), 1993, pp. 185-211 and "Premiums in a Dynamic Model of a Reinsurance Market," *Scandinavian Actuarial Journal* 2, 1993, pp. 134-160.
- 1992 **James A. Tilley**, PhD, FSA, "An Actuarial Laymen's Guide to Building Stochastic Interest Rate Generators," *TSA* XLIV, 1992, pp. 509-538.
- 1991 **Patrick L. Brockett, PhD,** "Information Theoretic Approach to Actuarial Science: A Unification and Extension of Relevant Theory and Application," *TSA* XLIII, 1991, pp. 73-114.
- 1990 Edward W. Frees, PhD, FSA, "Stochastic Life Contingencies with Solvency Considerations," *TSA* XLII, 1990, pp. 91-129.

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- 1988 Henrik Ramlau-Hansen, "The Emergence of Profit in Life Insurance," *Insurance: Mathematics and Economics* 7, 1988, pp. 225-236.
- 1987 **F. Delbaen and J. Haezendonck**, "Classical Risk Theory in an Economic Environment," *Insurance: Mathematics and Economics* 6, 1987, pp. 85-16.

C.D. Daykin, G.D. Bernstein, S.M. Coutts, E.R.F. Devitt, G.B. Hey, D.I.W. Reynolds, and P.D. Smith, "Assessing the Solvency and Financial Strength of a General Insurance Company," *Journal of the Institute of Actuaries* 114, Pt. 2, 1987, pp. 227-309.

- 1986 **Ragnar Norberg**, "A Contribution to Modelling of IBNR Claims," *Scandinavian Actuarial Journal*, No. 3-4, 1986, pp. 155-203.
- 1985 **Robert P. Clancy, FSA,** "Options on Bonds and Applications to Product Pricing," *TSA* XXXVII, 1985, pp. 97-151.
- 1984 **James D. Broffitt, PhD, ASA,** "Maximum Likelihood Alternatives to Actuarial Estimators of Mortality Rates," *TSA* XXXVI, 1984, pp. 77-142.
- 1983 Anders Martin-Lof, "Premium Control in an Insurance System, An Approach Sharing Feedback and Persisting," *Scandinavian Actuarial Journal*, No. 1, 1983, pp. 1-27.
- 1982 L.A. Balzer, PhD, "Control of Insurance Systems with Delayed Profit/Loss Sharing Feedback and Persisting Unpredicted Claims," *Journal of the Institute of Actuaries* 109, 1982, pp. 285-313.
- 1981 Newton L. Bowers Jr., FSA; James C. Hickman, PhD, FSA; and Cecil J. Nesbitt, PhD, FSA, "Dynamics of Pension Funding: Contribution Theory," *TSA* XXXI, 1979, pp. 93-119.
- 1980 William S. Jewell, PhD, "Models in Insurance: Paradigms, Puzzles, Communications, and Revolutions," *Transactions, 21st International Congress of Actuaries*, Zurich, June 19, 1980, Vol. S, pp. 87-130.
- 1979 **James C. Hickman, PhD, FSA, and Robert B. Miller, PhD,** "Bayesian Bivariate Graduation and Forecasting," *ARCH*, 1979.3, pp. 99-136.
- 1978 **Phelim P. Boyle, PhD, FCIA,** "Immunization Under Stochastic Models of the Term Structure," *Journal of the Institute of Actuaries* 105, Pt. II, 1978, pp. 177-187. Also *ARCH*, 1980.1, pp. 19-29.

HAROLD W. SCHLOSS MEMORIAL SCHOLARSHIP FUND

In November 1984, the Harold W. Schloss Scholarship was established by the Casualty Actuarial Society as a memorial to Mr. Schloss, a past president of the Society. The fund for this annual \$500 scholarship stipend was initiated by Mr. Schloss' wife, Frances A. Schloss, and their children. The scholarship benefits deserving and academically outstanding students in the actuarial program of the Department of Statistics and Actuarial Science at the University of Iowa.

The student recipient is selected each spring by the Trustees of the CAS Trust, based upon the recommendation of the departmental chairperson at the University of Iowa.

	Kecipiei
1985	Steven W. Book
1986	Mark Meyer
1987	Brett Scranton
1988	Trenton Werner
1989	Jena Ann Losey
1990	Robert J. Moser
1991	LaTisha Boothe
1992	Jennifer Brinker
1993	Julie Ekdom
1994	Yong Yao
1995	Larry Lickteig
1996	Tendra J. Cady
1997	Ranee Thiagarajah
1998	Changki Kim
1999	Jingsu Pu
2000	Feng Sun
2001	Hongyan Hao
2002	Bangwon Ko
2003	Biou Xu
2004	Tony Van Berkel
2005	Alex Jin He
2006	Pui Sai Lau
2007	Lindsey Scott
2008	Jun Yang
2009	James P. Arns
2010	Zhujing Feng
2011	Daniel Stanford Benzshawel

Recipients of the Harold W. Schloss Memorial Scholarship

MANAGEMENT DATA AND INFORMATION PRIZE

This award is made to the authors of the best papers submitted in response to calls for data management/data quality discussion papers whenever the program is conducted by the Committee on Management Data and Information of the Casualty Actuarial Society. Papers are judged by a specially appointed review committee on the basis of originality of ideas, understandability of complex concepts, contribution to the literature, and thoroughness of ideas expressed. The committee's decision will be final. Recipients need not be members of the Casualty Actuarial Society. The announcement of the award will be made at the seminar at which the papers are presented.

The amount of the Management Data and Information Prize is determined annually.

Recipients of the Management Data and Information Prize

1997	William Raichle, "Insurance Geographics"
	Omar D. Kouatlym , Mark W. Littman , and Aleksey S. Popelyukhin , "Synchronizing Data Management Technologies to Integrate Actuarial Processes"
1998	No Program Held
1999	Alan E. Wickman, "Insurance Data and Intellectual Property Issues"
2000	No Program Held
2001	Douglas J. Collins and Stephen P. Lowe, "A Macro Validation Dataset for U.S. Hurricane Models"
	Louise A. Francis, "Neural Networks Demystified"
2002	No Program Held
2003	Louise A. Francis, "Martian Chronicles: Is MARS Better than Neural Networks?"
2004	No Award
2005	Louise A. Francis, "Dancing With Dirty Data: Methods for Exploring and Cleaning Data"
2006	Louise A. Francis, "Taming Text: An Introduction to Text Mining"
2007	No Program Held
2008	Robert Neil Campbell, Louise A. Francis, Virginia R. Prevosto, Mark Rothwell, and Simon Sheaf "Dirty Data on Both Sides of the Pond"
2009	No Program Held
2010	Louise Francis and Virginia R. Prevosto, "Data and Disaster: The Role of Data in the Financial Crisis"
2011	No Program Held
2012	Roosevelt C. Mosley Jr., "Social Media Analytics: Data Mining Applied to Insurance Twitter Posts"
	Jim Weiss and Jared Smollik, "Beginner's Roadmap to Working with Driving Behavior Data"

MATTHEW RODERMUND SERVICE AWARD

This award was established in 1990 in honor of Matt Rodermund's years of volunteer service to the Casualty Actuarial Society. The funding for this award was provided by The Munich American Reinsurance Company.

The award is intended to recognize a CAS member, or members, who have made significant volunteer contributions to the actuarial profession. Volunteer contributions include, but are not limited to: committee involvement, participation in CAS meetings and seminars, volunteer efforts for Regional Affiliates or Special Interest Sections, and involvement with non-CAS actuarial professional organizations such as the American Academy of Actuaries or the Canadian Institute of Actuaries. Service as an elected CAS officer or director and authorship of *Proceedings* papers and Discussion Paper Program papers are not considered. Past presidents are not eligible.

The Board of Directors will name the recipient of this award, but any member may make nominations to the Committee on Volunteer Resources. The award will not necessarily be made every year.

The amount of the Matthew Rodermund Service Award is currently \$1,000.

Recipients of the Matthew Rodermund Service Award

1991 Robert B. Foster 1992 Norman J. Bennett 1993 Robert A. Bailey 1994 Robert A. Miller III 1995 Dale A. Nelson 1996 Walter J. Fitzgibbon Jr. Paul M. Otteson 1997 1998 Richard H. Snader 1999 John H. Muetterties 2000 Charles F. Cook 2001 James R. Berquist 2002 David Skurnick 2003 C. Walter Stewart Arthur R. Cadorine 2004 2005 Anne E. Kelly 2006 Richard J. Roth Sr. and Richard J. Roth Jr. Jeffrey T. Lange and Darrell Ehlert 2007 David J. Grady and Stephen Makgill 2008 2009 David N. Hafling and Gary S. Patrik 2010 Glenn Meyers and Gary Venter 2011 Amy S. Bouska and Stephen W. Philbrick

MICHELBACHER PRIZE

This award, which commemorates the work of Gustav F. Michelbacher, is made to the authors of the best papers submitted in response to calls for discussion papers whenever the program is conducted by the Casualty Actuarial Society. Papers are judged by a specially appointed committee on the basis of originality, research, readability, completeness, and other factors. The committee's decision will be final. Recipients need not be members of the Casualty Actuarial Society. The announcement of the award will be made at the meeting at which the papers are discussed.

The amount of the Michelbacher Prize is currently \$1,500.

Recipients of the Michelbacher Prize

1979	Robert P. Butsic, "Risk and Return for Property-Casualty Insurers"
1980	Russell T. John and Gary S. Patrik, "Pricing Excess-of-Loss Casualty Working Cover Reinsurance Treaties"
1981	Robert P. Butsic, "The Effect of Inflation on Losses and Premium for Property-Liability Insurers"
1982	Philip E. Heckman and Phillip N. Norton, "Optimization of Excess Portfolios"
1983	No Award
1984	Paul M. Otteson, "Property and Casualty Insurance: Solvency and Investments. Playing the Game"
1985	Robert P. Butsic, "Branch Office Profit Measurement for Property-Liability Insurers"
	David Skurnick, "Measuring Division Operating Profitability"
1986	Ronald F. Wiser, "The Cost of Mixing Reinsurance"
1987	Richard G. Woll, "Insurance Profits: Keeping Score"
1988	Robert P. Butsic, "Determining the Proper Interest Rate for Loss Reserve Discounting: An Economic Approach"
1989	Louise A. Francis, "A Model for Combining Timing, Interest Rate, and Aggregate Loss Risk"
1990	Cecily A. Gallagher, Joyce Fish, and Howard Monroe, "An Iterative Approach to Classification Analysis"
1991	Guy H. Whitehead, "No Claim Discount or Bonus/Malus Systems in Europe"
1992	Robert P. Butsic, "Solvency Measurement for Property-Liability Risk-Based Capital Applications"
1993	Sholom Feldblum, "Professional Ethics and the Actuary"
1994	No Award
1995	Leigh J. Halliwell, "Mean-Variance Analysis and the Diversification of Risk"
1996	Richard B. Amundson, "Residual Market Pricing"
1997	Theresa W. Bourdon, Keith A. Passwater, and Mark Priven, "An Introduction to Capitation and Healthcare Provider Excess Insurance"
1998	Richard L. Stein, "The Actuary or Project Manager in a Dynamic Product Analysis Environment"
1999	Richard W. Gorvett, "Insurance Securitization: The Development of a New Asset Class"
	Donald F. Mango, "Risk Load and the Default Rate of Surplus"
2000	Sergei Esipov and Dajiang Guo, "Portfolio Based Pricing of Residual Basis Risk with Application to the S&P 500 Put Options"
2001	No Award
2002	No Award
2003	No Program Held
2004	Greg Taylor and Grainne McGuire, "Loss Reserving with GLM's: A Case Study"
2005	No Award
2006	No Award
2007	No Award
2008	No Award
2009	No Award
2010	No Award

NEW MEMBERS AWARD

The New Members Award is made annually to one or more members of the CAS who have made significant volunteer contributions within five years of their most recent credential.

Recipients of the New Members Award

2011 Vijay Manghnani

RATEMAKING PRIZE

This award is made to the authors of the best papers submitted in response to calls for ratemaking discussion papers whenever the program is conducted by the Committee on Ratemaking of the Casualty Actuarial Society. Papers are judged by a specially appointed review committee on the basis of originality of ideas, understandability of complex concepts, contribution to the ratemaking literature, thoroughness of ideas expressed, and timeliness and relevance of research. The committee's decision will be final. Recipients need not be members of the Casualty Actuarial Society. The announcement of the award will be made at the Ratemaking Seminar at which the papers are discussed.

The amount of the Ratemaking Prize is determined annually.

and Statistical Models"

1993

Recipients of the Ratemaking Prize

Herbert I. Weisberg and Richard A. Derrig, "Pricing Auto No-Fault and Bodily Injury Liability Coverages Using Micro-Data

1994	John Rollins and Monty J. Washburn, "A Quantification of Snader's Deductible Safety Factor"
1995	No Program Held
1996	George Burger, Beth E. Fitzgerald, Jonathan White, and Patrick B. Woods, "Incorporating a Hurricane Model into Property Ratemaking"
1997	Shaun Wang, "Implementation of PH-Transforms in Ratemaking"
1998	Tim McCarthy, "A Frequency Based Model for Excess Wind in Property Ratemaking"
1999	Keith D. Holler, David Sommer, and Geoff Trahair, "Something Old, Something New in Classification Ratemaking With a Novel Use of GLMs for Credit Insurance"
2000	James E. Monaghan, "The Impact of Personal Credit History on Loss Performance in Personal Lines"
2001	No Award
2002	Donald F. Mango and James C. Sandor, "Dependence Models and the Portfolio Effect"
2003	Donald F. Mango, "Capital Consumption: An Alternative Methodology for Pricing Reinsurance"
2004	No Award
2005	No Award
2006	No Program Held
2007	No Award
2008	No Program Held
2009	No Award
2010	No Program Held
2011	Fred Klinker, "Generalized Linear Mixed Models for Ratemaking: A Means of Introducing Credibility into a Generalized Linear Model Setting"

REINSURANCE PRIZE

This award is made to the authors of the best papers nominated for the prize as determined by the CAS Committee on Reinsurance Research (CORR).

Papers will be judged by CORR on the basis of originality of ideas, understanding of complex concepts, contribution to reinsurance literature, thoroughness of ideas expressed, as well as whether the papers are understandable and practical. If no paper is considered worthy in a given year, the award shall not be made. The committee's decision will be final. Recipients need not be members of the CAS. The announcement of the award will normally be made at the CAS Seminar on Reinsurance. The amount of the Reinsurance Prize is currently \$2,000.

Recipients of the Reinsurance Prize

Donald F. Mango, "An Application of Game Theory: Property Catastrophe Risk Load"
Gary Blumsohn, "Levels of Determinism in Workers Compensation Reinsurance Commutations"
Emily Canelo and Bryan C. Ware, "Evaluating Variations in Contract Terms for Casualty Clash Reinsurance Treaties"
No Program Held
Robert P. Butsic, "Capital Allocation for Property-Liability Insurers: A Catastrophe Reinsurance Application"
John M. Kulik, "A Practical Application of Modern Portfolio Theory to Capital Allocation"
No Program Held
Daniel D. Heyer, "Stochastic Dominance: A Tool for Evaluating Reinsurance Alternatives"
Rade T. Musulin and John W. Rollins , "Optimizing a Multi-Season Catastrophe Reinsurance Program With Private and Public Components"
No Program Held
Donald F. Mango, "Capital Consumption: An Alternative Methodology for Pricing Reinsurance"
Gary G. Venter, "Quantifying Correlated Reinsurance Exposures with Copulas"
Shaun Wang, "Cat Bond Pricing Using Probability Transforms"
Ira Robbin and Jesse DeCouto, "Coherent Capital for Treaty ROE Calculations"
No Program Held
No Program Held
No Program Held
Neil M. Bodoff and Yunbo Gan, "An Analysis of the Market Price of Cat Bonds"
No Program Held
David L. Homer and Richard A. Rosengarten, "A Method for Efficient Simulation of the Collective Risk Model"

RONALD BORNHUETTER LOSS RESERVES PRIZE

This award is made to the authors of the best papers submitted in response to calls for papers regarding reserves whenever the program is conducted by the Committee on Reserves of the Casualty Actuarial Society. Papers are judged by a specially appointed review committee on the basis of originality of ideas, clarity of presentation, contribution to the literature on loss reserving, and thoroughness of analysis. Recipients need not be members of the Casualty Actuarial Society. The announcement of the award is made at the Casualty Loss Reserve Seminar at which the papers are presented.

The amount of the Ronald Bornhuetter Loss Reserves Prize is determined annually.

Recipients of the Ronald Bornhuetter Loss Reserves Prize

- 1994 Susan L. Cross and John P. Doucette, "Measurement of Asbestos Bodily Injury Liability"
- 1995 No Program Held
- 1996 Jeffrey J. Scott, "Workers Compensation Medical Reserving with Calendar Year Payments in a Cost Containment Environment"
- 1997 **Prakash Narayan** and **Thomas V. Warthen III**, "A Comparative Study of the Performance of Loss Reserving Methods Through Simulation"
- 1998 Chandrakant C. Patel and Alfred Raws III, "Statistical Modeling Techniques for Reserve Ranges: A Simulation Approach"
- 1999 **Thomas Struppeck**, "Premium Earning Patterns for Multi-Year Policies with Aggregate Deductibles"
- 2000 Allen J. Gould and Orin M. Linden, "Estimating Satellite Insurance Liabilities"
- 2001 Aaron Halpert, Scott P. Weinstein, and Christopher Gonwa, "Evaluating Reserves in a Changing Claims Environment"
 Daniel D. Heyer, "A Random Walk Model for Paid Loss Development"
- 2002 No Award
- 2003 David R. Clark, "LDF Curve-Fitting and Stochastic Reserving: A Maximum Likelihood Approach"
- 2004 Richard E. Sherman and Gordon F. Diss, "Estimating the Workers' Compensation Tail"
- 2005 No Program Held
- 2006 Glenn G. Meyers, "Estimating Predictive Distributions for Loss Reserve Models"
- 2007 No Program Held
- 2008 James Guszcza, "Hierarchical Growth Curve Models for Loss Reserving"
- 2009 No Program Held
- 2010 Tapio Boles and Andy Staudt, "On the Accuracy of Loss Reserving Methodology"
- 2011 No program held.

THEORY OF RISK PRIZE

This award is made to the author of the best paper submitted in response to a call for theory of risk discussion papers whenever the program is conducted by the Committee on Theory of Risk of the Casualty Actuarial Society. Papers are judged by a specially appointed review committee on the basis of applied orientation, theoretical soundness, recognition of different sources of uncertainty, and illustration of method through an example that can be replicated. The committee's decision will be final. Recipients need not be members of the Casualty Actuarial Society. The announcement of the award will be made at the seminar at which the papers are discussed.

The amount of the Theory of Risk Prize is \$10,000, divided among authors of the best papers.

Recipients of the Theory of Risk Prize

1993Richard J. Verrall, "Statistical Methods for the Chain Ladder Technique"Thomas Mack, "Measuring the Variability of Chain Ladder Reserve Estimates"Ben Zehnwirth, "Probabilistic Development Factor Models with Applications to Loss Reserve Variability, Prediction
Intervals and Risk Based Capital"1994–2009No Program Held

The Theory of Risk Prize was discontinued in 2010.

VARIANCE PRIZE

This prize recognizes the best papers published in *Variance*, the scientific journal of the *Casualty Actuarial Society*. The amount of the *Variance* Prize is currently \$5,000.

Recipients of the Variance Prize

2007	Richard J. Verrall. ve Distributions for Reserves Which Incorporate Expert Opinion" <i>Variance</i> 1:1
2008	Martin Eling, Hato Schmeiser, and Thomas Parnitzke "Management Strategies and Dynamic Financial Analysis" <i>Variance</i> 2:1
2009	
2010	Gary G. Venter and Dumaria Rulina R. Tampubolon "Robustifying Reserving" <i>Variance</i> 4:2

WOODWARD-FONDILLER PRIZE

This award, commemorating the work of Joseph H. Woodward and Richard Fondiller, was intended to stimulate original thinking and research. Each year it was awarded to the best eligible paper submitted to the *Proceedings of the Casualty Actuarial Society* by an Associate or Fellow who had attained his or her designation within the last five years of submitting his or her paper. An eligible *Proceedings* paper showed evidence of original research and solved advanced insurance problems. If no paper was considered eligible in a given year, the award was not made. Papers previously submitted to the Society or elsewhere were not eligible. Papers were judged by the Society's Committee on Review of Papers, whose decision was final. The announcement of the award was made at the November meeting each year, based on papers submitted to the Society at the previous November and May meetings. The prize was suspended after publication of the 2005 *Proceedings*, which marked the last time peer-reviewed papers were published as part of the *Proceedings*.

Recipients of the Woodward-Fondiller Prize

1963	No Award
1964	James H. Durkin, "A Glance at Group Dental Coverage"
1965	Kenneth L. McIntosh, "A Mathematical Approach to Fire Protection Classification Rates"
1966	No Award
1967	Jeffrey T. Lange, "Implications of Sampling Theory for Package Policy Ratemaking"
1968	Charles F. Cook, "The Minimum Absolute Deviation Trend Line"
1969	J. Robert Ferrari, "The Relationship of Underwriting, Investments, Leverage, and Exposure to the Total Return on Owners' Equity"
1970	Jeffrey T. Lange, "The Interpretation of Liability Increased Limits Statistics"
1971	Woody Beckman, "Federal Income Taxes"
1972	David R. Bickerstaff, "Automobile Collision Deductibles and Repair Cost Groups: The Lognormal Model"
1973	C.K. Khury, "Review of LeRoy Simon's Paper, 'Actuarial Applications in Catastrophe Reinsurance'"
1974	C.K. Khury, "Personal Lines Pricing: From Judgment to Fact"
1975	David Skurnick, "The California Table L"
1976	Robert J. Finger, "Estimating Pure Premium by Layer—An Approach"
1977	Robert S. Miccolis, "On the Theory of Increased Limits and Excess of Loss Pricing"
1978	Edward W. Weissner, "Estimation of the Distribution of Report Lags by the Method of Maximum Likelihood"
	Sheldon Rosenberg, "Review of Robert Miccolis' Paper, 'On the Theory of Increased Limits and Excess of Loss Pricing'"
1979	No Award
1980	No Award
1981	Stephen W. Philbrick, "The Implication of Sales as an Exposure Base for Products Liability"
1982	Stephen W. Philbrick, "An Examination of Credibility Concepts"
1983	Philip E. Heckman and Glenn G. Meyers , "The Calculation of Aggregate Loss Distributions from Claim Severity and Claim Count Distributions"
1984	Albert J. Beer, "Review of Margaret E. Wilkinson's Paper, 'Estimating Probable Maximum Loss with Order Statistics'"
1985	Glenn G. Meyers, "Empirical Bayesian Credibility in Workers' Compensation Ratemaking"
1986	Glenn G. Meyers, "An Analysis of Experience Rating"
1987	No Award
1988	Emanuel Pinto and Daniel F. Gogol, "An Analysis of Excess Loss Development"
1989	Manuel Almagro and Thomas L. Ghezzi, "Federal Income Taxes—Provisions Affecting Property/Casualty Insurers"
1990	Amy S. Bouska, "Exposure Bases Revisited"
1991	Robert A. Bear and Kenneth J. Nemlick , "Pricing the Impact of Adjustable Features and Loss Sharing Provisions of Reinsurance Treaties"
1992	William R. Gillam, "Parameterizing the Workers Compensation Experience Rating Plan"
1993	No Award
1994	Daniel M. Murphy, "Unbiased Loss Development Factors"
1995	No Award
1996	No Award

The Woodward-Fondiller Prize

- 1997 Leigh J. Halliwell, "Loss Prediction by Generalized Least Squares"
- 1998 **Donald F. Mango**, "An Application of Game Theory: Property Catastrophe Risk Load"
- 1999 **Stephen J. Mildenhall**, "A Systematic Relationship Between Minimum Bias Methods and Generalized Linear Models"
- 2000 **Stephen J. Mildenhall**, "Discussion of Michael G. Wacek's Paper, 'Application of the Option Market Paradigm to the Solution of Insurance Problems'"
- 2001 No Award
- 2002 No Award
- 2003 David L. Ruhm, "Distribution-Based Pricing Formulas Are Not Arbitrage-Free"
- 2004 No Award
- 2005 No Award
- 2006 No Award
- 2007 No Award

CASUALTY ACTUARIAL SOCIETY TRUST

The Casualty Actuarial Society Trust affords members and others an income tax deduction for contributions of funds to be used for scientific, literary, or educational purposes. The library function of the Society is managed by the Trust. The Trust was qualified by the Internal Revenue Service on February 26, 1979, as a non-profit organization exempt from federal income tax under section 501(c)(3) of the Internal Revenue Code. The Officers of the Society serve as Trustees. As funds permit they will be made available for such uses as scholarships and research grants. The CAS Trust Scholarship Program and the Reinsurance Prize are currently funded by the Trust.

Contributions for scientific, literary, or educational purposes should be made to the "Casualty Actuarial Society Trust" to qualify for an income tax deduction.

Inquiries and contributions should be addressed to the Society's Vice President-Administration, in care of the CAS Office at office@casact.org.

CAS TRUST SCHOLARSHIP PROGRAM

The CAS Trust Scholarship Program, funded by donations to the CAS Trust, awards up to three \$2,000 scholarships to deserving students annually. The scholarship's intent is to further students' interest in the property/casualty actuarial profession and encourage pursuit of the CAS designation. Recipients are chosen by the CAS Trust Scholarship Subcommittee.

Completed applications are due by May 1 of each year for scholarships awarded for the fall semester. Additional details on application requirements are available through the Academic Community section of the CAS Web Site.

Inquiries should be addressed to the CAS Trust Scholarship Coordinator, in care of the CAS Office at office@casact.org.

Recipients of the CAS Trust Scholarship

2003	Denise Leung Yu Cheung, University of Waterloo
	Marc G. Glickman, Yale University
	Sarah Mae Klein, University of Missouri-Rolla
2004	Carl Jeffrey Gillette, University of Texas at Austin
	Jenny Jin, University of Waterloo
	Grace M. Liu, University of Texas at Austin
2005	Daniel Alai, University of Waterloo
	Waswate Ayana, University of Texas at Austin
	Judy Wong, University of Waterloo
2006	Alexander Rosteck, Rutgers University
	Sharalyn Chen, University of Waterloo
2007	Nicole Belmonte, Bentley College
	Matthew Steffen, University of Minnesota-Duluth
	Emily Tipton, University of Florida
2008	Kathy Gu, University of Illinois-Champaign
	Brett Jaros, University of Illinois-Champaign
	Kristin Longenecker, Florida State University
	Jeffrey Miklas, University of Wisconsin-Madison
2009	James Arns, University of Iowa
	Lesley Eng, University of Calgary
	Helen Muller, University of Minnesota
2010	Jason Rohlfs, Illinois State University
2011	Kevin Owens, University of Iowa
	Danielle Gilmour, University of Connecticut

PUBLICATIONS OF THE SOCIETY

CAS publications that are still in print may be purchased at the prices listed below. Prices include postage and handling for orders delivered in the U.S. and Canada. For deliveries outside the U.S. or Canada, add 50 percent to prices shown below. Canadian residents must add 7 percent for GST. Virginia residents must add 4.5 percent for sales tax. Those making bulk orders of 20 or more of any publication will receive a 20 percent discount.

Prepayment is required for all orders. Prepayment must be in U.S. funds in the form of check, draft, money order, or credit card (MasterCard, Visa, or American Express). NO RETURNS. All credit card orders must be submitted in writing to:

Casualty Actuarial Society 4350 North Fairfax Drive, Suite 250 Arlington, Virginia 22203 All prepaid orders made by check or money order must be submitted with payment to: Casualty Actuarial Society Post Office Box 425 Merrifield, Virginia 22116-0425.

Publications and Prices

Proceedings of the Casualty Actuarial Society (PCAS)

Volumes I (1914) through XCVIII (2011)	Available at www.casact.org		
Index to the Literature of the Casualty Actuarial Society			
Volumes XXXI to XL (1944-1953)	Available at www.casact.org		
Volume XLI to L (See 1963 PCAS)	Ũ		
Volumes LI to LXXX (1964-1993)			
Volumes LXXX to LXXXV (1994-1998)	Available at www.casact.org		
Foundations of Casualty Actuarial Science (Fourth Ed.)	\$75		
CAS Discussion Paper Programs			
1984 through 2004			
2005—Primer on Enterprise Risk Management (ERM)			
2006—Current Issues in Insurance Financial Statements	\$30		
CAS Forum			
Fall 1987 through Spring 2007	Available at www.casact.org		
CAS <i>E-Forum</i>			
Fall 2007 through Winter 2012, Volume 2	Available at www.casact.org		
2012 Yearbook/2011 Proceedings of the Casualty Actuarial Society	Available at www.casact.org		
"American Remarriage Table"	Available at www.casact.org		
CAS Syllabus of Examinations	Available at www.casact.org		
The Actuarial Review (Annual Subscription)	\$10		
Actuarial Considerations Regarding Risk and Return In Property-Casualty Insurance Pricing	Available at www.casact.org		
Statement of Principles Regarding P&C Insurance Ratemaking	\$4		
Statement of Principles Regarding P&C Loss and Loss Adjustment Expense Reserves	\$4		
Statement of Principles Regarding P&C Valuations	\$4		
Variance: Advancing the Science of Risk	\$50/year*		

*Dues-paying CAS members receive Variance as a member benefit. For information on subscriptions, visit www.variancejournal.org.

LIBRARY

All candidates registered for CAS Examinations and all CAS members have access to the library facilities. The CAS Library is located at the CAS Office in Arlington, Virginia. Books may be withdrawn from the Library for 30 days without charge. In general, not more than two references may be in the hands of one borrower at a time. Candidates requesting study materials should keep in mind that only those materials marked with an "L" in the Syllabus are available through the CAS Library.

Address requests for books to:

Casualty Actuarial Society Library Service 4350 North Fairfax Drive, Suite 250 Arlington, Virginia 22203 Fax: (703) 276-3108; E-Mail: library@casact.org

CAS WEB SITE

The CAS Web Site, at www.casact.org, provides comprehensive information about the CAS for members, candidates, and academics. Through the Web site, CAS members have access to a searchable database of members that contains the most up-to-date contact information for Fellows, Associates, and Affiliates. Other features of the Web site include the Calendar of Events, which is updated often with the latest information about upcoming continuing education programs and other CAS activities, and actuarial science research tools, including a searchable catalog of article citations and a downloadable library of papers. For questions on the CAS Web Site, send an e-mail to webmaster@casact.org.

BEANACTUARY.ORG WEB SITE

The Web Site at www.BeAnActuary.org is devoted entirely to those interested in entering the actuarial profession. The site is sponsored by the CAS/SOA Committee on Career Encouragement. Designed primarily for those who know little about the actuarial profession, visitors will find testimonials from practicing actuaries, explanations of the examination process, and tips on finding a job. The site also boasts an online exam that visitors can take that will give them a better understanding of the actuarial examinations. For questions on the BeAnActuary.org Web Site, send an e-mail to webmaster@BeAnActuary.org.

CASNET

CASNET is an Internet e-mail distribution list on casualty actuarial topics. Subscribers to CASNET are free to post messages for discussion on any topic that might be of interest to people who have casualty actuarial science in common. Topics could include research questions, CAS exams, CAS business, or actuarial jokes. To join CASNET, send an e-mail to webmaster@casact.org with your request to join. Your request should include your full name, date of birth, subscription mode (standard or digest), and e-mail address. You will receive a confirmation when you have been successfully added to the distribution list. For questions on CASNET, send an e-mail to webmaster@casact.org.

REGIONAL AFFILIATES

The following regional actuarial organizations are affiliated with the Casualty Actuarial Society. Information regarding membership in any of these organizations may be obtained from the president or secretary-treasurer of that organization. Information regarding the requirements for affiliation with the Casualty Actuarial Society may be obtained from the Vice President-Professional Education of the Society.

Regional Affiliates Inside the United States and Canada

Association des Actuaires IARD (AAIARD)

Guillaume Benoit, President Amélie Beauregard, Vice President Jean-François Lessard, Treasurer Soraya Larivière, Secretary

For information, contact: Guillaume Benoit, FCAS, FICA Manager - Actuarial Belairdirect 7101, Jean-Talon East Montréal, QC H1M 3T6 Phone: 514-270-1700, ext 60939 Fax: 514-493-9636 guillaume.benoit@intact.net

Buckeye Actuarial Continuing Education (BACE)

Charles A. Bryan, President James S. Shoenfelt, President-Elect Nathan K. Voorhis, Vice President Joseph L. Petrelli, Secretary Allan R. Neis, Treasurer

For information, contact: Joseph L. Petrelli (614)761-8602 jpetrelli@demotech.com

Casualty Actuaries Of The Bay Area (CABA)

Anne Petrides, President Loren Nickel, Secretary-Treasurer

Elections - July

For information, contact: Anne Petrides, anne.petrides@towerswatson.com

Casualty Actuaries Of Desert States (CADS)

Gordon Thompson, President Paul Mayfield, Vice President Melissa Tomita, Secretary-Treasurer Amanda Kemling, Past-President

Officers hold office for 1 year

For information, contact: Melissa Tomita Scottsdale Group 8877 N. Gainey Center Dr. Scottsdale, AZ 85258 (480) 365-2560 nowalkm@scottsdaleins.com

Casualty Actuaries Of Greater New York (CAGNY)

John Celidonio, President Timothy J. McCarthy, Immediate Past President Michael C. Dubin, President Elect Kexin Li, Vice President Lina Boye, Treasurer

Elections - Spring Meeting

For information, contact: Ishmealina (Lina) Boye (646) 471-5171 ishmealina.boye@us.pwc.com

Casualty Actuaries Of The Mid-Atlantic Region (CAMAR)

Lew Augustine, President Michael Cascio, Vice President Steve Manilov, Treasurer Chuck Romberger, Secretary Jon Levy, College Relations Chair Alan Pakula, Education Chair Maureen Donnelly, Past President Mike Blivess, Past President

Elections - December

For information, contact: Chuck Romberger, Secretary Coal Mine Compensation Rating Bureau Commerce Building–Suite 403 300 North Second Street Harrisburg, PA 17101 (717) 238-5020 camar.secy@gmail.com

Casualty Actuaries Of New England (CANE)

Dave Pfahler, President Paul Ivanovskis, Immediate Past President Stephanie Bolstridge, President-Elect Jonathan Blake, Vice President-Programs Michael Blasko, Vice President-Education, Career Contact Person

Craig Avitabile, Vice President-Administration

Elections - March

For information, contact: Craig Avitabile Vice President of Administration Craig.Avitabile@LibertyMutual.com

Casualty Actuaries Of The Northwest (CANW)

Eric Vaagen, President Kimberly Anderson, Past President Heather Caffoe, Vice President Joe Pietraszewski, Secretary Susan Hendricks, Treasurer

Elections - March (Spring Meeting)

For information, contact: Joe Pietraszewski CANW Secretary Liberty Mutual Agency Corporation 1191 2nd Ave, Suite 600 Seattle, WA 98101 206-473-5235 Joe.Pietraszewski@libertymutual.com

Casualty Actuaries of the Southeast (CASE)

Ruth Howald, President Denise Farnan, Past President Kelly Mattheisz, President-Elect Ashley Lowenberg, VP-Administration Michael Speedling, VP-Education Zachery Ziegler, VP-College Relations Keith Palmer, VP-Program

Elections - March

For information, contact: Ruth A. Howald American Mining Insurance Company P. O. Box 660847 Birmingham, AL 35266-0847 (205) 874-8253 Fax: (205) 870-3245 rhowald@americanmining.com

Central States Actuarial Forum (CSAF)

Justin VanOpdorp, President Vacant, Vice President Jeff Adams, Secretary Patricia Smolen, Treasurer Kelly Wargo, Past-President

For information, contact: Justin M. VanOpdorp 444 W. 47th Street Kansas City, MO 64112 (816) 960-9572 jvanopdo@lockton.com

Midwestern Actuarial Forum (MAF)

Amy Juknelis, President Rick Gorvett, Vice President Dave Moore, Secretary-Treasurer J. J. Ihrke, Education Officer

For information, contact: Dave Moore, FCAS CNA Insurance Companies 333 S. Wabash Avenue Fl 27 Chicago, IL 60685 (312) 822-3977 david.moore@cna.com

Ontario Conference Of Casualty Actuaries (OCCA)

Matthew Buchalter, President Chris Van Kooten, Vice President Denise Cheung, Secretary-Treasurer Mariane Takahashi, College Community Relations Chair Cheryl Burrows, Past President

Elections - December

For information, contact: Houston Cheng KPMG LLP Suite 3300 Commerce Court West 199 Bay Street Toronto ON M5L 1B2 (416) 350-3742 hhcheng@kpmg.ca

Southern California Casualty Actuarial Club (SCCAC)

Stephen Koca, President Edward Cimini, Vice President Matt Antol, Secretary/Treasurer Kamil Jasinski, Past President

Elections - September

For information, contact: Matthew L. Antol Associate Actuary Farmers Insurance Group 6303 Owensmouth Ave 4th Floor 038 Woodland Hills, CA 91367 (818) 936-8535 matt.antol@farmersinsurance.com

Southwest Actuarial Forum (SWAF)

Ryan Voge, President Ping Yang, President Elect Michael McPhail, Secretary-Treasurer Suejeudi (Sue) Buehler, Past President Mauricio Freyre, Education Officer Ryan Dunkel, College Relations Officer

For information, contact: Michael McPhail USAA 9800 Fredricksburg Rd. H-03-E San Antonio, TX 78288 (210) 498-1913 Fax: (210) 498-0462 Michael.Mcphail@usaa.com

CAS International Regional Affiliates

Casualty Actuaries Of Bermuda (CABER)

Jay Rajendra, President Sandy Wu, Vice-President Melanie Ostiguy, Treasurer Nelson Le, Secretary

Elections - December

For information, contact: CABER PO Box 640 48 Par-la-ville Road Hamilton HM11 Bermuda

Casualty Actuaries In Europe (CAE)

Laura Stevens, President (Greenwich) Martin Birkenheier, Past President (Dusseldorf) Brad Raatz, Vice-President and President-Elect (London) Gareth Christopher, Secretary-Treasurer (Zurich) Frank Cuypers, European Liaison (Zurich) Elections - Spring For information, contact:

Gareth Christopher gchristopher@novae.com

Casualty Actuaries Of The Far East (CAFE)

Yin Lawn, President Kuei-Hsia Ruth Chu, Vice President Yung-Chih Chen, Secretary-Treasurer Yu-Te Lin, Education Chairperson

Elections - November

For information, contact: Mr. Yin Lawn Managing Director Centum Consulting Company 8F, No 176, Sec 1, Dunhua S Rd Taipei, 106 Taiwan 011-886-25584-2939 Fax: 011-886-25585-9320 yinlawn@yahoo.com

CAS SPECIAL INTEREST SECTIONS

A Special Interest Section is a means for members of the Casualty Actuarial Society to organize the study and discussion of their common functional and professional interests. A section is intended to contribute information on these interests to the actuarial profession through special meetings, seminars, and research projects. Sections are organized only after the approval of the Board of Directors and remain subordinate organizations of the Society. They are self-supporting and open to all members of the Society without regard to their prior experience or training. Subscribers to the Society's Subscriber Program may also become subscribers to a section. Other nonmembers of the Society who meet the requirements of each section as defined in its Constitution may also become subscribers to a section. Information regarding the requirements to organize a Special Interest Section of the Casualty Actuarial Society may be obtained from the Vice President-Professional Education of the Society.

The following Special Interest Sections have been organized. Information regarding membership may be obtained through the individuals listed below.

Casualty Actuaries in Regulation (AIR)

Richard Marcks, President

For information, contact: Richard Marcks State of Connecticut Insurance Dept. PO Box 816 Hartford, CT 06142-0816 richard.marcks@po.state.ct.us

Casualty Actuaries in Reinsurance (CARe)

Elliot R. Burn, *President* Josh Fishman, *Vice President*

Elections—June (biyearly)

For information, contact: Steven Petlick Senior Vice President, Casualty Swiss Reinsurance America Corporation 175 King St Armonk, NY 10504 (914) 828-8216 steven_petlick@swissre.com

Credit Risk Section

The purposes of the Credit Risk Special Interest Section are to promote discussion and the exchange of ideas among members and subscribers on the subject of credit risk evaluation, to provide forums for such discussions to take place, to advance the knowledge of actuarial science as applied to credit risk through both original research and surveys of members' and subscribers' collective knowledge, and to promote good fellowship among its member and subscribers.

Officers

Michael C. Schmitz, FCAS, *President* David L. Ruhm, FCAS, *Vice President* Michael C. Schmitz, FCAS, *Secretary*

For information, contact: Michael C. Schmitz Milliman, Inc. 15800 Bluemound Rd, #400 Brookfield, WI 53005-6069 (262) 784-2250 mike.schmitz@milliman.com

Joint CAS/SOA/CIA Risk Management Section

The Society of Actuaries (SOA), Casualty Actuarial Society (CAS) and Canadian Institute of Actuaries (CIA) jointly sponsor the Risk Management Section. The purpose of the Risk Management Section is to further the education and research in the area of risk management and establish leading risk management techniques. These efforts should help to increase the profile of the actuarial profession as being leaders in this field and should be rigorous and based on sound principles such that the resulting techniques are broadly transportable across disciplines and industries.

2012 Section Leadership

Officers

Stuart Wason, *Chairperson* (2012) Stephen Lowe, *Vice–Chairperson* (2012) Jason Alleyne, *Co-Treasurer* (2012) Mark J. Scanlon, *Co-Treasurer* (2013)

Council Members

Ross Bowen (2012) Susan Cleaver (2014) Eugene Connell (2014) Louise Francis (2014) Glenn Meyers (2013) Peter A. Schindler (2012) David Serge Schraub (2012) Frank Zhang (2012) **Board Partner** Frank Sabatini

Newsletter Editors Ross Bowen Pierre Cottrell Tournier

Liaisons

Eugene Connell–CAS Board Liaison Wayne Fisher–ERM-II Liaison David Ingram–IN-ARM Liaison Sylvain Fortier–CIA Liaison

Staff Partner Robert Wolf

Section Specialist Susan Martz

Seasoned Actuaries Section

The purposes of this organization shall be to advance the knowledge of actuarial science applied to property, casualty, and similar risk exposures, to promote and maintain high standards of conduct and competence within the actuarial profession, to draw upon the experience base of its members to help promote the overall goals of the actuarial profession, and to promote social fellowship among its members.

Elections - November

Officers:

Joanne Spalla, *President* joanne.spalla@finialre.com

Deborah M. Rosenberg, *President-Elect* fcas1984@gmail.com

Anne E. Kelly, *Secretary-Treasurer* akelly@ins.state.ny.us

* Non-CAS Member

(As Approved January 26, 2007)

This Working Agreement sets forth the cooperative goals of the American Academy of Actuaries (Academy), the American Society of Pension Professionals and Actuaries (ASPPA), the Asociacion Mexicana de Actuarios (AMA), the Asociacion Mexicana de Actuarios Consultores (AMAC), the Canadian Institute of Actuaries (CIA), the Casualty Actuarial Society (CAS), the Colegio Nacional de Actuarios (CONAC), the Conference of Consulting Actuaries (Conference), and the Society of Actuaries (SOA), collectively referred to as the Participating Organizations.

In order to: foster cooperation among the Participating Organizations consistent with their individual missions as described below; eliminate unnecessary duplication of effort and activity among the Participating Organizations (thereby maximizing the efficient use of the Participating Organizations' resources); encourage mutual recognition and cross-border discipline; and enhance the image, growth and reputation of the actuarial profession in North America, the Participating Organizations agree to participate in the North American Actuarial Council ("NAAC") as described in this Working Agreement.

The Participating Organizations agree to broadly publicize this Agreement (e.g., publish it in their Yearbooks and on their web sites).



I. Missions of the Participating Organizations

Each of the Participating Organizations operates to further its self-identified mission. The missions of the Participating Organizations may be broadly summarized as follows:

Academy: nationally and internationally, to represent the entire U.S. actuarial profession in the formulation of public policy and support U.S. actuaries in fulfilling their related responsibilities; to encourage the professionalism of U.S. actuaries by fostering the establishment, communication, maintenance and enforcement of high professional standards; and to represent and advance the U.S. actuarial profession and increase the public's recognition of the U.S. actuarial profession's value.

ASPPA: to educate all retirement plan professionals and to preserve and enhance the employer-based retirement system as an essential part of a national retirement income policy in the United States.

AMA: to support the Mexican actuarial profession in maintaining high standards of professional integrity and technical expertise and, thereby, promote the dignity of the profession and enhance the public's recognition of the profession's value.

AMAC: to advance the quality of actuarial consulting practice in Mexico by providing continuing education and business support services to Mexican actuaries in consulting practice.

CIA: as the national organization of the Canadian actuarial profession, to serve the public through the provision by the profession of actuarial services and advice of the highest quality by: representing the Canadian actuarial profession in the formulation of public policy; promoting the advancement of actuarial science and sponsoring programs for the education and qualification of CIA members and prospective members; ensuring that actuarial services provided by its members meet accepted professional standards; and assisting actuaries in Canada in the discharge of their professional responsibilities.

CAS: to advance the body of knowledge of actuarial science applied to property, casualty, and similar risk exposures by: providing basic and continuing education; conducting research; establishing and maintaining high standards of conduct and competence for its members; communicating with the publics affected by insurance; and increasing the awareness of actuarial science.

CONAC: to serve as the professional membership organization for all the actuaries licensed to practice in Mexico, regardless of their specialty area; to advise the Mexican government concerning public policy matters with actuarial implications; and to foster actuarial education and research in Mexico.

Conference: to advance the quality of actuarial consulting practice, support the needs of consulting actuaries, and represent their interests.

SOA: The Society of Actuaries is an educational, research, and professional organization dedicated to serving the public and Society members. Its mission is to advance actuarial knowledge and to enhance the ability of actuaries to provide expert advice and relevant solutions for financial, business, and societal problems involving uncertain future events. The vision of the Society of Actuaries is for actuaries to be recognized as the leading professionals in the modeling and management of financial risk and contingent events. The Society also works to anticipate future member needs through environmental scanning, strategic planning, and dynamic strategy management.

Each of the Participating Organizations takes whatever measures it deems necessary, appropriate, or desirable to attract, recruit and serve its individual members. This agreement is not intended, nor should it be construed, to restrict in any way the independent business decisions of the Participating Organizations but, rather, to document the Participating Organizations' desire to cooperate in the service of the North American actuarial profession consistent with their own missions and purposes.

II. The North American Actuarial Council

A. Purpose of NAAC

The Participating Organizations jointly acknowledge that:

- The operating environments in the three North American countries are very different,
- The Participating Organizations' members expect the organizations to leverage resources and take appropriate advantage of synergies, and
- Increased information sharing and dialogue among the Participating Organizations has the potential to yield collective insights valuable to each organization.

Accordingly, the Participating Organizations define NAAC's purpose as follows:

- 1. NAAC is to be a catalyst for dialogue on key issues facing the North American actuarial profession.
- 2. NAAC is to be a facilitator of opportunities for leveraging of resources across organizations.
- 3. NAAC is to be a source of knowledge in identifying conditions, trends, assumptions, and key issues affecting the North American actuarial profession and benchmarking best practices among member organizations.
- 4. NAAC is to be a forum for information sharing on current and potential activities among the North American actuarial organizations.
- 5. NAAC is to be a forum where networking occurs and camaraderie is built among the leaders of the North American actuarial organizations.

In fulfilling its purpose, NAAC shall abide by the following guiding principles:

- The conditions, cultures and perspectives of each individual country and their member organizations will be respected and valued.
- The autonomy of each member organization to pursue its mission and purpose will be preserved.
- The public interest will always be a primary consideration.
- The best interests of the profession will always be considered.

B. Members

The North American Actuarial Council (NAAC) is comprised of up to two officers of each Participating Organization. One of the two officers shall be the President of the Participating Organization. The other officer shall be the President-Elect of the Participating Organization unless the Participating Organization appoints another officer it deems more appropriate. If a designated officer of a Participating Organization is unable to attend a meeting of NAAC, the Participating Organization may designate another appropriate representative to attend the meeting in that officer's stead.

The Executive Directors of the Participating Organizations attend and participate in NAAC meetings, but are not members of NAAC and do not vote.

Additional organizations may participate in NAAC at the invitation of the Participating Organizations.

C. Meetings

NAAC will meet in person up to three times a year. Arrangements for the in-person meetings (e.g., location and chairing the local meeting) shall be the responsibility of the host country. The Participating Organizations shall decide how to coordinate the agenda and provide meeting materials for the following year no later than at their Fall meeting each year. The Participating Organizations agree to share equally the costs to perform this support function, with the Mexican organizations counting as one organization.

D. Legal

When appropriate, the Academy also agrees to make its legal counsel available to NAAC; and to coordinate, upon request, with counsel for the CIA and the Mexican organizations.

III. Communications Among the Participating Organizations

A. Each Participating Organization shall share items of mutual interest, including items distributed to the Participating Organization's board members (subject to board approval), with the other members of NAAC as soon as feasible after the items are available (electronically through the NAAC list server if appropriate). This sharing includes the Participating Organization's yearbook, newsletters, and board minutes, in addition to other important documents or significant studies that would be of value to the wider audience. This sharing does not apply to any item that a Participating Organization considers to be confidential.

B. Each Participating Organization shall endeavor to inform each of the other Participating Organizations on a timely basis of any of its actions that are expected to have a significant effect on one or more of the other Participating Organizations or their members.

C. Each Participating Organization shall invite the Members of NAAC to all general membership meetings, with the registration fee waived.

AMERICAN ACADEMY OF ACTUARIES

The American Academy of Actuaries is a professional membership, public policy information and communications organization for all actuaries practicing in the United States.

As the organization representing the entire U.S. actuarial profession, the mission of the American Academy of Actuaries is to serve the public and the actuarial profession both nationally and internationally through a) establishing, maintaining, and enforcing high professional standards of actuarial qualification, practice, and conduct, b) assisting in the formulation of public policy by providing independent and objective information, analysis, and education, and c) in cooperation with other organizations representing actuaries: representing and advancing the actuarial profession, and increasing the public's recognition of the actuarial profession's value.

Professional standards of practice and discipline procedures are the responsibility of the Actuarial Standards Board and the Actuarial Board for Counseling and Discipline, respectively, both independent entities managed with Academy staff support. The Academy also establishes qualification standards for making prescribed statements of actuarial opinion.

Applications for membership and a copy of the Academy's Yearbook may be obtained from:

American Academy of Actuaries 1850 M Street NW, Suite 300 Washington, DC 20036 (202) 223-8196; Fax: (202) 872-1948 www.actuary.org

Board of Directors 2011-2012*

Executive Committee

President	Dave Sandberg (2013)
President-Elect	Cecil Bykerk (2014)
Immediate Past President	
Secretary	Steve Rosen (2012)
Treasurer	John Schubert (2012)
Vice President, Casualty	Tim Wisecarver (2012)
Vice President, Health	
Vice President, Life	Cande Olsen (2013)
Vice President, Professionalism	John Gleba (2012)
Vice President, Risk Management and Financial Reporting	Maryellen Coggins (2013)
Vice President	John Moore (2013)

Directors

Mary Bahna-Nolan (2014)
Mary D. Miller (2012)
Dave Neve (2012)
Jeffrey Petertil (2013)
Shari Westerfield (2012)

Ken Kent (2014) Catherine Murphy-Barron (2014) Marc Oberholtzer (2013) Stephen Preston (2013)

Special Directors

ACOPA President	
ACOPA President-Elect	Mark Dunbar (2013)
CAS President	
CAS President-Elect	Gary Josephson (2013)
CCA President	Dale Yamamoto (2012)
CCA President-Elect	Patricia Rotello (2013)
SOA President	Brad Smith (2012)
SOA President-Elect	

* For terms expiring at the annual meeting of the year given.

INTERNATIONAL ACTUARIAL ASSOCIATION

The International Actuarial Association (IAA) is the international professional, educational, and research organization of actuarial associations and of actuaries. Its objectives include serving the public, enhancing the reputation of the actuarial profession throughout the world, promoting high standards of professionalism of actuaries in the public interest, advancing actuarial knowledge and its applications, and representing member associations in discussions with international bodies.

The first International Congress of Actuaries was held in 1895 in Brussels under the auspices of the Permanent Committee of International Congresses of Actuaries. The name of the organization was changed in 1968 to the International Actuarial Association. The IAA was restructured in June 1998 from an organization with individual members to become an organization of actuarial associations, and the International Forum of Actuarial Associations was simultaneously dissolved.

The committee structure of IAA includes Accreditation, Advice and Assistance, Education, Financial Risks, Insurance Accounting, Insurance Regulation, Member Services, Pensions and Employee Benefits, Professionalism, Social Security, Supranational Relations, and various governance committees. Nominations for committee representatives can be submitted by member associations on the basis of one per committee.

The CAS is a member association of the IAA and all CAS Fellows are members of the IAA, with dues paid for by the CAS. The American Academy of Actuaries (AAA) is also a member association of the IAA and all members of the Academy (MAAAs) are members of the IAA (with dues paid for by the AAA). All other CAS Associates who are not MAAAs may apply for IAA membership to the IAA Council (through the AAA Office).

Members of the IAA may attend its international congresses, generally held every four years. The 2014 congress will be held in Washington, DC. Members also receive the IAA Bulletin, which is distributed electronically on the IAA Web Site at www.actuaries.org. For CAS members who do not have access to the Internet, the CAS will reproduce and distribute copies of the IAA Bulletin on request. An IAA membership listing is available on the IAA Web Site under "Interactive Tools" in the Members section.

Actuarial Approach for Financial Risks (AFIR)	http://www.actuaries.org/index.cfm?LANG=EN&DSP=AFIR&ACT=INDEX
Actuarial Studies in Non-Life Insurance (ASTIN)	http://www.actuaries.org/index.cfm?lang=EN&DSP=ASTIN&ACT=INDEX
Actuaries Without Frontiers (AWF)	http://www.actuaries.org/index.cfm?lang=EN&DSP=AWB&ACT=INDEX
IAA Health Section (IAAHS)	http://www.actuaries.org/index.cfm?lang=EN&DSP=IAAHS&ACT=INDEX
IAA Life Section (IAALS)	http://www.actuaries.org/index.cfm?lang=EN&DSP=LIFE&ACT=INDEX
International Association of Consulting Actuaries (IACA)	http://www.actuaries.org/index.cfm?lang=EN&DSP=IACA&ACT=INDEX
Pensions, Benefits, and Social Security (PBSS)	http://www.actuaries.org/index.cfm?lang=EN&DSP=PBSS&ACT=INDEX

Following are URLs for IAA Sections and that are open to all IAA members:

Inquiries by CAS members regarding the International Actuarial Association should be directed to:

International Actuarial Association 150 Metcalfe Street, Suite 601 Ottawa, Ontario K2P 1P1 Canada Phone: +1-613-236-0886 Fax: 1-613-236-1386

Officers

President	Desmond Smith
President-Elect	
Immediate Past President	Cecil D. Bykerk
Secretary General	Vacant

For more information, see the IAA Web Site at www.actuaries.org.

THE ACTUARIAL PROFESSION (U.K.)

The Actuarial Profession represents the members of the Institute and Faculty of Actuaries externally, and regulates those members for the benefit of the outside world. The Institute and Faculty of Actuaries is the chartered professional body for actuaries in the United Kingdom.

The Actuarial Profession's aims are to:

- promote the work of actuaries
- oversee the education of actuaries at all levels
- expand actuarial knowledge
- enforce professional and ethical standards
- cooperate with all other interested parties
- identify matters of public concern where the input and involvement of actuaries can be of benefit to society.

For more information, visit http://www.actuaries.org.uk/.

THE GENERAL INSURANCE RESEARCH ORGANISING (GIRO) COMMITTEE

The Actuarial Profession's General Insurance Research Organising (GIRO) Committee is responsible for coordinating the General Insurance Practice Executive Committee's program of research and for organizing the annual general insurance conference.

The GIRO Committee is also responsible for the award of the Brian Hey prize which is presented annually to the best paper submitted to that year's GIRO conference.

For an archive of GIRO Convention papers, visit http://www.actuaries.org.uk/research-and-resources/pages/giro-convention-papers-archive.

American Society of Pension Professionals & Actuaries

4245 North Fairfax Drive, Suite 750 Arlington, Virginia 22203 (703) 516-9300 www.asppa.org asppa@asppa.org Robert M. Richter, APM, *President* Brian H. Graff, Esq., APM, *Executive Director/Chief Executive Officer*

Asociación Mexicana de Actuarios

Miguel Serrano No. 21-PH Col. del Valle, C.P. 03100 México, D.F. 55 75 95 13; Fax: 55 75 94 09 www.ama.org.mx actuarios@ama.org.mx Luis Jesús Alvarez Marcén, *Presidente* Crisóforo Suárez Tinoco, *Vice Presidente* Verónica Robledo Camacho, *Secretario*

Asociación Mexicana de Actuarios Consultores

Miguel Serrano No. 21, Int 901 Col. del Valle, C.P. 03100 México, D.F. 55 59 05 14 www.amac.org.mx informes@amac.org.mx Jorge Fonseca, *Presidente* Armando Orta, *Vice Presidente* Beatriz Anaya, *Tesorera* Patricia Barra, *Secretaria*

Canadian Institute of Actuaries

800-150 Metcalfe Street Ottawa, ON K2P 1P1 (613) 236-8196 www.actuaries.ca Jim Christie, FCIA, FCAS, *President* Simon R. Curtis, BSc, FCIA, FSA, *President-Elect* Micheline Dionne, BSc, FCIA, FSA, MAAA, *Immediate Past President* Martin Roy, BSCAct, FICA, FSA, *Secretary-Treasurer*

Colegio Nacional de Actuarios

Miguel Serrano No. 21-PH Col. del Valle, C.P. 03100 México, D.F. 55 59 29 03; Fax: 55 59 29 43 www.conac.org.mx info@conac.org.mx Jesús Zúñiga San Martín, *Presidente* Gerardo Sánchez Barrio, *Vicepresidente* Sandra Gallegos Gallardo, *Tesorero* Diego Hernández Rangel, *Secretario*

Conference of Consulting Actuaries

3880 Salem Lake Dr., Suite H Lake Grove, Illinois 60047-5292 (847) 719-6500 www.ccactuaries.org conference@ccactuaries.org Dale H. Yamamoto, *President* Patricia A. Rotello, *President-Elect* Lawrence A. Johansen, *Secretary* S. Aquil Ahmed, *Treasurer*

Society of Actuaries

475 North Martingale Road, Suite 800 Schaumburg, Illinois 60173 (847) 706-3500 www.soa.org Bradley M. Smith, *President* Tonya B. Manning, *President-Elect*

CAS FUTURE MEETINGS

CAS Annual Meeting

2012

November 11, 2012 - November 14, 2012 Walt Disney World Swan Hotel Lake Buena Vista, FL United States

2013

November 2, 2013 - November 6, 2013 Hilton Minneapolis Minneapolis, MN United States

2014—Centennial Celebration

November 9, 2014 - November 12, 2014 Hilton New York New York, NY United States

2015

November TBD, 2015 Boston, MA United States

CAS Spring Meeting

2012

May 20, 2012 - May 23, 2012 Arizona Grand Resort Phoenix, AZ United States

2013

May 19, 2013 - May 22, 2013 The Westin Bayshore Vancouver Vancouver, BC Canada

2014—ICA 2014 (International Congress of Actuaries)

March 30, 2014 - April 4, 2014 Marriott Wardman Park Washington, DC United States

2015

May TBD, 2015 Colorado Springs, CO United States

ICA 2014 (International Congress of Actuaries)

2014

March 30, 2014 - April 4, 2014 Marriott Wardman Park Washington, DC United States

CAS Centennial Celebration

2014 November 9, 2014 - November 12, 2014 Hilton New York New York, NY

<u>Ratemaking and Product</u> <u>Management (RPM) Seminar</u>

2013

March 11, 2013 - March 13, 2013 Hyatt Regency Huntington Beach Resort & Spa Huntington Beach, CA United States

2014

March TBD, 2014 Washington , DC United States

Seminar on Reinsurance

2012

June 4, 2012 - June 5, 2012 Hyatt Regency Cambridge Boston, MA United States

2013

June 6, 2013 - June 7, 2013 Fairmont Southampton Southampton Bermuda

Casualty Loss Reserve Seminar

2012

September 5, 2012 - September 7, 2012 Sheraton Denver Downtown Hotel Denver, CO United States

2013

September 16, 2013 - September 17, 2013 Boston Marriott Copley Place Boston, MA United States

<u>CAS/CIA Seminar for the Appointed</u> <u>Actuary</u>

2012

September 20, 2012 - September 21, 2012 Fairmont Royal York Hotel Toronto, ON Canada

Limited Attendance Seminar

2012

In Focus: Taming Cats-Managing Natural and Man-Made Catastrophe Risks October 4, 2012 - October 5, 2012 Baltimore Marriott Waterfront Baltimore, MD United States

Webinars and Online Courses

See the CAS Calendar of Events for current information on CAS Webinars and Online Courses at http://www.casact.org/calendar/.

PROCEEDINGS

OF THE Casualty Actuarial Society

Organized 1914



2011 VOLUME XCVIII Number 188—May 2011 Number 189—November 2011

2011 PROCEEDINGS of the CASUALTY ACTUARIAL SOCIETY

Part I: Spring Meeting 2011 May 15, 16, 17, 18, 2011 The Breakers, Palm Beach, FL

ADDRESS TO NEW MEMBERS—MAY 16, 2011

CHRISTOPHER S. CARLSON

In continuing the great tradition established many years ago, I am so privileged and pleased to welcome our newest classes of members to the Casualty Actuarial Society. I can still remember when I sat in your place as a new Associate just 25 years ago and as a new Fellow some 21 years ago. The CAS was a much smaller organization in 1985 than it is today.

To the new Fellows, the past few months have been a time of tremendous celebration upon the completion of your examination process. Since your current president and I have a deep appreciation for long distance and marathon running, let me use that as a backdrop for some of my remarks. During my running days, I raced four marathons including completing the Boston Marathon twice. I never finished one of them thinking, "Gee that was so much fun. Can we do that again real soon?" You probably have the same feeling about the exams. It is not a process that once you have completed it, you look back and say, "Let's do that again." So let me offer my personal congratulations on "finishing the race."

I offer congratulations to those of you who have attained Associateship. This is a wonderful accomplishment. We look forward to welcoming you as Fellows in the very near future. As you may understand better in a minute, my advice to each of you is:-"Finish the race."

Every pro golfer has a caddy—and now a swing coach and a mental coach—to help him or her succeed. Likewise, to successfully endure the long exam process, it takes a great support team. So to the many people who have supported these new Associates and new Fellows as they spent uncounted hours preparing for the exams, I offer congratulations and appreciation. If these new members are anything like me, they were not always in the best of moods or easy to get along with before the exam, before the results, and sometimes after the results—depending upon their scores. While the recognition may be to the individual, it is most often accomplished through the efforts of many.

Fellows, just as athletes begin to prepare for the next challenges shortly after the completion of their last events, you now have the opportunity to utilize your many skills, gifts, and acquired knowledge in whatever path or paths you choose to go in the future. You just have to find a new challenge.

Now that you have some spare brain cells and brain power, I will touch briefly upon three areas you might ponder as being important in your life now and in the future: your career, the CAS, and, most importantly, you and your family.

In your preparation for the exams, you have learned the background of a variety of the important facets of property and casualty actuarial science and risk transfer mechanisms. But you probably also developed an appreciation that the exam material only went so far. Putting the material and the processes into place in performing your job required an even more detailed and deeper understanding of the specifics of each application, whether it be in ratemaking, reserving or maybe some other application. The basic skills and techniques are what you learned in the exams. The key to your future will be adopting those skills and techniques and using them in the most appropriate way. This is part of the process of moving from becoming an actuary to being an actuary that was so eloquently expressed by LeRoy Simon in his address to new members a few years ago. His comments centered on the professional aspect of being an actuary. He stated that it is easier to "become an actuary" than to "be an actuary." The tough challenges continue throughout our careers.

For many of you, the final exam will be the last time you have the right answer. In our profession, we make myriads of estimates of the future. These are not typically right on target. With apologies to my friend and developer of Bayesian credibility, Dr. Hans Bühlman, in the classical credibility area, we focus upon development of estimates that will be within plus or minus five percent of the actual result, 90 percent of the time. If we are that good, that means we are outside plus or minus five percent one out of every 10 estimates. Try and remember this when you are providing your results. They are not exact pictures of the future—only estimates that may vary from what turns out to be the case.

For those of you practicing in the United States and Canada, I heavily encourage you to continually review the Actuarial Standards of Practice. I also encourage a periodic reading of the Code of Professional Conduct as jointly adopted by the American Academy of Actuaries and the Casualty Actuarial Society. In Canada, the Code of Professional Conduct and Standards of Practice have legal standing and are equally important. These documents are written to guide you and to provide your employers and clients with a reasonable expectation of a high level of professional conduct and professionalism.

Address to New Members

The CAS is not only an organization with high standards for gaining membership, but also for standards for maintaining membership through requirements of continuing professional development. While many of us have complied with the requirements of the American Academy of Actuaries and the Canadian Institute of Actuaries, CAS members who practice outside of those areas (and the numbers are growing) are now subject to requirements of the CAS. It is through continuing education that we can maintain our professional skills at a fairly high level. Granted, you will not be tested in the same way you were with the exams. Continuous learning is a hallmark of any profession, especially one like the actuarial profession that demands a critical level of understanding as the science itself continues to evolve. Many of the areas that you have just studied were not on the exams just 20 years ago. Staying current with state of the art actuarial techniques is yet another challenge. My advice is to embrace learning.

For those of you looking for another exam challenge and CE credit at the same time, the CAS will soon offer an additional globally recognized designation titled Chartered Enterprise Risk Analyst (CERA). A CAS member is highly trained in the measurement and management of hazard risk. This designation has been developed through the efforts of many of the actuarial organizations throughout the world to expand the focus to many other types of risk, their measurement and management. Gaining this designation through an additional exam or two may assist you in gaining opportunities in this emerging field with high visibility and growing value. Just as every actuary won't rise to the level of chief actuary, every CERA may not be a chief risk officer. But as part of the CAS Centennial Goal, we may aspire that every chief risk officer has an actuary as a trusted and valued advisor on the team.

But whatever you do, find your race and commit to a process of continuous learning.

The legendary Ohio State coach Woody Hayes said, "You can never pay back, you can only pay forward." With that in mind and all of your newfound free time, I encourage you to seriously consider some level of involvement with the CAS. As you may have learned, the CAS is a volunteer-led organization. Most of the speakers at this meeting, and many of the people involved in organizing this meeting, are CAS members. All those nasty exams were developed, administered, and graded by CAS members. The CAS staff does a wonderful job supporting our volunteer efforts. For the CAS to thrive into the future, I encourage you to consider joining a committee. Here's your chance to write those perfect questions that have eluded question writers for years. In addition, there are many committees and Regional Affiliates in need of volunteers. Consider writing a paper for *E-Forum*, or our scientific journal *Variance*. The CAS has many areas for volunteers to participate. I think you will find your CAS experience to be challenging, but also very rewarding. Hopefully, in the future, some of you will serve as a committee chair, vice president, board member and even one or more as president of the CAS.

I'd like to share some comments on work-life balance that may cause my supportive wife of many years to chuckle. After years devoting significant amounts of time and energy to the exams, it is important now to step back and determine, at least short-term, how to maintain a reasonable work-life balance. I tell people that the reason I took up the great game of golf was that, after completing the exams, I didn't have enough frustration in my life. In my case, I replaced the passion and dedication for completing the exams with a passion and dedication for chasing a white ball around the golf course. That, along with skiing, has provided me opportunities to recreate. Some may say I also developed a passion for the efforts of the CAS. So, try to find an area or two within your life outside of work that you really enjoy. Develop a passion for them. Find your challenges. I chase par and black diamond ski runs. Find your challenges.

Finally, one area in which the actuarial profession in general has scored low in surveys is the area of communication. I'd like to expand upon the suggestion shared by Gail Ross a few years ago in her address when she recommended "rest your thumbs."

I suggest "rest your thumbs and your fingers." You may wonder what this has to do with communication. My son in college can text and e-mail on his smart phone and laptop as well as, if not better, than, any college student. When he has a disagreement with his girlfriend, I'll ask, "Did you talk to her?" To which he responds "I sent her a text." Texting and e-mailing are, in my opinion, or should I say IMHO, not anywhere as effective as actually talking on the phone or, better yet, talking face-to-face with people. So instead of perfecting your typing skills on your BlackBerry, iPhone, or other smart phone, please use the call button and talk into the phone. Better yet, you might even get out of your chair and talk directly to someone, you'll be surprised how much more effective your communication can be.

Your future is bright. Embrace the challenge and opportunity to shine in your career, the profession, and your family life.

Congratulations to all. I wish each and every one of you a very rewarding career in whatever races, paths, or challenges you chose to take. Thank you.

MINUTES OF THE 2011 SPRING MEETING

Sunday, May 15, 2011

The Casualty Actuarial Society (CAS) Board of Directors met from 8:00 a.m. to 5:00 p.m.

Registration was held from 4:00 p.m. to 6:30 p.m.

An officers' reception for new Associates and their spouses/guests was held from 5:30 p.m. to 6:30 p.m.

A welcome reception for all attendees was held from 6:30 p.m. to 7:30 p.m.

Monday, May 16, 2011

Registration was held from 7:00 a.m. to 5:00 p.m.

A continental breakfast was served at 7:00 a.m. The business session was opened by CAS President Ralph S. Blanchard III at 8:00 a.m. Mr. Blanchard welcomed everyone and announced that the meeting was being Webcast over the CAS Web Site. He extended a special welcome to the new Fellows, new Associates, and one new Fellow by Mutual Recognition, who would be recognized at this meeting.

Mr. Blanchard introduced several special guests in attendance, including Cecil Bykerk, President of the International Actuarial Association; Wayne Fisher, Executive Director of the Enterprise Risk Management Institute International; David Hartman, Chair of the Actuarial Foundation Board of Directors; Gene Lai, President of the American Risk and Insurance Association; and Mary Frances Miller, President of the American Academy of Actuaries.

Mr. Blanchard went on to introduce the past presidents of the Society in attendance including Chris Carlson (2007), David Hartman (1988), Roger Hayne (2009), Stan Khury (1984), John Kollar (2008), Steve Lehmann (1998), and Mary Frances Miller (2004).

Mr. Blanchard then introduced the CAS Executive Council; the CAS Board of Directors; Jim Christie, Board liaison from the Canadian Institute of Actuaries; and Tim Wisecarver, Board liaison from the American Academy of Actuaries.

Next, the names were announced of the new Associates and a new Fellow by Mutual Recognition. They are as follows:

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New Associates			
Jonathan C. Abbott	David Anthony Gamble	Kim Ho Lo	Robert M. Sanders
Emily Stone Allen	Demetria Anne Gianopoulos	Brian Michael Lubeck	Eric J. Schmidt
Nicole Kristen Belmonte	Margaret Hendrix Glenn	Emily A. Lyons	Kaushika Sengupta
Subhayu Bose	Tanya D. Havlicek	Carrie F. Miller	Philip Traicus
Jarod James Brewster	Jared Helms	Leigh Miselis	Etienne Trudel
Paul Andrew Brezovec	Andrew S. Herman	Alexander F. Morrone	Tracy Valentine
Amy M. Chang	Brian M. Ironside	Laura Ann Mottl	Matthew Charles Van Vleet
Dana Tung Chang	David Itzkowitz	Melissa Nowalk	Phillip Anthony Victory
Aritra Chatterjee	Albert H. Johnson	Aleksandra V. Orlova	Zachary Samuel Webber
Cynthia Cheng	Kayne M. Lammers	Tetteh Otuteye	Ming Yi Wong
Haoxuan Cheng	Michael J. Lavazza Jr.	Brett A. Parmenter	Adrian Ralph Wood
Ryan Conrad	Sarah Jane Leszczuk	Rochelle M. Pereira	Julieta A. Zambrano
Emilie Rovito Dubois	Joyce Cheuk Chi Li	Rebecca Lynn Pettingell	Nan Zhang
Elizabeth E. End	Robert Emmet Lighthizer Jr.	Thomas M. Prince	Bei Zhou
Michael Epstein	Chiouray Lin	Olivier Elie Quesnel	
Shu Fang	Steven Ray Lindley	Michael J. Reynolds	
Jennifer R. Fiorita	Bradley W. Lippowiths	Arlene Marie Richardson	

New Fellow by Mutual Recognition Zander Smith

Mr. Blanchard next recognized the valuable work of CAS member volunteers, including moderators and panelists at this or other meetings and seminars this year; authors of papers; Regional Affiliate officers; chairs of CAS, CIA, or Academy committees; CAS, CIA, and American Academy of Actuaries committee members; individuals who have worked on the committees of other actuarial organizations; and Board Members and Officers of the Executive Council. Mr. Blanchard noted that 34% of CAS members volunteer. He urged those not currently volunteering to learn more about volunteer opportunities at the CAS Volunteer and Recruitment table.

Mr. Blanchard encouraged the audience to nominate worthy CAS members for the Above and Beyond Achievement Award, the Matthew Rodermund Service Award, and the New Member Volunteerism Award—a newly established honor which recognizes volunteer contributions made by members within five years of earning their latest credential. The winners of these awards will be announced at the 2011 Annual Meeting in Chicago.

Mr. Blanchard then announced two scholarship awards administered by the CAS Trust.

The Harold W. Schloss Memorial Scholarship award is a \$500 scholarship to benefit a deserving and academically outstanding student in the actuarial program of the Department of Statistics and Actuarial Science at the University of Iowa. The student recipient is selected by the Trustees of the CAS Trust, based on the recommendation of the Department Chair at the University of Iowa. This \$500 scholarship was awarded to Daniel Stanford Benzshawel.

The CAS Trust Scholarship is funded by donations to the CAS Trust and awards up to three \$2,000 scholarships to deserving students annually. The scholarship's intent is to further students' interest in the property/casualty actuarial profession and to encourage pursuit of the CAS designation. Recipients are chosen by the CAS Trust Scholarship Subcommittee. The 2011 winners are Kevin Owens from the University of Iowa and Danielle Gilmour from University of Connecticut.

Mr. Blanchard recognized and thanked the participants in the Society Partners program. Society Partners are firms who demonstrate a commitment to the CAS and its mission by making an annual pledge to support CAS activities. Mr. Blanchard noted that 2011 is the second year for the program and that, due to the support of the Society Partners and their sponsorships, fees for CAS meetings and seminars have been able to remain at the same levels as they were in 2010. Society Partners for the 2011 program are as follows:

Platinum Partners

- Pauline Reimer and Pryor Associates Executive Search
- Milliman
- Ernst & Young LLP

Gold Partner

• Towers Watson

Silver Partners

- Actuarial Careers, Inc.
- ISO
- Lexis Nexis
- Pinnacle Actuarial Resources

Following the Society Partners announcement, the new CAS Fellows were recognized in a special ceremony. The names of the members of the Spring 2011 class are as follows:

NEW FELLOWS

New Fellows			
Christopher T. Andersen	Kwame Akil Davis	Jing Li	Ashley Arlene Reller
Alanna Catherine Anderson	Leigh Maurice Duhig	Lian-Ching Lim	Jeffrey N. Roth
Amel Arhab	Caryl Marie Fank	Christopher J. Loyd	Lindsay Aaron Roy
Sophia Cyma Banduk	Patrick Arthur Fillmore	Xiaoyan Ma	Jennifer Rae Schwartz
William Paul Borgen	Robert Jerome Foskey	Michael Brandon McPhail	Andra Catalina Serban
Jess B. Broussard	Susan C. Hendricks	Joseph A. Milicia	Evgueni Venkov
Karen B. Buchbinder	Jennifer Lynn Kaye	Randall K. Motchan	Katherine Therese Werner
Richard F. Burke	Rodney Christopher Kleve	Minh-Huyen Nguyen	Chad P. Wilson
Hsing-Pei Chen	Vinu Kuriakose	Samantha Lynn Nieveen	Sandy Wu
Meng-Fang Chung	Matthew Thomas Laitner	Irina Viktorovna Odushkin	Xingzhi Wu
Kevin M. Cleary	Jonathan Robert Laux	Grant C. Owens	Gang Richard Xu
Elizabeth Louise Cohen	Charles Chaoyuen Lee	Robert V. Phipps	Virginia M. Zeigler
Robert Alan Cole	Christie Lai Yin Lee	Douglas E. Pirtle	Huiyan A. Zhou
Li Cui	Jeremy M. Lehmann	Matthew Ryan Purdy	
Chad Alan Davis	Richard Brian Levy	Joseph David Rakstad	

Mr. Blanchard introduced Chris Carlson, a CAS past president, who gave the address to new members. Mr. Carlson is a Fellow of the Casualty Actuarial Society and a Member of the American Academy of Actuaries. He is currently a consulting actuary with Pinnacle Actuarial Resources, Inc. in Columbus, Ohio. He served as CAS president in 2008 and as chairperson of the CAS Board of Directors in 2009. Mr. Carlson has served the CAS in various other capacities including as an elected member of the Board of Directors, Vice President of Professional Education, and Chair of both the Ratemaking Research and the Ratemaking Seminar Committees. Mr. Carlson has also served the actuarial profession beyond the CAS, by volunteering for both the Actuarial Standards Board and the American Academy of Actuaries. He has given many hours of his professional life in service to the actuarial profession and is truly a role model for our new Fellows and Associates.

Following the address to new members, David Cummings gave an update on the activities of the Actuarial Foundation.

Next, Gene Lai, president of the American Risk and Insurance Association (ARIA), gave an update on the organization.

Chet Szczepanski, Vice-President–Professional Education, made several announcements regarding the meeting, stating that the Spring Meeting consisted of four general sessions and over 25 different concurrent sessions, offering a maximum of 16.5 CE credits. Mr. Szczepanski encouraged attendees to take advantage of the University of CAS, which provides recorded digital media of continuing education programs offered free to CAS Meeting attendees. He also encouraged members to attend the CAS Annual Meeting in Chicago and to submit program ideas for that meeting. Mr. Szczepanski next recognized and thanked the following 2011 Spring Meeting Sponsors:

- Milliman—lanyard and opening day luncheon
- Pauline Reimer and Pryor Associates Executive Search—tote-bag and Cyber Café

- Pinnacle Actuarial Resources-gum and registration handout
- ClaudePenland.com—notebook
- Actuarial Careers—registration handout
- Barrie & Hibbert-registration handout
- Ernst & Young LLP-registration handout
- Guy Carpenter & Company, LLC-registration handout

Mr. Szczepanski announced the addition of the new Spring Meeting Roundtable Discussions, where four groups of nine participants and one facilitator discuss critical topics. Participants in the Roundtables earn CE credits. Mr. Szczepanski also encouraged new members to attend a special session later in the day called "The CAS and You: An Overview for New Members."

Attendees were asked to complete brief evaluation forms at the end of every session. They were also encouraged to use the social networking tool Twitter to post their thoughts on the Spring Meeting.

In conclusion, Mr. Szczepanski thanked the Program Planning Committee and members of the CAS Office staff for their contributions to the meeting.

Following Mr. Szczepanski, Mr. Blanchard introduced the keynote speaker Brian Sullivan. Mr. Sullivan has been an insurance reporter and editor at the *Journal of Commerce* and the *Philadelphia Inquirer*, editor in chief of the *Philadelphia Business Journal*, and managing editor of the *American Banker*, before being named president of *American Banker Bond Buyer Newsletters*. He is a journalist who has been covering financial services and the insurance industry for 30 years. Mr. Sullivan is currently editor and publisher of two of the leading newsletters in the property and casualty insurance industry, *Auto Insurance Report* and *Property Insurance Report*, and chairs the annual conferences for those businesses. With a reputation for speaking his mind, Mr. Sullivan has been called upon to host seminars for the senior management teams and boards of directors for insurance companies of all sizes, and make presentations on industry trends to agents, claims, and operations professionals.

After a refreshment break, the first general session was held from 10:45 a.m. to 12:15 p.m. and covered the following topic:

No Insurer is an Island

Moderator:	Mary Frances Miller, Founder and Senior Consulting Actuary, Select Actuarial Services; President, American Academy of Actuaries
Panelists:	Kathryn Morgan, Manager, Prudential Insurance Policy, Financial Services Authority (U.K.); Member, Insurance Committee, Groupe Consultatif Actuariel Européen
	Kris DeFrain, Director, Actuarial and Statistical, NAIC; Vice President-International, Casualty Actuarial Society
	Alessandrea Quane, SVP-Chief Risk Officer, Chartis International

Following a luncheon held from 12:15 p.m. to 1:30 p.m., the second general session was held from 1:30 p.m. to 3:00 p.m.:

Florida Homeowners—A Study of Contrasts

Moderator:	Jeff Kucera, Senior Consultant, Towers Watson
Panelists:	Yong Gilroy, Chief Insurance Officer, Citizens Property Insurance Corporation
	Locke Burt, President, Security First Insurance Company
	Robert Ritchie, President and CEO, American Integrity Insurance Group

After a brief refreshment break, the following concurrent sessions were held from 3:30 p.m. to 5:00 p.m.:

1. CAS Actuaries Working Overs Moderator:	seas Xiang Ji, Actuarial Director, CNA Insurance Company	
Panelists:	Karen Commons, Associate Actuary, Allstate Insurance Company	
	Brian MacMahon, Chief Actuary, Liberty Mutual Reinsurance	
	Ronald Kozlowski, Director and Head of General Insurance Consulting, Asia Pacific, Towers Watson	
2. Data Visualization		
Presenter:	Ken Hilburn, Vice President, Juice Analytics	
3. Everything You Ever Wanted to Know about Health Reform but Were Afraid to Ask		
Moderator/Panelist:	Mary D. Miller, Assistant Director, Ohio Department of Insurance	
Panelists:	Joshua Goldberg, Health Policy and Legislative Analyst, NAIC	
	Douglas Lynch, Vice President and Actuary, Blue Cross/Blue Shield of Florida	

Minutes of the 2011 Spring Meeting

4. Expanding Analytics Through the Moderator/Panelist:	Use of Machine Learning Christopher L. Cooksey, Senior Actuarial Consultant, EagleEye Analytics
Panelist:	Joel A. Reott, Director of Regulatory Compliance, Georgia Farm Bureau Mutual Insurance Co.
5. Systemic Risk in the U.S. Insuran Moderator: Panelists:	Stephen Lienhard, Vice President, Guy Carpenter & Company, LLC Donald Mango, Head of Global Advisory, Guy Carpenter & Company, LLC
	Shaun Wang, Chairman, Risk Lighthouse LLC
6. The State of the Reinsurance Mar Moderator:	ket James W. Larkin, Senior Vice President and Property Underwriting Manager, Munich Re America, Inc.
Panelists:	Joshua Everdell, Senior Vice President, Guy Carpenter & Company, LLC Roderick P. Thaler, Vice Chairman, Aon Benfield
The following optional session was held	from 5:00 p.m. to 5:30 p.m.:
1. The CAS and You: An Overview for Presenter:	r New Members Joanne Spalla, Past Member of the Board of Directors and Executive Council, Casualty Actuarial Society
An Officers' Reception for the New Fellow	ws and their spouses or guests was held from 5:30 p.m. to 6:30 p.m.
Tuesday, May 17, 2011 Registration was held from 7:00 a.m. to 2:30 p.m. A continental breakfast was served from 7:00 a.m. to 9:00 a.m. The following general session was held rom 8:00 a.m. to 9:30 a.m. The Effects of Social Media on Property & Casualty Insurance Moderator: Brian Sullivan, Editor and Conference Chair, Risk Information, Inc. Panelists: Terry Golesworthy, President, The Customer Respect Group	
	Patrick Sullivan, Contributing Writer, Risk Information, Inc. Roosevelt Mosley, Principal, Pinnacle Actuarial Resources, Inc.
One session was repeated and the follow	ing concurrent sessions were held from 10:00 a.m. to 11:30 a.m.:
1. A User's Guide to Writing a Good Moderator/Panelist:	Actuarial Report Joseph Herbers, Managing Principal, Pinnacle Actuarial Resources, Inc.
Panelist:	Mary D. Miller, Assistant Director, Ohio Department of Insurance
2. Achieving Optimal Insurance Pric Moderator:	Sing by Balancing Class Plan Rating and Underwriting-Driven Pricing Mo Masud, Senior Manager, Actuarial, Risk & Analytics, Deloitte Consulting LLP
Panelists:	Jun Yan, Specialist Leader, Advanced Analytics & Modeling, Deloitte Consulting LLP Beth Sweeney, Staff Actuary Research and Modeling Manager, Actuarial Division, American Family Insurance Group Cheng-Sheng Peter Wu, Director, Advanced Analytics & Modeling, Deloitte Consulting LLP
3. Emerging Risk—Reinsurance Moderator/Panelist:	Pete Thomas, EVP, Managing Director and Chief Risk Officer, Willis Re
Panelists:	David K. A. Mordecai, President, Risk Economics, Inc. Samantha Kappagoda, Chief Economist, Risk Economics, Inc.

Minutes of the 2011 Spring Meeting

	minutes of the 2011 spring meeting
4. Extreme Development Tect Moderator/Panelist:	hniques Richard Plunkett, Senior VP – Actuary, Brandywine Group
Panelists:	Justin Brenden, Manager, Ernst & Young LLP Christopher Diamantoukos, Senior Consulting Actuary, Ernst & Young LLP
	Christopher Diamanoukos, senior Consulting Actuary, Ernst & roung EEr
5. Past Court Rulings Effects Moderator/Panelist:	on Claim Settlements: Florida Personal Auto as an Example Allan Neis, Corporate Actuary, Progressive Corporation
Panelists:	Barry "Todd" Parnell, Regional Claims Attorney, Progressive Corporation
	Emma Magnole, Division Claims Manager, Infinity Insurance Companies
6. Predictive Modeling on Fr Moderator/Panelist:	aud Claims Roosevelt Mosley, Principal, Pinnacle Actuarial Resources, Inc.
Panelist:	Richard A. Derrig, Ph.D., President, OPAL Consulting LLC
7. Uncovering the Mysteries Moderator:	of the Insurance Cycle Christopher Najim, AVP and Actuary, Swiss Reinsurance America Corporation
Panelists:	Jessica Leong, Lead Casualty Specialty Actuary, Guy Carpenter & Company, LLC
	Shaun Wang, Chairman, Risk Lighthouse LLC
	Meyer Shields, Analyst, Stifel, Nicolaus & Company, Inc.
Following a lunch break, three	sessions were repeated and the following concurrent sessions were held from 1:00 p.m.to 2:30 p.m.:
1. Flood—Australia and Othe Moderator:	er International Exposures Benoit Carrier, Vice President and Casualty Pricing Manager, Zurich North America
Panelists:	Jane Toothill, Head of Catastrophe Analysis, JBA Consulting
	David Lalonde, Senior Vice President, AIR Worldwide Corporation
2. Medicare Set Asides—What Moderator:	at Every Actuary Needs to Know Loren Nickel, Associate Director and Actuary, Aon Global Risk Consulting
Panelists:	James S. Price, Senior Consultant, Aon Global Risk Consulting
	Timothy Doherty, Functional Claim Consultant, Sedgwick Claims Management Services, Inc.
3. Open Source: What Is It W Moderator:	orth? Mark Shapland, Consulting Actuary, Milliman, Inc.
Panelists:	Benedict Escoto, Assistant Vice President, Aon Benfield
	Markus Stricker, Managing Director, Project Leader PillarOne, Intuitive Collaboration AG
(
4. Secret Language of Influen Presenter:	nce: The Sequel Dan Seidman, President, Sales Autopsy, Inc.
The following Variance papers	were also presented from 1:00 p.m. to 2:30 p.m.:
1. "Optimal Layers for Catast	trophe Reinsurance" by Luyang Fu and C.K. "Stan" Khury [<i>Variance</i> 4(2)]
2. "Catastrophes and Worker Moderator:	rs Compensation Ratemaking" by Thomas V. Daley [<i>Variance</i> 5(1)] Martin King, Corporate Risk Finance Manager, Kaiser Permanente
Presenters:	Thomas V. Daley, Director and Actuary, National Council on Compensation Insurance, Inc.
	Luyang Fu, Director of Predictive Modeling, State Auto Insurance Companies
	C.K. "Stan" Khury, Principal, Bass & Khury
A huffet dinner was held from 6	:00 p.m. to 9:30 p.m. in the hotel's Venetian Ballroom.
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Wednesday, May 18, 2011

Registration was held from 7:00 a.m. to 11:45 a.m.

A continental breakfast was served from 7:00 a.m. to 9:00 a.m.

One session was repeated and the following concurrent sessions were held from 8:00 a.m. to 9:30 a.m.:

1. Mixture Distribution and its Applications on P&C Insurance Data

Moderator/Panelist:	Luyang Fu, Director of Predictive Modeling, Corporate Actuarial, State Auto Insurance
Panelists:	Matthew Flynn, Senior Statistician, Claim Business Intelligence & Analytics, Travelers of New Jersey
	Douglas E. Pirtle, Actuary, State Auto Insurance Companies

2. Own Risk and Solvency Assessment . 1

Own RISK and Solvency Assessment		
Moderator:	Alessandrea Quane, SVP-Chief Risk Officer, Chartis International	
Panelists:	Kathryn Morgan, Manager, Prudential Insurance Policy, Financial Services Authority (U.K.); Member, Insurance Committee, Groupe Consultatif Actuariel Européen	
	Kris DeFrain, Director, Actuarial and Statistical, NAIC; Vice President-International, Casualty Actuarial Society	

3. Premium Deficiency Reserves: How Much and Why?

Moderator/Panelist:	Joseph Herbers, Managing Principal, Pinnacle Actuarial Resources, Inc.
Panelists:	Justin Brenden, Manager, Ernst & Young LLP
	Kenneth Quintilian, Vice President and Chief Actuary, Medical Liability Mutual Insurance Company

4. Update on CAS and Academy Activities

Panelists:	Mary Frances Miller, Founder and Senior Consulting Actuary, Select Actuarial Services; President, American Academy of Actuaries
	Ralph Blanchard, Vice President and Actuary, The Travelers Companies, Inc.; President, Casualty Actuarial Society

5. Workers Compensation Frequency and Experience Rating Plan

Moderator:	Xiang Ji, Actuarial Director, CNA Insurance Company
Panelists:	Frank A. Schmid, Director and Senior Economist, National Council on Compensation Insurance
	Tony DiDonato, Director and Senior Actuary, National Council on Compensation Insurance

The following Variance paper was also presented from 8:00 a.m. to 9:30 a.m.:

1. "Copula Regression" by Rahul A. Parsa and Stuart A. Klugman [Variance 5(1)].

Moderator:	David Snow, Vice President, Swiss Reinsurance America Corporation
Presenters:	Rahul A. Parsa, Professor, Drake University College of Business and Public Administration
	Stuart A. Klugman, Principal Financial Group Professor, Drake University College of Business and Public Administration

Following a break, the last general session was held from 10:00 a.m. to 11:30 a.m.:

Interactive Mock Trial Professionalism Session

Moderator/Panelist:	Thomas Griffin, Attorney, American Academy of Actuaries
Panelists:	John Wade, Senior Consultant, Pinnacle Actuarial Resources, Inc.
	Ann Griffith, Senior Actuarial Advisor, Ernst & Young LLP
	Bob Morand, Partner, D.W. Simpson
	Ann Conway, Consulting Actuary, Towers Watson
	Christopher Brunetti, PMI Mortgage Insurance Company
	Leslie Marlo, Director, KPMG LLP
	Martin King, Corporate Risk Finance Manager, Kaiser Permanente

After the general session, Mr. Blanchard encouraged all attendees to complete the online meeting evaluation form and announced upcoming meetings before he adjourned the meeting.

2011 CAS Spring Meeting Attendees

The 2011 CAS Spring Meeting was attended by 381 Fellows, 125 Associates, one Affliate, and 50 guests. The names of the Fellows, Associates, and Affliate are as follows:

Barbara J. Addie Avraham Adler Stephanie J. Albrinck Terry J. Alfuth Sheen X. Allen Christopher T. Andersen Alanna Catherine Anderson Kevin L. Anderson Amel Arhab Nolan E. Asch Peter Attanasio Yanfei Z. Atwell Craig Victor Avitabile Gregory S. Babushkin Sophia Cyma Banduk Andrea C. Bautista Anna Marie Beaton Patrick Beaudoin Jeffrey Donald Bellmont Derek D. Berget Carolyn J. Bergh Nadege Bernard-Ahrendts Janice L. Berry Everett G. Bishop Gavin C. Blair Ralph S. Blanchard Robert G. Blanco Cara M. Blank Michael J. Bluzer Steven W. Book William Paul Borgen Esperanza Borja Nancy A. Braithwaite Kelly A. Bramwell Justin J. Brenden Jeremy James Brigham Sara T. Broadrick Jess B. Broussard Conni Iean Brown Karen B. Buchbinder Angela D. Burgess Hayden Heschel Burrus Matthew E. Butler Ryan V. Capponi Christopher S. Carlson Benoit Carrier Jeffrey M. Casaday Sanders B. Cathcart Joseph G. Cerreta Hao Chai Hong Chen Hsing-Pei Chen

FELLOWS Michael Keryu Chen Sen Chen Yvonne W.Y. Cheng David R. Chernick Thomas Joseph Chisholm Alan M. Chow Jason A. Clark Kevin M. Cleary Elizabeth Louise Cohen Karen M. Commons Eugene C. Connell Timothy David Conrad Ann M. Conway Christopher L. Cooksey Francis X. Corr Gregory L. Cote Chad J. Covelli Benjamin E. Crabtree Alan M. Crowe Jeanne E. Crowell A. David Cummings Alexandre Cung-Rousseau Daniel J. Czabaj Karen Barrett Daley Chad Alan Davis Kwame Akil Davis Renee Helou Davis Robert E. Davis Willie L. Davis John Dawson Kris D. DeFrain Curtis Gary Dean Stephen P. Decoteau Hussain Z. Dhalla Anthony M. DiDonato Christopher Diamantoukos Ryan M. Diehl Michel Dionne John L. Doellman Mark A. Doepke Leigh Maurice Duhig Denis Dumulon Sophie Duval Jeffrey Eddinger Dale R. Edlefson Wayne W. Edwards Malika El Kacemi-Grande David Engles Paul E. Ericksen Benedict M. Escoto Juan Espadas Philip A. Evensen

John S. Ewert Weishu Fan Yuting Fan Caryl Marie Fank Bruce Fatz Marc-Olivier Faulkner Wayne H. Fisher Beth E. Fitzgerald Gail N. Flannery Chauncey Edwin Fleetwood Robert Jerome Foskey Amy M. Fournier Michelle L. Freitag Luyang Fu **Richard Gauthier** Keith R. Gentile Brian P. Gill Joel D. Glockler Philippe Gosselin Bradley A. Granger Francis X. Gribbon Ann V. Griffith Robert A. Grocock Simon Guenette Todd N. Gunnell Kathleen J. Gunnery Jonathan M. Guy Nasser Hadidi Allen A. Hall Wei Juan Han Bradley Alan Hanson David G. Hartman Michael James Hartshorn Joseph Patrick Hasday Robin A. Haworth Roger M. Hayne James Richard Healey Scott E. Henck Susan C. Hendricks Dennis R. Henry Wade R. Hess Patricia A. Hladun Robert J. Hopper Scott D. Hornyak Derek Reid Hoyme Pierre-Alexandre Jalbert Xiang Ji Charles B. Jin Warren H. Johnson Thomas S. Johnston Bridget Laurel Jonsson Karine Julien

Erin Hye-Sook Kang Kai Kang Jennifer Lynn Kaye Eric R. Keen C.K. Stan Khury Thomas Patrick King Joseph E. Kirsits Brandelyn C. Klenner Rodney Christopher Kleve Stephen A. Knobloch Stephen Jacob Koca John M. Koch Brenda L. Koenig John J. Kollar David C. Korb Lucas James Koury Dusan Kozic Ronald T. Kozlowski Alex Gerald Kranz John R. Kryczka Jeffrey L. Kucera Vinu Kuriakose Edward M. Kuss Douglas Lacoss Matthew Thomas Laitner David A. Lalonde Lily K. Lam Dean K. Lamb James W. Larkin Aaron M. Larson Steven W. Larson Ionathan Robert Laux Borwen Lee Charles Chaoyuen Lee Christie Lai Yin Lee Lewis Y. Lee Robert H. Lee Seung-Won (Sam) Lee Louise Legg Stephen E. Lehecka Jennifer Marie Lehman Meyer Tedde Lehman Jeremy M. Lehmann Steven G. Lehmann Weng Kah Leong Hoi Fai Leung Justin M. Levine Richard Brian Levy John J. Lewandowski Kelly Carmody Lewis Jing Li Sharon Xiaoyin Li

Minutes of the 2011 Spring Meeting

Zhe Robin Li Xiaoving Liang Jia Liao Elise C. Liebers Herman Lim Lian-Ching Lim Katherine Yukyue Lin Shan Lin Jin Liu Cara M. Low Christopher J. Loyd James P. Lynch Xiaoyan Ma Rimma Maasbach Brian E. MacMahon John T. Maher Lynn C. Malloney Donald F. Mango Leslie R. Marlo David Michael Maurer Dee Dee Mays Ryan Andrew McAllister Michael Brandon McPhail Dennis C. Mealy David L. Menning Stephen V. Merkey Timothy Messier Daniel John Messner Glenn G. Meyers Vadim Y. Mezhebovsky Michael E. Mielzynski Joseph A. Milicia Mary D. Miller Mary Frances Miller Ronald R. Miller Ain Milner Richard B. Moncher Rodney S. Morris Roosevelt C. Mosley Randall K. Motchan Joseph J. Muccio Raymond D. Muller Nancy R. Myers Christopher A. Najim

Jonathan C. Abbott Jodie Marie Agan Sajjad Ahmad Emily Stone Allen Nicole Kristen Belmonte Perry Anne Bone Jarod James Brewster Louis M. Brown Christopher G. Brunetti Lisa K. Buege Jennifer S. Byington Kenrick A. Campbell Michael E. Carpenter Kathleen N. Casale

Allan R. Neis Loren J. Nickel Samantha Lynn Nieveen John Nissenbaum John E. Noble Irina Viktorovna Odushkin Kathleen S. Ores Walsh Grant C. Owens Timothy A. Paddock Richard W. Palczynski Michael Thomas Patterson Daniel Berenson Perry Douglas E. Pirtle Kristine E. Plickys Richard C. Plunkett Felix Podgaits Igor Pogrebinsky Sean Evans Porreca Ricky R. Poulin Virginia R. Prevosto David S. Pugel Matthew Ryan Purdy Junhua (Blanca) Qin Alessandrea Corinne Quane Kenneth Quintilian Joseph David Rakstad Donna J. Reed Ashley Arlene Reller Todd Richard Rio Bruce A. Ritter John P. Robertson Charles Francois Robitaille Steven Carl Rominske Kim R. Rosen Deborah M. Rosenberg Benjamin G. Rosenblum Jeffrey N. Roth Lindsay Aaron Roy Mitra Sanandajifar Thomas E. Schadler **Jennifer Rae Schwartz** William Harold Scully Ernest C. Segal Vladimir Shander

Paul A. Chabarek Dana Tung Chang Haoxuan Cheng Peggy Cheng Alan R. Clark Thomas V. Daley Michael K. Daly Mujtaba H. Datoo James R. Davis Jean-Francois Desrochers Jonathan Mark Deutsch Kimberly M Dorani Christine A. Doyle Emilie Rovito Dubois

Michael Shane Mark R. Shapland Andrea Wynne Sherry Meyer Shields Jeffrey Shirazi Jimmy Shkolyar Jeremy D. Shoemaker Bret Charles Shroyer Jerome J. Siewert Paul Silberbush Paul W. Simoneau Tom A. Smolen Jared G. Smollik Joanne S. Spalla Daniel L. Splitt Paul Quinn Stahlschmidt Michael William Starke Julia Causbie Stenberg Michael Bryant Stienstra Christopher J. Styrsky Ligin L. Sun Zongli Sun Beth M. Sweeney Chester John Szczepanski Josy-Anne Tanguay Patricia A. Teufel Nicholas D. Thoemke Daria Lynn Thomas Richard D. Thomas Beth S. Thompson Kevin B. Thompson Denny Tei Tuan Brian K. Turner Matthew L. Uhoda Stephen H. Underhill Joel A. Vaag Mary Vacirca Eric Vaith Marie-Pierre Valiquette William R. Van Ark Evgueni Venkov Ryan Nolan Voge Alissa Wendy Vreman Michael G. Wacek

ASSOCIATES

John Anthony Duffy Elizabeth E. End Anders Ericson Shu Fang Denise M. Farnan Farzad Farzan Suzanne M. Finnegan Jennifer R. Fiorita Michael Scott Foulke Robert C. Fox Margaret Hendrix Glenn John W. Gradwell Gary Granoff Barbara Hallock

Josephine M. Waldman Tice R. Walker Michael C. Walsh Xuelian Wan Anping Wang Morgan M. Wang Shaun S. Wang David W. Warren James R. Weiss Mark S. Wenger Katherine Therese Werner Anna Marie Wetterhus Timothy G. Wheeler Mark Whitman Laura M. Williams Stephen C. Williams Chad P. Wilson Dean M. Winters Brandon L. Wolf Robert F. Wolf Simon Kai-Yip Wong Jeffrey F. Woodcock Cheng-Sheng Peter Wu Sandy Wu Xingzhi Wu Joshua Jordan Wykle Gang Xu Tong Xu Run Yan Grace Huey-wen Yang Roger A. Yard Iva Yuan Arthur J. Zaremba Virginia M. Zeigler Juemin Zhang Li Zhang Lijuan Zhang Wei Zhang Yi Zhang Huiyan A. Zhou Li Zhu

Aaron M. Halpert Tanya D. Havlicek Randolph S. Hay Jared A. Helms Joseph A. Herbers Andrew S. Herman Brett Horoff Qi Huang Brian M. Ironside Albert H. Johnson Monica Drew Noel Johnson William Russell Johnson Robert C. Kane Brett King

YEARBOOK AND PROCEEDINGS

Minutes of the 2011 Spring Meeting

Martin T. King Kayne M. Lammers David Lawrence Larson Khanh M. Le Sarah Jane Leszczuk Joyce Cheuk Chi Li Yanqing Li Robert Emmet Lighthizer Eric F. Liland Steven Ray Lindley Kim Ho Lo Emily A. Lyons Sally Ann MacFadden David J. Macesic **Gregory Vincent Martain** Mea Theodore Mea Albert-Michael Micozzi Leigh Miselis

Michael W. Morro Alexander F. Morrone Kwok C. Ng Melissa Nowalk Aleksandra V. Orlova Tetteh Otuteye Kathryn Ann Owsiany James Alan Partridge Claude Penland Rochelle M. Pereira Rebecca Lyn Pettingell Anthony J. Pipia Thomas M. Prince Kazuko Minagawa Prock Olivier Elie Quesnel Thomas O. Rau Michael J. Reynolds Cynthia L. Rice

Arlene M. Richardson Jordan Rubin Shama S. Sabade Eric J. Schmidt Lawrence M. Schober Kaushika Sengupta David Y. Shleifer Ben Silberstein Charles Leo Sizer David C. Snow Jayme Peter Stubitz Joseph W. Tasker Christian Alan Thielman Tanya K. Thielman Wendy Artecona Thompson Casey Ann Tozzi Etienne Trudel Frederick A. Urschel

Tracy Leslie Valentine Matthew Charles Van Vleet Phillip Anthony Victory Jeannine Marie Villa John E. Wade Colleen Ohle Walker Stephen D. Warfel Zachary Samuel Webber Karin H. Wohlgemuth Adrian Ralph Wood Donald S. Wroe Xiaohui Wu Robert S. Yenke Julieta A. Zambrano Nan Zhang

AFFILIATE

Pablo F. Nunez

Part II: Annual Meeting 2011 November 6, 7, 8, 9, 2011 Hyatt Regency Chicago, Chicago, IL

ADDRESS TO NEW MEMBERS-NOVEMBER 7, 2011

Robert F. Conger

Good morning! It is indeed a pleasure and a privilege to deliver the Address to New Members today. I appreciate the opportunity to share a few thoughts with you, the 166 new Fellows and 19 new Associates of the CAS Class of November 2011, and your family members. I would also like to welcome everyone gathered here today, as well as those joining us from all around the planet via Webcast. On a smaller scale, I enjoyed meeting some of you new Fellows last night and this morning, and I look forward to talking with more of you individually here in Chicago this week and as our paths cross again in the future.

Let me begin today by joining my voice with the many others who are celebrating with you your accomplishment in achieving your CAS designation. Each of you new Fellows and Associates represents a rare combination of natural talents, hard work, and a vibrant and patient support network. Our thanks to the Creator, to your parents, and to your teachers for your in-born natural talents, developed to the point of readiness for your entry into the profession. Our congratulations and kudos to each of you for your hard, sometimes grueling, work in preparing for, and pursuing, the actuarial education and examination process. And we acknowledge the great importance of your support network of family members, friends, colleagues, mentors, and employers, who, throughout the intellectual and emotional lows and highs of the exam journey, variously have guided, aided, cajoled, comforted, and applauded you. Congratulations! Thank you for making the effort and welcome aboard!

As I prepared for my remarks today, I could not resist the temptation to think back to the early days of my own career. I still recall vividly the photographic image of our class of new Fellows—24 of us standing tall and proud—but none of Asian or African heritage, only one female, and no mailing addresses outside of North America. How happy I am to see the more diverse make-up of today's new Fellows and to know that we are making progress in tapping a broader and deeper talent pool to find the best and brightest people to join the actuarial profession.

Let's take a glance at the magnitude of some of the other changes over the course of my career.

Globally, the Vietnam War ground to a painful conclusion as I was beginning my career. A few short decades later, Vietnam is a vibrant trading partner of the U.S. and a very desirable travel destination. China—several decades ago clouded in isolationist mystique and depicted by Westerners as a land of bicycles, ping pong, and rice fields—has emerged as a massive and creative global economic and market force. It also has become one of the world's largest producers and exporters of actuarial talent. At the recent annual meeting of the China Association of Actuaries in Xiamen, I learned that more than 9,000 students sat for exams in China this past spring. Of course, one reflection of China's dramatic emergence is that many of you new Fellows and Associates sitting here in Chicago today have family and roots, as well as educational foundations, in China.

The Berlin Wall and Iron Curtain fell midway through my career (I feel a bit like Forrest Gump!), and capitalism is now being reinvented and rediscovered, not always painlessly, in the formerly communist sections of Eastern Europe. Last month, in Croatia, I had the opportunity to help facilitate a professionalism seminar for actuaries from all over southeastern Europe—countries that did not exist just two decades ago, never mind having market-driven insurance companies and regulation. Meanwhile, the common market in Western Europe has evolved into the more formal structure of the European Union, expanded to embrace neighboring countries, and made the Euro the official currency in 2002. In the EU, we saw a vision of an economic powerhouse in which all the member countries leverage the strengths of the others, almost seamlessly, to contribute to regional stabilization, and take an even more prominent center stage role in the world economy. That was the vision, but now we are rediscovering the dangerous realities of interdependencies, as weak and abused economies in several of the EU countries today cast a grim pall on the outlook across the entire region and globe.

Mother Nature has been busy too. When Hurricanes Hugo and Andrew blew ashore on the U.S. East Coast in 1989 and 1992, our perspectives on the property, human, and financial implications of catastrophe risk changed overnight. Almost as quickly, new products, insurance/reinsurance companies, and markets emerged from the storm damages. Earlier this year, the massive and tragic earthquake and subsequent tsunami off the coast of Japan brought a stark new perspective to our understanding of global economic and supply chain linkages, and of operational risk margins. Failsafe mechanisms failed. Shortages of automotive parts and silicon from Japan, the manufacture of cars in Tennessee, and integrated circuits in California brought to a near standstill.

Other changes may look more dramatic through the compressed perspective of time-lapse photography. Reviewing a list of the top 50 U.S. property/ casualty insurance groups at the beginning of my career, almost half of those insurance company groups—almost half of them—do not appear on a comparable list produced today: the consequence of marketplace events of insolvency, acquisition, merger, strategic redirection or misdirection, or simple failure to thrive. In the realities of the marketplace, there is no such thing as "too big to fail." From Economics 101, we know the marketplace allows, and expects, that some of today's market leaders will fade into oblivion, and that some aggressive and innovative players will take their places at the front of the pack. Of course, the transition does not feel at all academic when you work for one of these companies, as many of you will discover.

Insurance products certainly have changed over this time period. The pricing of today's personal auto policy is almost unrecognizable to an actuary who rolled off the Amherst College production line, shiny and new, in 1975. There has been the introduction of fascinating new factors that correlate with driving behavior, accident propensity, claim filing behavior, and insurance shopping behavior. These rating processes rely on data

elements harvested from sources as diverse as credit bureaus and ingenious electronic gadgets that attach directly to the vehicle. The shopping tools available to today's auto insurance consumer are equally unrecognizable, with real-time price comparisons and purchase options available from the comfort of the chair in front of your television. Many of you could check this assertion before I finish my remarks: could you really save \$500 by switching insurance companies?

Insurance coverages have been retooled to reflect the new exposures of today's market and have changed perceptions of what is insurable. Asbestos and environmental exposures have been substantially eliminated from conventional general liability coverages, but only after the industry incurred \$120 billion in losses from these sources. In medical malpractice insurance, a whole new market emerged and coverages were restructured into the claims-made form in response to the availability crisis of the 1970s. Directors & Officers and Employment Practices Liability coverages were invented, introduced, and have grown into prominence, with some difficult lessons learned along the way. I know that you could list a number of other examples.

I don't have time to even begin a list of the technological changes that have altered dramatically our ability to gather, share, analyze, and communicate information (and misinformation), changes beyond the most creative imaginations of the bygone era of pencils and erasers when I entered the actuarial profession.

As you probably know from listening to your parents and grandparents, I could continue in this vein for quite a while longer, reminiscing about the good old days and offering wry commentary about how things have changed. But my point is not to detail the specific changes that have occurred; rather, my point is to illustrate the variety, scope, magnitude, complexity, and unpredictability of the changes and their wide-ranging consequences that occur during the several decades that represent the span of a person's career. I certainly am not clever enough to enumerate the specific changes that lie ahead during your careers. But with confidence, I can assure you that the future changes and their consequences will be at least as surprising, as dramatic, and as complex as any changes that have come before.

So. Change will happen. What's in it for you? Allow me to outline four roles for you.

First, *embrace* change. As an intelligent, well-educated, problem-solving actuary, you should view change as your friend. Sure, change will create some unhappy surprises and difficult problems for you and your employers. But, if not for change, your job might be little more than the rote performance of prescribed formulas and calculations, again and again, for the next 30 or 40 years. This is not a very interesting prospect and certainly not a job requiring a person of your skills, abilities, training, and potential. Change will keep your job interesting, challenging, useful, and new. Change is your friend. Meet it head-on, and embrace change!

Your second role is to *manage* change. The mighty dinosaurs could not cope with the changes to their environment and are now extinct. Some of the U.S. property/casualty insurance companies that fell off the Top 50 list were equally ill-prepared to deal with, manage, or exploit change. On the other hand, some of the new entrants to the Top 50 list earned their spots on that list precisely because they do understand how to adapt to, or even cause, changes in the environment and in the marketplace. Of course, managing and adapting to change is partly a matter of corporate culture and requires the active participation of all disciplines and departments. It does not appear solely on the actuarial department job descriptions. As an actuary, you have an essential role to play in anticipating, monitoring, analyzing. evaluating, measuring, and explaining changes and their implications. You also have a role in planning and developing strategic and tactical responses that allow your company to survive and thrive in a changing environment. One of the most important elements of your job is to help your employer or clients anticipate, understand, and manage change.

Third, *initiate* change. Some elements of change simply happen; for example, the occurrence of an earthquake. Even with a so-called "Act of God," the consequences of the event—the damage to buildings, the loss of life, the financial effects, and who bears those effects—depend greatly on human choices and human actions before, during, and after the event. Many other changes are even more directly the result of human action, such as the machinations of an aggressive new competitor or the expanded capabilities supported by new technology or the corporate reorganization initiated by a new management team. You will have a thousand chances to decide; will you initiate change or will you simply hope to survive the changes initiated by others? I urge you: don't be a change-taker—be a change-maker. You have the intelligence and you will have the opportunities. By being an agent of change, you and your employer have a greater scope to define the playing field and to declare some of the key rules of engagement, rather than trying to figure out the rules of someone else's game. As an agent of change—an initiator of change—you will make a difference!

Your fourth role is to *prepare* for change. Preparing for change has many dimensions, including keeping an open mind that is constantly asking the question: "Could this be done differently?" I would like to focus your attention on the importance of continuing education in this process. You have just made a huge investment in the basic toolkit of actuarial knowledge and skills to launch your career. It is quite a toolkit, containing knowledge about the world, the industry, and the regulatory frameworks in which most of us operate. Your CAS toolkit contains understanding of some of the key dynamics important to our work and diagnostic tools to help you detect and monitor these dynamics in action. Your toolkit contains a robust set of methodologies that you know how to select and apply to the situation at hand. It is a beautiful toolkit, and again I congratulate you on acquiring it and owning it. However, just as with a toolkit that you might have in your basement or garage, you now must turn your attention to keeping your set of personal actuarial tools well-lubricated and up-to-date. This is an important responsibility to yourself, to your employer and clients, to your profession, and to the public—a responsibility that goes far beyond the specified continuing education requirements. If you are going to be relevant, and effective, throughout the course of your career, you must be an active and engaged participant in the rich offerings of meetings, seminars, Webinars, publications, research, and formal and informal discussion forums. Many offerings are available through the CAS, Regional Affiliates, other actuarial organizations, universities, libraries, your employer, and many other sources. Throw yourself with passion into one or two volunteer roles with the CAS as well. You will find there a treasure trove of personal growth opportunities. Please, make the ongoing investment in yourself. It will change you, and it will prepare you to initiate, to manage, and to embrace the changes that lie ahead in the world

Good luck, Godspeed, and, to paraphrase the great philosopher and Jedi Master Obi-Wan Kenobi, "May the change be with you!"

Ralph S. Blanchard III

Lessons Forgotten

Good morning. Today I want to talk about a perspective that has interested me for quite some time. I'll begin with a brief intro to the topic.

While many casualty actuaries focus exclusively on the *liability* side of the balance sheet, I've always been fascinated by certain *asset* issues, in particular the workings of economic and financial markets. Recent times have provided much to read regarding financial markets. However, this is not just recent history. Not only is there the *current* extended crisis that started in 2008, there was also the dot.com crisis before then, the Long Term Capital crisis before that, and the Portfolio Insurance crisis even earlier, in 1987. Each of these crises led to a series of books on what happened and why, and how to keep it from happening again. Nevertheless, if you read these books about the "lessons learned" from each successive crisis, a curious phenomenon occurs. The lessons learned from each crisis are all the same. We've "learned" about fat tails, the riskiness of high leverage, the importance of liquidity, and the irrationality of markets *every time there is a crisis*. It's kind of like déjà vu all over again. So maybe the real issue isn't about the new lessons learned from historical events, but "lessons forgotten" from the past.

Lessons Forgotten

Could this same perspective be of use for the Casualty Actuarial Society in its Own Risk and Solvency Assessment? Are there some forgotten lessons from our past that could be of benefit today? The following is my investigation into the CAS past for a few such lessons.

For the first possible lesson, I go back to the founding of the CAS. It all began in 1914 when a group of insurance industry professionals met in New York's Waldorf Astoria Hotel. These professionals were doing actuarial and statistical work in a newly emerging field, Workmen's Compensation Insurance, as a result of recently passed Workmen's Comp. laws in the U.S. These pioneers in the field decided that the best way to have a group of actuaries focusing on Workmen's Comp. issues was to create a brand new, separate actuarial society. What did they call their new organization? "The Casualty and Statistical Society of America."

Now I suppose multiple lessons could be extracted from this historical snapshot, but the one I will talk about today has to do with having the word "America" in this new Society's title. In 1914, the CAS was an all-U.S. organization. By 1915, the CAS had members in Canada and the U.K. This membership expansion was not part of an aggressive effort to take over the world. Instead, this expansion was the result of having a product that had value to more than just the U.S. market. It was valuable to casualty actuaries anywhere. By May of 1921, this new reality was recognized by the CAS membership when the name was changed to the current "Casualty Actuarial Society."

So the lesson learned from the past, and one we should not forget, is this: the CAS does not have national boundaries; the CAS will remain highly respected and relevant as long as the education and research it produces is of value, and this value does not end at a national border. This is my "lesson not to forget #1."

Knowledge of value has no national boundaries.

Now for lesson number 2, I would like the older folks in the audience to think back to the 1980s Savings & Loan Crisis in the United States. Fundamental changes in the banking industry led to historic levels of banking insolvencies. As the banking regulators were cleaning up the resulting mess, the U.S. Congress and others started looking around for the next potential financial blowup. And where did they turn in their search for the next problem area? They turned to the insurance industry, with a particular focus on the property/casualty industry. (For those who don't remember these times, I recommend getting a copy of the "Failed Promises" report by Representative John Dingell of Michigan. It is fascinating reading and points out many regulatory weaknesses of that time, including the failure of Mission Insurance.)

As I was saying, after cleaning up the remains of many bank failures, the U.S. government started focusing on problems with the insurance industry. This led the NAIC to implement a series of reforms, some of which were partly modeled on the banking reforms. These reforms included the current NAIC risk-based capital formulas and the current loss reserve opinions.

Now many actuaries of the time may have totally ignored the banking crisis, perhaps feeling that it had no relevance to their lives, but I suspect they didn't have the same views about RBC or loss reserve opinions. So lesson number 2 is this: What's going on outside your world sometimes matters a lot to your world.

At this point, I'd like to paraphrase a quote generally attributed to Mark Twain:

"History doesn't repeat, it rhymes."

If we look at our world right now and, in particular, where the current pressures on us are coming from, some would point to our local or federal government. But in reality, these pressures are a direct consequence of the international banking crisis. (Can you hear the rhyme coming?) That banking crisis led to pressures to reform international banking rules and, just like the 1980s, those banking pressures are extending into the insurance business. The current push for requiring an ORSA for insurers in all countries (including the U.S. and Canada) is a direct result of fallout from that banking crisis. Through an involved chain that includes the G-20, the International Monetary Fund, and the International Association of Insurance Supervisors, this banking crisis has led to a series of international regulatory rules called Insurance Core Principles (or ICPs). These ICPs are going to change the way insurance is regulated in every major country in the world, and hence will affect our profession.

So once again, lesson not to forget #2 is:

What's going on outside your world sometimes matters a lot to your world.

Now, on to lesson number 3.

CAS Membership Counts

My research in the past year for my *Actuarial Review* columns resulted in a number of dead-ends. However, sometimes this research also led to new directions and insights. One of those insights came from researching past CAS membership counts.

I had thought that the CAS has always been a growing organization, with membership levels showing an ever-increasing trend line, but that is not what I found.

Year	Fellow	Associates	Affiliates	Total
1914	97			97
1920	152	47		199
1930	175	129		304
1940	175	130		305
1950	157	121		278
1960	199	163		362
1970	249	212		461
1980	465	427		892
1990	988	684		1,672
2000	2,061	1,377	17	3,455
2010	3,655	1,736	26	5,417

Note the drop from 1930 to 1950.

To some extent, my preconceived notion was not much different from many involved in the U.S. mortgage industry prior to 2008. Those professionals believed that U.S. house prices could *never* go down. (Now I hope they and we know better.) Nevertheless, after looking at what happened to the CAS from 1930 to 1950 when membership actually declined, I now know that we are not immune to the same phenomena. That doesn't mean that our membership will decrease in the future; it does mean that we can't stay passive and just assume that the future will take care of itself. We need to stay ever-vigilant to keep the value of our credential strong.

Within the CAS leadership, this effort has been labeled "Actuarial Skill Set," which consists of technical, communication, and business skills. There are several efforts currently underway to strengthen this skill set, including the testing of higher order thinking in our exams. We are also investigating ways to better prepare our members for work in predictive modeling and data mining. The bottom line is that standing in place is not an option. We must continue to adapt to stay relevant and strong. Otherwise, we risk becoming less relevant to our employers.

So lesson not to forget number 3 is this:

Our growth and future relevance is not guaranteed. We must continually work to keep our credential strong.

My final lesson has a more personal connection. It goes back to 1941 when someone with the initials RHB became president of the CAS. This individual was a Dartmouth graduate, the same as me. After an illustrious career in the insurance industry, and as a CAS past president, he retired and eventually found himself in a nursing home in eastern Massachusetts, near my hometown. He passed away from pneumonia in Plympton, Massachusetts, in September 1973, curiously about one year after I also had pneumonia. This individual's name was Ralph H. Blanchard, making me the second Ralph Blanchard in the history of the Society.

So what is the lesson in all of this?

Well, it turns out that I am not related to Ralph H. Blanchard in any way that I know of. All the attributes of Ralph H. Blanchard that so closely parallel mine are just a coincidence. So lesson not to forget #4 is this:

Sometimes it is just a coincidence, not a correlation.

In closing, I'd like to segue back to the more traditional president's address and thank all those who made this past year possible:

- First, I'd like to thank all those who volunteer their time and effort to make the CAS so successful. Their volunteer contributions are an integral part of our culture. We could not exist as we are without their valiant efforts on behalf of the profession.
- Next, I'd like to recognize that special group of volunteers who make up the CAS Executive Council. Thank you for your tireless support over the past year on behalf of the CAS, providing key direction to the CAS's many activities.
- I'd also like to thank the CAS Staff, a highly dedicated group of professionals that make it all work. I've witnessed countless examples in the past year of CAS staff going above and beyond normal requirements on behalf of our membership.
- Next, I'd like to make a special thank you to Cynthia Ziegler, our executive director. Her leadership, professionalism, and 24/7 dedication to her job has been invaluable to the CAS and each successive CAS president.

Presidential Address

- I also am indebted to my employer, Travelers, and my boss, Keith Bell, for supporting me in my volunteer efforts, allowing me to be a true professional in name and deed.
- Finally, I need to thank my wife, Karen, and four children, Linda, Derek, Scott and Kevin. Their patience and understanding has allowed me to serve the CAS this past year as President, as well as serving the prior 3 years on the CAS Executive Council as VP-International and as President-Elect. I promise that I will now be home more often in the next year. See you soon.

So in closing...thank you all.

MINUTES OF THE 2011 ANNUAL MEETING

Sunday, November 6, 2011

The Casualty Actuarial Society Board of Directors met from 8:00 a.m. to 5:00 p.m.

Registration was held from 4:00 p.m. to 6:30 p.m.

From 5:30 p.m. to 6:30 p.m. a presentation was made to new Associates and their spouses/guests.

A welcome reception for all members and guests was held from 6:30 p.m. to 7:30 p.m.

Monday, November 7, 2011

Registration continued from 7:00 a.m. to 5:00 p.m. with a continental breakfast served from 7:00 a.m. to 9:00 a.m.

Roger Hayne and Patricia Teufel conducted the business session for CAS President Ralph Blanchard, who was recovering from eye surgery and was unable to attend. Mr. Hayne is a former CAS president, elected in 2009, and Ms. Teufel is the incoming CAS president.

Pat Teufel opened the business session at 8:00 a.m. by welcoming everyone to Chicago and the 2011 Annual Meeting. Ms. Teufel also welcomed all who were watching at their homes and offices via the Webcast, in particular Mr. Blanchard. Ms. Teufel asked the assembled audience to "give a special shout out to Ralph." Ms. Teufel thanked the Program Planning Committee for developing a great program of sessions and extended a special welcome to the 166 new Fellows and 21 new Associates to be recognized at this meeting.

Ms. Teufel announced the special guests in attendance: Jim Christie, President of the Canadian Institute of Actuaries; Rita DeGraaf, Executive Director of the Conference of Consulting Actuaries; Miyuki Ebisaki, Representative of the Institute of Actuaries of Japan; Wayne Fisher, Executive Director of the Enterprise Risk Management Institute International; David Hartman, Chairman of the Actuarial Foundation Board of Directors; Greg Heidrich, Executive Director of the Society of Actuaries; Nancy Jenkinson, Manager of Meeting Services, Canadian Institute of Actuaries; and Mary Frances Miller, President of the American Academy of Actuaries.

Ms. Teufel noted that Ms. Ebisaki coordinated the concurrent session on Japan's Great Tohoku Earthquake that occurred in 2011. Ms. Teufel thanked the Japanese delegation for traveling to the CAS Annual Meeting to present, and she encouraged the audience to attend their session.

Other special guests in attendance included two college-student recipients of the Actuarial Foundation Scholarship: Camilo Gonzalez Guevara and Cosme Loic Dzukou Fonkoua.

In addition to the delegation from Japan, Ms. Teufel noted that a number of attendees traveled from outside the United States. She asked them to stand and be recognized and thanked them for traveling such distances to attend the Annual Meeting.

Ms. Teufel welcomed the past CAS presidents in attendance including Paul Braithwaite (2005), Chris Carlson (2007), Bob Conger (2001), Mike Fusco (1989), David Hartman (1988), Roger Hayne (2010), Stan Khury (1984), Steve Lehmann (1998), Jim MacGinnitie (1979), and Mary Frances Miller (2004).

Ms. Teufel thanked and introduced the members of the CAS Executive Council (EC). She especially recognized CAS Executive Director Cynthia Ziegler, who has served the CAS for 10 years. She thanked outgoing VP-Research and Development Louise Francis and VP-Admissions Dave Menning and introduced their replacements on the EC, Alice Underwood and Virginia Prevosto, respectively.

Ms. Teufel introduced the CAS Board of Directors and the liaisons to the CAS Board of Directors from other actuarial organizations. She recognized the five outgoing board members, thanking Gene Connell, Morton Lane, Wayne Fisher, Alice Underwood, and Mavis Walters. She singled out Roger Hayne for special thanks for his leadership as chair of the Board.

Ms. Teufel announced that Gary Josephson was elected president-elect in September 2011. Mr. Josephson could not attend the Annual Meeting because he was representing the CAS at the Actuarial Society of South Africa convention in Johannesburg. Ms. Teufel introduced new board members Shawna Ackerman, Steve Armstrong, Annette Goodreau, Jim Merz, and Michael Steel.

Ms. Teufel asked for a moment of silence for members who have passed away since November 2010. The members are Michael B. Epstein; James A. Hall III; Francis J. Hope; Howard H. Kayton; John R. Linden; Elizabeth Mauro, who was to be recognized at this meeting as a New Fellow; Daniel McNamara; Richard J. Mills; Phillip J. Panther; John A. Potter; Yves Provencher; Gordon L. Scott; Philip R. Thompson; and Frank T. White.

Ceremony for New Associates and New Fellows by Mutual Recognition

Nineteen new Associates were admitted in November 2011. New Associates in attendance and four new Fellows by Mutual Recognition were announced. The names of these new members follow:

New Associates

Kitty Bao Kristin J. Brown Thomas Randall Daly Brian Elliott Timothy Allen Gault

Jennifer Ann Hellmuth Korey G. Klister Peng B. Lee Hua Li Michael Mendel John William Myers Diana Marie O'Brien James H. Panning Michelle Anne Pederson David K. Raikowski Kelly A. Rothermel Michael James Seeber Jeffrey A. Turner Jianwei Xie

New Fellows by MUTUAL RECOGNITION Gillian James Zora Wing Fong Law Panayiotis George Skordi David Third

Following the ceremony, the family members and others who supported these new CAS members were acknowledged.

Volunteers Acknowledged

Mr. Hayne took over the emcee duties from Ms. Teufel. He noted that CAS volunteers account for 34% of the membership and that they include meeting moderators and panelists; authors; Regional Affiliate officers; CAS, CIA, and AAA committee members; CAS, CIA, and Academy committee chairs; committee members of other actuarial organizations; and CAS Board members and officers of the Executive Council. He asked for a round of applause for all of the members who volunteered this year. Mr. Hayne encouraged the audience to visit the CAS Web Site or to talk to the CAS Volunteer Coordinator, Matt Caruso, for more information on volunteer opportunities within the CAS.

Presentation of Awards

The CAS New Member Award is made to a CAS member who has made significant volunteer contributions within five years of his or her most recent credential. Mr. Hayne announced Vijay Manghnani as the 2011 winner of the New Member Award. Mr. Manghnani, who could not attend the meeting, earned his Fellowship in the CAS in 2010. He holds a Ph.D. in climatology and upon earning his FCAS, he volunteered for the Climate Change Committee. He was soon asked to serve as Vice Chair, and is now poised to serve as committee chair. Mr. Manghnani used his dual expertise in both actuarial science and climatology to contribute knowledge and insight on the issues surrounding climate change while participating in the committee discussions and working groups.

Mr. Hayne announced that there are two recipients of the 2011 Above & Beyond Achievement Award: Gareth Kennedy and Rhonda Walker.

Mr. Kennedy was nominated by the chair of the CAS Accounting Changes Task Force, which is charged with investigating the convergence of International Accounting Standards Board (IASB) and the U.S.-based Financial Accounting Standards Board (FASB). The chair wrote that Mr. Kennedy's contributions became "the central force allowing the task force to complete its work. His work was the basis of the task force's conclusions and presentations. Gareth's contributions included developing a theoretical model to analyze the differences between IASB and FASB proposals and current GAAP/Stat accounting principles. He also made presentations to the NAIC, the IASB, the FASB, and the Academy, responding to the difficult questions and clearly earning the trust of those present."

Rhonda Walker, who was unable to attend the meeting, was recognized for her work for the Examination Committee, the largest CAS committee comprised of over 400 members. Ms. Walker was responsible for recruiting and placing every one of those volunteers during four cycles each year. As if that volunteer work weren't enough on its own to merit an award, in the past year she more than doubled her work as the committee prepared for a transition to the restructured 2011 education structure. Ms. Walker surveyed all committee members to determine where they would like to serve in the new structure while continuing her ongoing recruiting of new members.

Finally, Mr. Hayne announced the winners of what is considered the CAS lifetime achievement award for volunteer service, the Matthew S. Rodermund Service Award. The award was established in 1990 in honor of Matt Rodermund's years of volunteer service to the CAS. The Award is intended to recognize two CAS members each year who have made significant volunteer contributions to the actuarial profession. In 2011, the award was given to Amy Bouska and Stephen Philbrick.

Like many new Fellows, Amy Bouska began her volunteer service for the CAS as a member of the Exam Committee. This started a history of volunteer work that has now spanned more than 20 years. During that time, Ms. Bouska contributed extensively to the CAS, working on committees and task forces dealing with international relations, publications, research, basic education, continuing education, and governance issues. "We are grateful for Amy's *many* contributions to the CAS," said Mr. Hayne.

Steve Philbrick's volunteer service to the CAS goes back more than 30 years. His focus has been on publications, in particular, our former peerreviewed research journal, the *Proceedings*. Mr. Philbrick served as a member and then chair of the Committee on Review of Papers for a total of nine years. He is also known from his popular "Brainstorms" column in *The Actuarial Review*. His first "Brainstorms" column ran in August 1982 and his last was published 24 years later in August 2006. When Steve stepped down as "Brainstorms" contributor, Paul Lacko, the editor-in-chief at the time wrote: "Steve leaves us with an amazing collection of thoughts, musings, observations, and questions still to be answered."

Mr. Hayne next announced the winners of the 2011 Hachemeister Prize. Bob Miccolis and David Heppen were awarded the prize for their paper titled, "A Practical Approach to Risk Margins in the Measurement of Insurance Liabilities for Property and Casualty (General Insurance) under Developing International Financial Reporting Standards." This Hachemeister Prize was established in 1993 in recognition of Charles A. Hachemeister's many contributions to Actuarial Studies in Non-Life Insurance (ASTIN) and his efforts to establish a closer relationship between the CAS and ASTIN. The Prize is awarded by the CAS for a paper published in the *ASTIN Bulletin* or presented at an ASTIN/AFIR Colloquium.

Mr. Hayne next announced that Gary G. Venter and Dumaria Rulina R. Tampubolon won the 2010 Variance Prize for their paper titled, "Robustifying Reserving," which is published in Volume 4, Issue 2 of Variance.

Mr. Hayne recognized D.W. Simpson Global Actuarial Recruitment, which donated 10,000 to the CAS Trust, bringing their lifetime contribution to the Trust to 150,000. The CAS Trust was established in 1979 as a non-profit 501(c)(3) organization to afford members and others an income tax deduction for contributions of funds to be used for scientific, literary, research or educational purposes.

Mr. Hayne next recognized and thanked the Society Partners, which are firms that demonstrate a commitment to the CAS and its mission by making an annual pledge to support CAS activities. He noted that this is the third year of the program and that the support of Society Partners and

their sponsorships at CAS meetings and seminars have enabled the CAS to keep our registration fees low for the fourth consecutive year. Mr. Hayne announced the 2011 CAS Society Partners as follows:

New Fellows

Platinum Partners

Ernst & Young Ezra Penland Actuarial Recruitment Milliman Pauline Reimer and Pryor Associates Executive Search Towers Watson Silver Partners Actuarial Careers, Inc. Guy Carpenter ISO Lexis Nexis

Pinnacle Actuarial Resources

Sensomatix

Ceremony for New Fellows

The 166 new Fellows were next recognized in a special ceremony. The names of these new Fellows follow:

Jill L. Deakins

Rachel A. Abramovitz Alex Rudolf R. Agatep Jr. Theodore M. Apostol Janejira Aranyawat Elizabeth A. Arsenault Brandon Lee Basken George M. Belokas Sokol Berisha Charles H. Birckhead Michael Bordeleau-Tassile James T. Botelho Adam E. Bremberger Louis M. Brown David Burack Scott G. Burke Colleen M. Burroughs Brandon John Buss Hannah Michelle Butler Cui Liu Cai Xiaobin Cao Amanda Marie Castello Eric Daniel Cathelyn Chung Yin Eric Chan Dana Tung Chang Som Chatterjee Minggiong Chen Alice Cheng Andrew M. Cheng Haoxuan Cheng Xiangyu Cheng Stephanie Wei Chin Matthew D. Clark TJ Clinch Vincent Coulombe Caroline Emily Cygnar Mary Elizabeth Daly Wade Daniluk

Cameron E. Deiter Derek D. Dunnagan Darci Rae Earhart David C. Fairchild Lu Fang Xiaohan Fang Gary M. Feder Yi Feng Gregory Andrew Finestine Chad J. Gambone Yunbo Gan Feng Ge Jio Young Goh Ruchama Graff Brent R. Grav Isabelle Guerin David Joseph Heilbrunn Michael A. Henk Roberto A. Hernandez Lisa Marie Holloway Chien Che Huang Dennis Dar You Huang Min Huang Qi Huang Michelle Lynne Humberd Michelle Lynn Iarkowski Daniel Joseph Kabala Mallika Kasturirangan Shannon M. Katzmayr Craig Stuart Kerman Matthew G. Killough Richard A. Knudson Jr. Dea Kondi Mariana Radeva Kotzev Zachary M. Kramer Jinghua (Chloe) Kuang

Guillaume Lamy Jean-François Lessard Yali Li Yuan-Chen Liao Lynda Ming Hui Lim Anna Liu Achraf Louitri Jenna Dawn Luft Keyang Luo Benjamin James Lynch Allison Marie Marra Liana Martuccio Elizabeth M. Mauro Andrew William Maxfield Matthew E. May Steven G. McKinnon Peter A. McNamara Thomas Walter Mezger Christopher G. Moore Richard P. Moore Christopher John Morkunas Brett E. Myers Todd M. Nagy Jennifer L. Nicklay Seoh Oh Elisa Pagan Yvonne Naa Korkor Palm Pierre Parenteau Glen Michael Patashnick Lela K. Patrik Paul Pelock Matthew Eric Petro Ashley S. Pistole Derek Paul Pouliot Thomas M. Prince Joshua J. Pyle Wenli Qiao

Olivier Elie Quesnel John Bradley Raatz Justin Taylor Ranney Nanxia Rao Chervl Lvnn Roberts Alexander Robert Rosteck Brett Andrew Saternus Michael Robert Scarpitti Adam Koloman Scarth Rachel Marie Seale Dara Marlene Seidler Dany Simard Taralyn Slusarski Kam Sang So Kunkook Son Stephen R. Sten John Paul Stonestreet Chih L. Su Heidi Joy Sullivan Kevin M. Sullivan Sean P. Sullivan Xiaowei Sun Laura Lucy Sutter Kuanshuan Helen Tai Simon Tam Samantha M. Taylor Dan Omer Tevet Alyssa Thao Thomas J. Thornburgh Kyle W. Tompkins Philip Traicus April M. Truebe Chee Lim Tung Dustin James Turner Alexander J. Turrell Nicholas Garret Van Ausdall Patricia Murphy Van Ausdall

Karen L. Van Cleave Andrew Vega Chinatsu H. Vergara Oleg Voloshyn Cong Wang Qing Janet Wang Rina Meng-Jie Wang Thomas Steve Wang Yao Wang Shawn A. Wright Lin Xing Michael Scot Young Li Zeng Lingang Zhang Yan Zhang

Yu Zhang Pavel Alexander Zhardetskiy Adolphe Emery Zielinski

After the ceremony Ms. Teufel introduced Robert Conger, who gave the address to new members. Mr. Conger is a Fellow of the Casualty Actuarial Society and a Member of the American Academy of Actuaries. He was elected President of the CAS in 2001 and has served as Chairperson of the CAS Board of Directors. He has also served the CAS on numerous committees and task forces, and most recently has been extremely busy in his role as the Chair of the 2014 International Congress of Actuaries, which is being hosted by the CAS and other U.S.-based actuarial organizations. Mr. Conger has more than 30 years of experience as an actuary, and is currently a Consultant with Towers Watson.

Chet Szczepanski, Vice-President—Professional Education, briefly described the educational content of the meeting stating that the Annual Meeting consisted of four general sessions and over 30 different concurrent sessions, offering a maximum of 18.3 CE credits. Mr. Szczepanski encouraged attendees to take advantage of the University of CAS and to attend the CAS Spring Meeting in Phoenix, Arizona. Mr. Szczepanski next recognized and thanked the 2011 Annual Meeting Sponsors and Advertisers.

Sponsors

- Milliman—opening luncheon
- · Pauline Reimer and Pryor Associates Executive Search-tote-bag and Cyber Café, and Advertiser
- EzraPenland Actuarial Recruitment—notebook
- CNA—water bottle

Advertisers

- Pauline Reimer and Pryor Associates Executive Search
- EzraPenland Actuarial Recruitment
- Actuarial Careers, Inc.
- DW Simpson Global Actuarial Recruitment

Mr. Szczepanski announced a new program of Roundtable Discussions for the Annual Meeting. Groups of nine participants and one facilitator will discuss critical topics and earn CE credits. He encouraged attendees to sign up for remaining seats. Another new program for this year's event is a Town Hall Meeting with the CAS Board of Directors. Board members will meet on Tuesday morning to discuss current issues with CAS members. He encouraged CAS members to attend and share their opinions and feedback with CAS leadership.

Mr. Szcepanski concluded his remarks with a few reminders to sign up for the Seasoned Actuaries Section dinner and a luncheon hosted by the Joint Risk Management Section of the CAS, CIA, and SOA. He asked attendees to complete brief evaluation forms on site for all the concurrent sessions. As an incentive, he told the assembled that there will be a drawing on Wednesday morning right before the General Session for two \$250 gift cards.

Also new this year, the CAS has created a Twitter hashtag for the Annual Meeting. Attendees were encouraged to tweet live from the Annual Meeting. The Annual Meeting hashtag is #CASannual. To follow the CAS on Twitter, go to Twitter.com\CASact.

As a final reminder, CAS members were asked to visit the registration desk to have their pictures taken for the CAS online membership directory.

Mr. Szczepanski also thanked the Program Planning Committee and the members of the CAS Office staff for their contributions to the meeting.

Following Mr. Szczepanski, Mr. Blanchard gave his Presidential Address via video. At the conclusion of the Presidential Address, Ms. Teufel thanked Mr. Blanchard for his service as president. Mr. Hayne then presented Ms. Teufel with the gavel and Presidential Medallion. Mr. Hayne then officially closed the business session.

After a brief refreshment break, the first General Session was held from 10:15 a.m. to 11:45 a.m.:

Actuarial and Business Perspectives on the Insurance Cycle

ephen Mildenhall, Chief Executive Officer, Aon Benfield Analytics
hn Beckman, Senior Vice President and Chief Underwriting Officer, CNA Commercial Insurance
avid Bassi, Chief Underwriting Officer, Plymouth Rock Assurance Corporation
ł

Following the General Session, a luncheon lecture was held with economist and entrepreneur Anthony Goldbloom. Mr. Goldblum's speech focused on the power of competition and applying competition to the business of analytics and actuarial science.

After the luncheon, the following concurrent sessions were held from 1:30 p.m. to 3:00 p.m.:

Choosing the Right Territory

Moderator:	James Guszcza, National Predictive Analytics Lead, Deloitte Consulting LLP
Panelist:	Satadru Sengupta, Actuarial Analyst, Liberty Mutual Group

Minutes	of the	2011	Annual	Meeting
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	minutes of the 2011 Annual meeting	
Directors and Officers Liability Moderator:	Carl Ashenbrenner, Principal and Consulting Actuary, Milliman, Inc.	
Panelists:	John R. Landis, Partner, Foley and Lardner LLP Jacqueline A. Urban, Senior Vice President, AON	
mplications, Challenges, and Sol Moderator/Panelist:	utions with Solvency II Kathryn Morgan, Manager – Prudential Insurance Policy, Financial Services Authority	
Panelists:	Vishal Desai, Senior Actuary, Financial Services Authority Neil Cantle, Milliman, Inc.	
mproving Your Presentation Skil	lls through Improv	
8	Bob Morand, Partner, D.W. Simpson Spective Testing of Loss Reserves Alia Understand Francisco Visa Davida & Wellia Davida Alia Visa Visa Visa Visa Visa Visa Visa Vi	
Moderator: Panelists:	Alice Underwood, Executive Vice President, Willis Re Susan Forray, Principal and Consulting Actuary, Milliman, Inc. Glenn G. Meyers, ISO Innovative Analytics	
Model Risk in Financial Systems: Moderator:		
Panelists:	Parr Schoolman, Senior Managing Director, Aon Benfield Micah Woolstenhulme, Senior Vice President, Guy Carpenter & Co., LLC	
Oil Price and Its Impact on Insur Moderator/Panelist:		
Panelist:	Gail Tverberg, President, Tverberg Actuarial Services, Inc.	
Our Estimates Are Cyclical. Are W Moderator:	'e Being Fooled? Simon Wong, Principal & Consulting Actuary, Milliman, Inc.	
Panelists:	Jessica Leong, Lead Casualty Specialty Actuary, Guy Carpenter & Co., LLC Donald Mango, Head of Global Advisory, Guy Carpenter & Co., LLC Brian Brown, Consulting Actuary, Milliman, Inc.	
After a brief refreshment break, three	repeat sessions and the following concurrent sessions were held from 3:30 p.m. to 5:00 p.m.:	
A Presentation about Presentation Speaker:	ns: Creating the "Dynamic Actuary" Bob Morand, Partner, D.W. Simpson	
Facts and Fiction of Statistical Sig	nificance Frank A. Schmid, Director and Senior Economist, NCCI, Inc.	
Moderator/Panelist:	Frank A. Schning, Director and Senior Economist, Weer, Inc.	
Moderator/Panelist: Panelist:	Chris Laws, Research Consultant, NCCI, Inc.	
	Chris Laws, Research Consultant, NCCI, Inc.	
Panelist: Loss Reserving Using Credibility a	Chris Laws, Research Consultant, NCCI, Inc. and Growth Curves	
Panelist: Loss Reserving Using Credibility a Moderator:	Chris Laws, Research Consultant, NCCI, Inc. and Growth Curves Daniel Murphy, President, Trinostics, LLC James Guszcza, National Predictive Analytics Lead, Deloitte Consulting LLP	

Minutes of the 2011 Annual Meeting

The Business of Run-off Moderator/Panelist:	Steven Herman, Principal, Asset Discovery Associates, LLC
Panelists:	Stuart Wrenn, Senior Vice President, Armour Risk Management Inc. Dr. Klaus Endres, Executive Vice President /Head of Business Development and Acquisitions, AXA LM Investments

Following the afternoon of concurrent sessions, a reception for new CAS Fellows and their spouses and guests was held from 5:30 p.m. to 6:30 p.m.

Tuesday, November 8, 2011

Registration continued from 7:00 a.m. to 2:30 p.m. and a continental breakfast was served from 7:00 a.m. to 9:00 a.m.

The CAS Board of Directors and other CAS leaders conducted a town hall meeting from 7:00 a.m. to 8:00 a.m. CAS members were able to give feedback on association issues. The main topic concerned a proposal by the Society of Actuaries to merge with the CAS. The CAS Board presented their official statement rejecting this proposed merger and audience members made comments.

The following concurrent sessions were held from 8:00 a.m. to 9:30 a.m.:

1. CAS Examination Process: Preser Moderator:	nt and Future Steven Armstrong, Senior Actuary, Allstate Insurance Company
Panelist:	Rajesh Sahasrabuddhe, Principal, Oliver Wyman
2. Effectively Utilizing Vehicle Teler	
Moderator:	A. David Cummings, Vice President and Chief Actuary, ISO Innovative Analytics
Panelists:	Colin Sutherland, Vice President, GeoTab, Inc.
	Jim Weiss, Assistant Manager–Actuarial, ISO
	Udi E. Makov, Actuarial Research Center-University of Haifa & Sensomatix
3. Facts and Fiction of Statistical Si	
Moderator/Panelist:	Frank A. Schmid, Director and Senior Economist, NCCI, Inc.
Panelist:	Chris Laws, Research Consultant, NCCI, Inc.
4. Loss Reserve Variability Worksho Moderator/Panelist:	op (Parts A and B) Louise Francis, President, Francis Analytics & Actuarial Data Mining Inc.
Panelist:	Mark Shapland, Consulting Actuary, Milliman, Inc.
5. Medical Professional Liability Up Moderator/Panelist:	
	Charles Mitchell, Consulting Actuary, Milliman, Inc.
Panelist:	Sarah Dore, Senior Vice President, AVRECO
6. Oil Price and Its Impact on Insur	rance
Moderator/Panelist:	Terri Dalenta, Chief Risk Officer, Allstate Protection, Allstate Insurance Company
Panelist:	Gail Tverberg, President, Tverberg Actuarial Services, Inc.
7. Ratemaking Documentation: Doe	
Facilitators:	Rebecca Williams, Manager–Data Analysis, North Carolina Rate Bureau
	Emilee Kuhn, AVP–Actuarial, Arch Insurance Group
8. The Painful Truth about Workers Moderator:	s Compensation Medical Severity Trends Steve DiCenso, Consulting Actuary, Milliman Inc.
Panelists:	Joseph Paduda, Principal, Health Strategy Associates, LLC Alex Swedlow, Executive Vice-President, California Workers' Compensation Institute
After a brief refreshment break, the follo	owing concurrent sessions were held from 10:00 a.m. to 11:30 a.m.:

1. Current Topics in Homeov Moderator:	vners Insurance Linda Brobeck, Principal, Brobeck Analytics Consulting
Panelists:	Dan Pickens, VP Property Pricing, USAA
	Tom Botsko, Chief Property and Casualty Actuary, Ohio Insurance Department
	Robert Curry, AVP & Actuary – Personal Property Actuarial Division, ISO
2. Does a Captive Need an Al Moderator/Panelist:	M Best Rating? Stephen DiCenso, Consulting Actuary, Milliman, Inc.
Panelists:	Gary Osborne, President, USA Risk Group
	Steven Chirico, Assistant Vice President, A.M. Best Co.
3. Financial and Human Toll Moderator:	of the Great Tohoku Earthquake in Japan Ronald Kozlowski, Director and Head of General Insurance Consulting, Asia Pacific, Towers Watson
Panelists:	Yuki Nii, Assistant Manager, National Mutual Insurance Federation of Agricultural Cooperatives
	Masato Tomihari, Deputy Manager, Mitsui Sumitomo Insurance Company, Limited
	Daisuke Nishihara, Assistant Vice President, Swiss Reinsurance Company Ltd., Japan Branch
 Latest Research on Capita Moderator/Panelist: 	l Allocation Donald Mango, Head of Global Advisory, Guy Carpenter & Co., LLC
Panelists:	Stephen D'Arcy, Professor, Department of Finance, University of Illinois
	David R. Clark, Senior Actuary, Munich Re America, Inc.
5. Solvency Modernization I Moderator:	nitiative Mary D. Miller, Assistant Director, Ohio Department of Insurance
Panelists:	Kris DeFrain, Director, Actuarial and Statistical, NAIC
	Mary Jo Kannon, Vice President and Actuary, ACE INA Insurance
Also during this time, the 2011	Hachemeister Prize paper was presented:
	k Margins in the Measurement of Insurance Liabilities for Property and Casualty (General oping International Financial Reporting Standards" A. David Cummings, Vice President and Chief Actuary, ISO Innovative Analytics
Author Panelists:	Robert Miccolis, Director, Deloitte Consulting LLP
	David Heppen, Senior Manager, Deloitte Consulting LLP
Also during this time, the follow	ving <i>Variance</i> paper was presented:
"Pricing in a Competitive In Moderator:	surance Market Driven by Fractional Noise" (<i>Variance</i> 5:1) A. David Cummings, Vice President and Chief Actuary, ISO Innovative Analytics
Author Panelist:	Alexandros Zimbidis, Athens University of Economics and Business
Following the morning Concu uncheon from 11:30 a.m. to 1:00	rrent Sessions, some attendees had lunch on their own and other attended the Joint Risk Management Section p.m.
The meeting reconvened for the	e following General Sessions, held from 1:00 p.m. to 2:30 p.m.:
Flood Insurance—The Great Moderator:	t Debate Jeffrey Kucera, Senior Consultant, Towers Watson
Panelists:	Stuart Mathewson, Senior Actuary, Swiss Re
	Jimi Grande, Senior Vice President Federal & Political Affairs, National Association of Mutual Insur- ance Companies

	Minutes of the 2011 Annual Meeting
It's Not Just for Pension Actuaries: Moderator:	What Every Actuary Should Know About Social Security Funding Steve Lehmann, Principal and Consulting Actuary, Pinnacle Actuarial Resources, Inc
Panelists:	Stephen C. Goss, Chief Actuary, Social Security Administration
	Thomas S. Terry, President, TTerry Consulting
	Janet Barr, Associate Actuary, Milliman Inc.
Following a brief break, the following o	ptional Roundtable Discussions were conducted from 2:45 p.m. to 4:15 p.m.
1. Insurance Cycles— Avoidable on Facilitator:	• Driven by Forces beyond Our Control? Benoit Carrier, Vice President and Casualty Pricing Manager, Zurich North America
2. Catastrophes—Abnormal Year o Facilitator:	r Are We Looking at One in Five Year Events? Jeffrey Kucera, Senior Consultant, Towers Watson
3. Capital Allocation— Can This Be Facilitator:	e Optimized? Donald Mango, Head of Global Advisory, Guy Carpenter & Co., LLC
4. Model Risks—Quantifiable? And Facilitator:	l if So, Can They Be Minimized? Parr Schoolman, Aon Benfield
5. Social Security Funding—Solution Facilitator:	ons or Replacement Options Steve Lehmann, Principal and Consulting Actuary, Pinnacle Actuarial Resources, Inc.
6. Solvency II— Implications to U.	S. Insurers
Facilitators:	Mary Jo Kannon, Vice President and Actuary, ACE INA Insurance
	Kathryn Morgan, Manager, Prudential Insurance Policy, Financial Services Authority
7. Professionalism—What You Wou	ıld Like to Know
Facilitator:	Pat Gilhool, AVP and Actuary, CNA Insurance Companies
8. Fractional Noise: A Discussion o tional Noise" Facilitator:	f the <i>Variance</i> paper " Pricing in a Competitive Insurance Market Driven by Frac - Alexandros Zimbidis, Author, Athens University of Economics and Business
Alter a drief dreak, allendees were treate	ed to a buffet dinner from 6:30 p.m. – 9:30 p.m. at the Chicago Museum of Science and Industry.
Wednesday, November 9, 2011	
-	to 11:45 a.m. and a continental breakfast was served from 7:00 a.m. to 9:00 a.m.
The following Concurrent Sessions were	
1. Model Risk in Financial Systems Moderator:	: The Lesson of the Black Swans David Bassi, Chief Underwriting Officer, Plymouth Rock Assurance Corporation
Panelists:	Parr Schoolman, Senior Managing Director, Aon Benfield
	Micah Woolstenhulme, Senior Vice President, Guy Carpenter & Co., LLC
2. Reserving Documentation: Does Facilitators:	Yours Make the Cut? Patrick Gilhool, AVP & Actuary, CNA Insurance
	Therese Klodnicki, Principal and Consulting Actuary, Advanced Analytics
3. Severe Weather Ratemaking Moderator:	Shantelle Thomas, Senior Actuary – Product Pricing, Allstate Insurance Company
Panelists:	David Lalonde, Senior Vice President, AIR Worldwide Corporation

Kathryn Rokosz, Assistant Actuary, Allstate Insurance Company

4. Solvency Modernization Initiative	e
Moderator:	Mary D. Miller, Assistant Director, Ohio Department of Insurance
Panelists:	Kris DeFrain, Director, Actuarial and Statistical, NAIC
	Mary Jo Kannon, VP & Actuary, ACE INA Insurance
5. Using Novel Data for Vehicle Rati	ng
Moderator/Panelist:	A. David Cummings, Vice President and Chief Actuary, ISO Innovative Analytics
Panelist:	Glenn Hofmann, Vice President, TransUnion
Also during this time, the following Vari	<i>iance</i> papers were presented:
"Credibility for a Tower of Excess L	ayers" (Variance 5:1)
Moderator:	Carl Ashenbrenner, Principal and Consulting Actuary, Milliman, Inc.
Author Panelist:	David R. Clark, Senior Actuary, Munich Re America, Inc.
"Correlated Random Effects for Hu	edle Models Applied to Claim Counts" (Variance 5:1)
Moderator:	Carl Ashenbrenner, Principal and Consulting Actuary, Milliman, Inc.
Author Panelist:	Jean-Philippe Boucher, Professor, Department of Mathematics, Université du Québec à Montréal
The following General Session was held	from 10:00 a.m. to 11:30 a.m.:
M&A Activity in the Insurance & Rei	nsurance Industry
Moderator:	Sean McDermott, Director, Consulting Services-Towers Watson
Panelists:	Jerry Theodorou, Vice President of Insurance Research, Conning Research & Consulting, Inc.
	Robert Giammarco, Managing Director-Head of Insurance Group Americas, Bank of America Merrill Lynch

Jack Sennott, Executive Vice President, Allied World Assurance Company

After the general session, Ms. Teufel encouraged all attendees to complete the online meeting evaluation form and announced upcoming meetings before she adjourned the meeting.

Attendees of the 2011 CAS Annual Meeting

The 2011 CAS Annual Meeting was attended by 578 Fellows, 130 Associates, 1 Affiliate, and Candidates, Subscribers, and other guests. The names of the Fellows, Associates, and Affiliate in attendance follow:

	FELL	0w8	
Rachel A. Abramovitz	Brandon Lee Basken	Linda K. Brobeck	Eric Daniel Cathelyn
Shawna S. Ackerman	David B. Bassi	Craig R. Brophy	Chung Yin Eric Chan
Mark A. Addiego	Nicolas Beaupre	Brian Z. Brown	Carl Chang
Alex Rudolf R. Agatep Jr.	John A. Beckman	Louis M. Brown	Dana Tung Chang
Brian C. Alvers	George M. Belokas	Elaine K. Brunner	Mei-Hsuan Chao
Desmond D. Andrews	Abbe Sohne Bensimon	William Robinson Buck	Scott K. Charbonneau
Theodore M. Apostol	Sokol Berisha	David Burack	Som Chatterjee
Janejira Aranyawat	Richard M. Beverage	Ilene Stone Burke	Mingqiong Chen
Deborah Herman Ardern	Francois Blais	Richard F. Burke	Andrew M. Cheng
Rebecca J. Armon	Ralph S. Blanchard	Colleen M. Burroughs	Haoxuan Cheng
Steven D. Armstrong	Peter George Blouin	George R. Busche	Xiangyu Cheng
Elizabeth A. Arsenault	Christopher David Bohn	Brandon John Buss	Max Chiao
Lawrence J. Artes	Michael Bordeleau-Tassile	Jarrett Durand Cabell	Stephanie Wei Chin
Carl Xavier Ashenbrenner	Charles H. Boucek	Jeanne H. Camp	Li-Chuan L. Chou
Martha E. Ashman	Amy S. Bouska	Xiaobin Cao	Michael Joseph Christian
Afrouz Assadian	Roger W. Bovard	Janet P. Cappers	James K. Christie
Guy A. Avagliano	Jerelyn S. Boysia	John E. Captain	Donna C. Chung
John L. Baldan	Nancy A. Braithwaite	Simon Careau	David R. Clark
Robert Sidney Ballmer	Paul Braithwaite	Christopher S. Carlson	Matthew D. Clark
Kim A. Barber	Yaakov B. Brauner	Lynn R. Carroll	Jason T. Clarke
D. Lee Barclay	Adam E. Bremberger	Thomas R. Carroll	TJ Clinch
Keith Michael Barnes	John R. Broadrick	Amanda Marie Castello	J. Paul Cochran

FELLOWS

William Brian Cody Robert Alan Cole Daniel G. Collins Robert F. Conger Larry Kevin Conlee Eugene C. Connell Cameron A. Cook Richard Jason Cook Christopher L. Cooksey Vincent Coulombe Jeanne E. Crowell Jason J. Culp A. David Cummings Claudia Barry Cunniff Robert J. Curry Michael T. Curtis Caroline Emily Cygnar Kenneth S. Dailey Mary Elizabeth Daly Wade Daniluk Stephen P. D'Arcy Edgar W. Davenport **Jill L. Deakins** Kris D. DeFrain Cameron E. Deiter John T. Devereux Stephen R. DiCenso Monica R. Dicesare Kurt S. Dickmann Kevin G. Dickson Natalia Dimitrienko Sara P. Drexler Eric Drummond-Hay Janet E. Duncan Derek D. Dunnagan Darci Rae Earhart Brad Eastwood Maribeth Ebert Grover M. Edie Dale R. Edlefson Bob D. Effinger Jr. David M. Elkins John W. Ellingrod William H. Erdman Ellen R. Erwav Benedict M. Escoto David C. Fairchild Richard J. Fallquist Lu Fang Xiaohan Fang Philippe Farrier Gary M. Feder Yi Feng John D. Ferraro Dale A. Fethke Gregory Andrew Finestine Ginda Kaplan Fisher Wayne H. Fisher Ellen D. Fitzsimmons Timothy J. Fleming

James E. Fletcher Daniel J. Flick Mark A. Florenz John R. Forney Jr. Susan J. Forray Robert Jerome Foskey Ron Fowler Louise A. Francis Michael Fusco Chad J. Gambone Timothy M. Garcia Robert W. Gardner Feng Ge Richard N. Gibson John S. Giles Patrick John Gilhool Kristen Marie Gilpin Annette J. Goodreau Kristen M. Goodrich David B. Gordon Rebecca J. Gordon Leon R. Gottlieb Ruchama Graff Brent R. Gray Charles R. Grilliot Cynthia M. Grim Joshua Matthew Grode Jacqueline Lewis Gronski Joshua S. Grunin Ren-Bin Guo Terry D. Gusler James C. Guszcza Christina Link Gwilliam Vincent Ha William Joseph Hackman Nasser Hadidi James W. Haidu Marc S. Hall David Scott Hamilton John C. Hanna David C. Harrison David G. Hartman Ryan D. Hartman Diane K. Hausserman Roger M. Hayne David H. Hays David Joseph Heilbrunn Christopher Ross Heim Michael A. Henk David E. Heppen Steven C. Herman Roberto A. Hernandez Ronald J. Herrig Paul Daniel Herzog Todd J. Hess Glenn R. Hiltpold Carole K.L. Ho Christopher Todd Hochhausler Lisa Marie Holloway Melissa S. Holt

Allen J. Hope Hugh D. Hopper Eric J. Hornick Linda M. Howell George A. Hroziencik Chien Che Huang Dennis Dar You Huang Min Huang Thomas A. Huberty Michelle Lynne Humberd Michelle Lynn Iarkowski Philip M. Imm Kenneth Layne Israelsen Joseph Marino Izzo Shira L. Jacobson Matthieu Jasmin Scott R. Jean Min Jiang Shiwen Jiang Zivi Jiao Charles B. Jin Daniel Keith Johnson Thomas S. Johnston Amy Ann Juknelis Daniel Joseph Kabala James B. Kahn Kyewook Gary Kang Stephen H. Kantor Mallika Kasturirangan Shannon M. Katzmayr Clive L. Keatinge Anne E. Kelly James M. Kelly Rebecca Anne Kennedy David R. Kennerud Craig Stuart Kerman C.K. Stan Khury Matthew G. Killough Ung Min Kim Deborah M. King Kayne M. Kirby Gerald S. Kirschner Joseph E. Kirsits Jeff A. Kluck Richard A. Knudson Jr. Terry A. Knull Jonathan David Koch Mark D. Komiskey Dea Kondi Wen Kong Andrew M. Koren Louis K. Korth Mariana Radeva Kotzev Ronald T. Kozlowski Israel Krakowski Zachary M. Kramer Gustave A. Krause Jinghua (Chloe) Kuang Jeffrey L. Kucera Emilee J. Kuhn

James D. Kunce Darjen D. Kuo Kimberly J. Kurban Terry T. Kuruvilla Keith Patrick Kwiatkowski Paul E. Lacko David A. Lalonde Michael A. LaMonica Guillaume Lamy Matthew G. Lange Steven P. Lattanzio Jason A. Lauterbach Henry T. Lee Scott J. Lefkowitz Steven G. Lehmann James J. Leonard Kenneth L. Leonard Jr. Weng Kah Leong Nathan A. Lerman Jean-François Lessard John N. Levy Sally Margaret Levy Sharon Xiaoyin Li Yali Li Andrew Hankuang Liao Yuan-Chen Liao Matthew Allen Lillegard Simon John Lilley Lynda Ming Hui Lim Kenneth Lin Paul T. Lintner Anna Liu Andrew F. Loach Richard Paul Lonardo Achraf Louitri Stephen P. Lowe John David Lower Robert G. Lowery Jenna Dawn Luft Benjamin James Lynch James P. Lynch Xiaoli (Shirley) Ma W. James MacGinnitie Evan P. Mackey Brett A. MacKinnon Eric A. Madia Daniel Patrick Maguire Alexander Peter Maizys Debra Anne Maizys Donald F. Mango Leslie R. Marlo Stephen P. Marsden Paul C. Martin Raul Gabriel Martin Zachary J. Martin Liana Martuccio Jerrel H. Mast Stuart B. Mathewson Andrew William Maxfield Matthew E. May

YEARBOOK AND PROCEEDINGS

Robert D. McCarthy Jeffrey F. McCarty Debra L. McClenahan Charles W. McConnell Sean P. McDermott Heather L. McIntosh Shawn Allan McKenzie Steven G. McKinnon Michael F. McManus Sylwia S. McMichael Peter A. McNamara Martin Menard David L. Menning Elizabeth Cashman Merritt Glenn G. Meyers Thomas Walter Mezger Robert S. Miccolis Ryan A. Michel Stephen J. Mildenhall Mary D. Miller Mary Frances Miller Stephanie A. Miller Max Harpo Mindel Charles W. Mitchell Brian A. Montigney Christopher G. Moore David Patrick Moore Phillip S. Moore Richard P. Moore Allison L. Morabito Christopher John Morkunas Thomas G. Moylan Todd B. Munson Daniel M. Murphy David A. Murray Eric L. Murray Brett E. Myers Donna M. Nadeau Todd M. Nagy John A. Nauss Aaron West Newhoff Minh-Huyen Nguyen Adam Kevin Niebrugge Jennifer Lee Niles Seoh Oh Kathy A. Olcese James D. O'Malley Joanne M. Ottone Elisa Pagan Richard D. Pagnozzi Yvonne Naa Korkor Palm Donald W. Palmer Keith William Palmer Jean-Pierre Paquet Glen M. Patashnick Bruce Paterson Gary S. Patrik Lela K. Patrik John R. Pedrick

Brian G. Pellv Paul Pelock John M. Pergrossi Julia L. Perrine Matthew Eric Petro Stephen W. Philbrick Elisabeth Picard-Courtois Daniel C. Pickens Michael D. Poe Gregory John Poirier Timothy K. Pollis Derek Paul Pouliot Ruth Poutanen Richard W. Prescott Virginia R. Prevosto Deborah W. Price Thomas M. Prince Lovely G. Puthenveetil Joshua J. Pyle Wenli Qiao Olivier Elie Quesnel Kenneth Quintilian John Bradley Raatz Rajagopalan K. Raman Srinivasa Ramanujam Justin Taylor Ranney Nanxia Rao Leonid Rasin Eric W.L. Ratti Kevin B. Robbins Cheryl Lynn Roberts Rebecca L. Roever Keith A. Rogers John R. Rohe A. Scott Romito Richard R. Ross Alexander Robert Rosteck Richard J. Roth Jr. Stuart C. Rowe Ashley Carver Roya Nadiya Rudomino Kenneth W. Rupert Jr. Laura Beth Sachs Rajesh V. Sahasrabuddhe Anthony D. Salido Brett Andrew Saternus Adam Koloman Scarth Karen E. Schmitt Jeffery Wayne Scholl Parr T. Schoolman Jeffory C. Schwandt Arthur J. Schwartz Lyndsey J. Schwegler Jeffery J. Scott Ronald S. Scott Craig J. Scukas Rachel Marie Seale Terry Michael Seckel Dara Marlene Seidler

Mark R. Shapland Raymond Bond Shum Melvin S. Silver Dany Simard Taralyn Slusarski Joseph Allen Smalley Joel M. Smerchek Jeffery J. Smith Richard A. Smith Patricia E. Smolen Kam Sang So Joanna M. Solarz Kunkook Son David Spiegler Daniel L. Splitt Grant D. Steer Samantha Elizabeth Steiner Stephen R. Sten Julia Causbie Stenberg Emanuel James Stergiou John Paul Stonestreet Karine St-Onge Mark Stephen Struck Chih L. Su Lisa M. Sukow Kevin M. Sullivan Xiaowei Sun Brian Tohru Suzuki Christian Svendsgaard Chester John Szczepanski Kuanshuan Helen Tai Simon Tam Samantha M. Taylor Patricia A. Teufel Dan Omer Tevet Alyssa Thao Mary A. Theilen Shantelle Adrienne Thomas Robert W. Thompson Thomas J. Thornburgh John P. Tiernev Dovid C. Tkatch Kyle W. Tompkins Philip Traicus Tang-Hung Trang Adam J. Trelford Matthew D. Trone Adam James Troyer April M. Truebe Lien K. Tu-Chalmers Dustin James Turner Alexander J. Turrell Gail E. Tverberg Alice M. Underwood Nicholas Garret Van Ausdall Patricia Murphy Van Ausdall Karen L. Van Cleave Jeffrey A. VanKley Richard L. Vaughan

Andrew Vega Chinatsu H. Vergara Kevin K. Vesel Marie-Eve Vesel Daniel Viau Oleg Voloshyn Allan S. Voltz Claude A. Wagner Benjamin A. Walden Benjamin J. Walker Cong Wang Hui Wang **Qing Janet Wang** Rina Meng-Jie Wang Bryan C. Ware Dominic A. Weber Kelly M. Weber Jennifer Lynn Weiner James R. Weiss Patrick L. Whatley Gnana K. Wignarajah William B. Wilder Robert F. Wolf Simon Kai-Yip Wong Mark L. Woods Patrick B. Woods Micah G. Woolstenhulme Stuart A. Wrenn Shawn A. Wright Lin Xing Zhijian Xiong Floyd M. Yager Min Yao Ioel D. Yatskowitz Fan Ye Kimberly Yeomans Andrew Yershov Sung Gyun Yim Richard P. Yocius Guanrong You Joshua A. Youdovin Michael Scot Young Anton Zalesky Ruth Zea Doug A. Zearfoss Li Zeng Guowen Zhang Lingang Zhang Yan Zhang Yu Zhang Yue Zhang Pavel Alexander Zhardetskiy Jeffrey W. Zheng Adolphe Emery Zielinski Steven Bradley Zielke Ralph T. Zimmer

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Kathryn Marie Rokosz Kelly A. Rothermel John C. Ruth Elizabeth Asher Sanders Amy Beth Green Sayegh Daniel David Schlemmer Richard T. Schneider Brian M. Scott Michael James Seeber David Garrett Shafer Jonathan N. Shampo Seth Shenghit Ben Silberstein Byron W. Smith Aleta J. Stack Scott T. Stelljes Michael Daniel Stephens Laura A. Stevens Mark Taber Kathy M. Thompson Joseph D. Tritz Mitchell Lee Underwood Darren Russell Weidner Andrew T. Wiest Rebecca R. Williams Terrence Wright Jianwei Xie Nora J. Young Bei Zhou Mingren Zhou Rita M. Zona

AFFILIATE

Simon J. Day

REPORT OF THE VICE PRESIDENT—ADMINISTRATION

This report provides a one-year summary of Casualty Actuarial Society activities since the 2010 CAS Annual Meeting and is organized into three sections:

1. A summary of the past year's activities as they relate to the four core purposes of the CAS as stated in the CAS Constitution.

2. A summary of activities that may not relate to a specific purpose outlined in the Constitution but that are critical to the ongoing vitality of the CAS.

3. Updates on CAS governance, membership statistics, and finances.

CORE CAS ACTIVITIES

1. Advance the body of knowledge of actuarial science applied to property, casualty, and similar risk exposures.

CAS contributions to actuarial literature through its many publications and numerous research and development projects are direct outputs of this goal. This year, as in previous ones, actuarial literature and research focused on theoretical and practical aspects of the actuarial profession.

Entering its fifth year, the CAS research journal *Variance* continued its commitment to publishing practical articles in actuarial science. In 2011 the *Variance* Editorial Board awarded the *Variance* Prize for 2010 to Gary G. Venter and Dumaria Rulina Tampubolon for their paper titled, "Robustifying Reserving." The paper is published in *Variance*, Volume 4, Number 2.

The year 2011 saw more offerings in the CAS *E-Forum* and Working Paper sites, which contributed greatly toward fulfilling this goal. Five *E-Forums* were posted this year and they included papers written in response to sponsored call paper programs on the topics of loss reserving, reinsurance, and ratemaking research.

Among the numerous enhancements to CAS research and education tools realized in 2011, the loss simulation model was converted from the APL computer language to Visual Basic, making the educational and research tool more accessible to practitioners. The CAS Loss Simulation Model Working Party completed its report titled "Modeling Loss Emergence and Settlement Processes" and published it along with the loss simulation model and its supporting documentation. These all were posted to the CAS Web Site in 2010.

In the area of funded research, the CAS joined The Actuarial Foundation (TAF) in cosponsoring an annual competition for research proposals. The CAS also contributed \$28,000 to help fund TAF grants for two research projects with the potential to benefit the property and casualty field. In total, the CAS committed \$121,500 to funded research projects during the year.

Other CAS research activities included updates to the Risk Premium Project literature search, completion of software to create multiyear inflation/ deflation scenarios, and the formation of one new research working party, the Low Interest Rate Environment Working Party.

2. Establish and maintain standards of qualification for membership.

Following through on planning begun in 2008, the CAS implemented its new basic education structure in 2011. Through two self-paced, Internetbased courses, candidates were tested to demonstrate familiarity with the topics of "Risk Management and Insurance Operations" (Online Course 1) and "Insurance Accounting, Coverage Analysis, Insurance Law, and Insurance Regulation" (Online Course 2). The CAS partnered with The Institutes (The American Institute for CPCU/IIA) to offer the courses.

In addition in 2011, Exam 3F/MFE was administered by computer-based testing (CBT), thus completing the goal of moving all of the joint exams to CBT.

The CAS continued working to make its basic education system available to candidates around the world. In June 2011 the CAS hosted a Course on Professionalism (COP) in Singapore City.

3. Promote and maintain high standards of conduct and competence of members.

Our Code of Professional Conduct continuously and successfully fulfills this core purpose. Other vital contributors to this goal are the CAS Continuing Education (CE) Policy, the new Chartered Enterprise Risk Analyst (CERA) credential, and our CE programs.

In 2011 the CAS implemented plans for its CE Policy, which was approved by the CAS Board in 2010. The CAS CE Policy applies to members rendering Actuarial Services on or after January 1, 2012. In order to provide Actuarial Services during 2012, Fellows and Associates of the CAS were required to assert compliance with the policy's CE requirements by the end of 2011.

Most members elected to satisfy the CAS CE Policy through the section of the policy titled, "National Compliance Provisions." This section recognizes existing continuing education requirements from national organizations such as the American Academy of Actuaries and the Canadian Institute of Actuaries. A majority of CAS members already obtain their continuing education under those organizations' systems.

In anticipation of an audit, CAS members are expected to maintain a log of CE activity to document that they have met the CE requirements. The CAS plans to randomly audit 1% of the CE logs for members who have attested their compliance with the Policy each year. In addition, the CAS Board of Directors agreed that all Board and Executive Council members (excluding appointed directors and the executive director) will be subject to the annual audit for compliance with the CAS CE Policy. Although CAS members who do not provide Actuarial Services are exempt from meeting the CE requirements, they are still required to attest to their compliance by indicating that they are "Not providing actuarial services."

Beginning in January 2012, the general public will be able to search a limited portion of the CAS online membership directory for information on

member CE compliance.

The CAS made further inroads into the field of enterprise risk management (ERM) with its recognition as an award signatory for the new CERA credential. Designed to promote actuaries in the field of ERM, the CERA requires designees to meet stringent education requirements in ERM and to be governed by a strong code of professional conduct.

On October 1, 2011, the CERA Treaty Board recognized the CAS as an award signatory for the CERA credential. CAS requirements to qualify for the CERA designation include CAS Associateship requirements plus credit for CAS Exams 7 and 9, or attainment of the CAS Fellowship designation, plus participation in a rigorous three-day seminar and successful completion of the U.K. ST-9 Enterprise Risk Management Specialist Technical Exam (ST-9 exam). The three-day seminar will cover the ERM learning objectives tested in the ST-9 exam, and it is intended to prepare candidates for successful completion of the exam. The CAS scheduled the seminar in March 2012, in advance of the April 2012 ST-9 exam sitting.

Also in 2011, the CAS began to develop a second, alternative pathway to earning the CERA credential, called the Experienced Practitioners Pathway (EPP). The EPP would award the CERA designation to existing members who, through their work experience, have demonstrated a level of knowledge and understanding of ERM comparable to that achieved by other designees. The EPP would also require approval by the CERA Treaty Board.

The CAS provides members with educational opportunities through the publication of actuarial materials and the sponsorship of meetings and seminars. This past year's education programs included the following:

	Location	CAS Members Attending
Spring	Palm Beach, FL	506
Annual	Chicago, IL	691

Торіс	Location	CAS Members Attending		
Ratemaking & Product Management	New Orleans, LA	359		
Enterprise Risk Management Symposium	Chicago, IL	105		
Reinsurance	Philadelphia, PA	323		
Casualty Loss Reserve Seminar	Las Vegas, NV	537		
In Focus: The Underwriting Cycle Seminar	Baltimore, MD	192		

Seminars:

In addition to these major programs:

- Three (3) limited-attendance seminars were conducted in 2011 titled, "Introduction to R," "Predictive Modeling," and "Loss Distributions."
- Two (2) offerings of the "Introduction to ERM" were available in 2011.
- The 2011 Annual Meeting offered two (2) workshops on general business skills: "A Presentation about Presentations: Creating the 'Dynamic Actuary'" and "Improving Your Presentation Skills through Improv." Other similar offerings include "Effective Communication for Actuaries" (Seminar on Reinsurance) and "The Language of Influence" (Spring Meeting).
- Webcasts from the 2011 Spring and Annual Meetings were provided.
- A Webcast from the 2011 ERM Symposium Seminar was provided: "Designing and Implementing ICAAP and ORSA: Challenges and Practices."
- Eleven (11) Webinars were conducted in 2011:
- "Solvency II" (two-part series)
- "International Accounting Changes—IASB and FASB Proposals"
- "Commercial Lines Credit Scores and Predictive Modeling"
- "Current CAS Issues"
- "Copulas and Their Applications: Part II"
- "Cyber Risks: Threats, Insurance & Risk Management Principles"
- "Actuarial Opinions and ASOP Nos. 36 and 43"
- "An Introduction to Copulas and Their Applications"
- "Reinsurance Counterparty Risk—A Transition Matrix/Recovery Rate Approach"
- "Tightening the Noose: Innovations in Claim Fraud Detection"
- "P/C Risk-Based Capital: State and International Solvency Regulation"
- Six (6) Courses on Professionalism were held in North America.

The variety and number of these offerings represent an ongoing expansion of education services to respond to members' demand for high-quality, affordable continuing education opportunities. The online University of CAS (UCAS) also more than doubled its offerings to CAS members of inex-

pensive online access to CAS recordings of educational sessions from past CAS meetings and seminars.

4. Increase the awareness of actuarial science.

The CAS undertook or participated in a number of communication initiatives designed to increase public awareness of the profession.

Press Releases

The CAS issued 13 press releases during 2011 in an effort to inform insurance industry professionals about CAS programs and initiatives.

Career Encouragement

In continued efforts to promote the actuarial career to promising students who reflect a diverse population, the CAS and SOA Joint Committees on Career Encouragement and Actuarial Diversity unveiled a new clean and modern design for the Be An Actuary Web Site. The redesigned site included enhancements such as video footage, improved navigation, and social media links, as well as updated tool-kits for those giving presentations about the career. The site, which was first launched in 1999 and last redesigned in 2003, provides an overview of the examination process and guidance for those searching for an entry-level actuarial job.

• Scholarships

The CAS Trust Scholarship Program awarded two (2) \$2,000 scholarships to deserving students for the 2011-2012 academic year. The CAS Trust also administered the Harold W. Schloss Memorial Scholarship Fund in conjunction with the University of Iowa.

OTHER ACTIVITIES

Other CAS activities contributed to the ongoing vitality of the organization during 2011.

Above and Beyond Achievement Awards

The CAS awarded the 2011 Above and Beyond Achievement Award (ABAA) to Gareth L. Kennedy and Rhonda Port Walker. Mr. Kennedy was recognized for his contributions to the CAS Accounting Changes Task Force and Ms. Walker for her work on behalf of the CAS Examination Committee. The ABAA recognizes noteworthy volunteer accomplishments occurring within the past two years.

• New Members Award

The New Members Award recognizes volunteer contributions during an individual's first five years as a member. The year 2011 was the inaugural year of this award. The first winner of the New Members Award was Vijay Manghnani for his contributions to the Climate Change Committee.

Matthew Rodermund Service Award

The Matthew Rodermund Service Award is intended to annually recognize two CAS members who have made significant volunteer contributions to the actuarial profession over the course of a career. The award was established in 1990 in honor of Mr. Rodermund's history of volunteer service to the CAS. The 2011 winners were Amy Bouska and Stephen Philbrick. Each of the 2011 Matthew Rodermund Service Award winners exemplifies a lifetime of service helping to accomplish a variety of CAS initiatives.

THE STATE OF THE CAS

Governance

Gary R. Josephson was elected President-Elect for 2011–2012. CAS Fellows also elected Shawna S. Ackerman, Steven D. Armstrong, Annette J. Goodreau, and James R. Merz to the CAS Board of Directors. Patricia Teufel assumed the presidency. As Immediate Past President, Ralph S. Blanchard moved to chair of the Board of Directors. Also in 2011, Michael Steel was appointed and Kathryn Morgan and Richard Delaney were reappointed to serve on the Board.

The following members were elected or re-elected by the Board to serve as vice presidents: Leslie Marlo, Vice President-Administration; Virginia R. Prevosto, Vice President-Admissions; Barry Franklin, Vice President-ERM; Kris D. DeFrain, Vice President-International; Nancy Braithwaite, Vice President-Marketing & Communications; Chet Szczepanski, Vice President-Professional Education; and Alice M. Underwood, Vice President-Research & Development. The vice presidents serve on the Executive Council of the CAS, along with CAS Executive Director Cynthia Ziegler, and the president and president-elect.

In conjunction with the 2011 election ballot, CAS Fellows voted to approve two of four changes to the CAS Constitution and Bylaws. The four ballot questions concerned Associate member voting, Associate Board service eligibility, the actuarial discipline process, and removal of antiquated language. Adopting proposed changes requires an affirmative vote of 10% of the Fellows or two thirds of the Fellows voting, whichever is greater. A special August Actuarial Review issue featured descriptions of the proposed revisions and suggested wording changes to the Constitution and Bylaws.

The first proposed amendment would have allowed Associates to vote in CAS elections five years after being recognized as Associates, if they have not yet attained Fellowship. This proposal failed. The second proposed amendment, which was contingent on the first measure passing, would have made all CAS voting members eligible to be elected members of the Board.

CAS Fellows approved the third set of changes designed to allow the CAS to participate in the joint disciplinary process proposed by the Council of U.S. Presidents (CUSP). The CUSP joint discipline proposal was designed to increase the efficiency of the discipline process and create greater consistency among discipline outcomes. CUSP is made up of the presidents and presidents-elect of the U.S.-based actuarial organizations.

Passage of this amendment enables the CAS Board of Directors to enter into an agreement for joint discipline with other participating organizations, while retaining control of the discipline of CAS members. As articulated in the changes to the CAS Constitution and Bylaws, the CAS Board, if approved by

a two-thirds majority vote of the CAS Board members voting, would be granted the authority to enter into a joint disciplinary agreement, provided that:

- a. No CAS member will be disciplined unless a majority of the panel judging that CAS member is composed of CAS members and a majority of those CAS members concur with the discipline.
- b. The authority to impose penalties of expulsion or suspension for more than two years for any CAS member will remain with the CAS.

The final amendment on antiquated language also passed. The removed language needlessly specified that Affiliates are entitled to attend CAS meetings and participate in Society functions. The CAS does not restrict attendance at its meetings and seminars.

The 2011 election results showed a total of 1,375 Fellows voting (35.5%), as compared to 1,166 Fellows in 2010 (31.9%).

Membership Statistics

Membership growth continued with 78 new Associates and 226 new Fellows, including four new Fellows via mutual recognition agreements with other actuarial organizations. The total number of members as of November 7, 2011, is 5,470, a gain of nearly one percent from the previous year.

Financial Status

The CPA firm LarsonAllen (effective January 3, 2012, LarsonAllen merged with Clifton Gunderson and became CliftonLarsonAllen) examined the CAS financial records for fiscal year 2011 and the CAS Audit Committee reported the firm's findings to the CAS Board of Directors in March 2012. The fiscal year ended with an audited net gain of \$370,954 compared to budgeted net loss of \$18,021.

The CAS surplus now stands at \$5,045,265. This represents an increase in surplus of \$234,538 over the amount reported last year. In addition to the net income from operations of \$323,434, there was interest and dividend revenue of \$173,367, a realized gain of \$33,347, and an unrealized loss of \$159,194. There was a total net increase of \$136,416 in various research, prize, and scholarship accounts (including the CAS Trust). Total Members' Equity (CAS surplus plus non-surplus accounts) now stands at \$6,180,412, an overall increase of \$370,954 over last year.

For FY 2012, the CAS Board of Directors has approved a budget of approximately \$9.2 million. Members' dues are \$450, representing an increase of \$10. The financial statements are attached to this report.

Respectfully submitted,

Leslie Marlo Vice President-Administration

FINANCIAL REPORT FISCAL YEAR ENDED 9/30/2011

FUNCTION	REVENUE		EXPENSE		DIFFERENCE
Membership Services	\$2,369,700		\$3,034,416		(\$664,716)
Seminars	2,344,249		2,041,467		302,782
Meetings	1,352,288		1,299,101		53,187
Exams	5,558,135	(a)	4,904,317	(a)	653,817
Publications	4,641		26,277		(21,636)
TOTALS FROM OPERATIONS	\$11,629,013		\$11,305,579		\$323,434
Interest and Dividend Revenue				_	173,367
Realized Gain/(Loss) on Marketable Securities					33,347
Unrealized Gain/(Loss) on Marketable Securities					(159,194)
TOTAL NET INCOME (LOSS)				_	\$370,954

NOTE: (a) Includes \$2,955,735 of Volunteer Services for income and expense (SFAS 116).

BALANCE SHEET

ASSETS	9/30/2010	9/30/2011	DIFFERENCE
Cash and Cash Equivalents	\$1,319,673	\$1,471,491	\$151,818
T-Bill/Notes, Marketable Securities	6,692,588	6,984,424	291,836
Accrued Interest	7,935	8,931	996
Prepaid Expenses / Deposits	382,051	220,507	(161,544)
Prepaid Insurance	25,357	26,343	986
Accounts Receivable	129,348	411,937	282,589
Textbook Inventory	13,284	12,335	(949)
Computers, Furniture, Leasehold Improvements	815,502	767,338	(48,164)
Less: Accumulated Depreciation	(603,965)	(639,708)	(35,743)
TOTAL ASSETS	\$8,781,773	\$9,263,597	\$481,824
LIABILITIES	9/30/2010	9/30/2011	DIFFERENCE
Exam Fees Deferred	\$1,045,785	\$1,017,410	(\$28,375)
Seminar and Meeting Fees Deferred	566,689	728,571	161,882
Accounts Payable and Accrued Expenses	720,633	617,120	(103,513)
Accrued Pension	426,147	531,819	105,672
Deferred Leasehold Improvements Allowance	108,744	87,696	(21,048)
Deferred Rent Obligation	104,316	100,568	(3,748)
TOTAL LIABILITIES	\$2,972,314	\$3,083,184	\$110,870
MEMBERS' EQUITY			
Unrestricted	9/30/2010	9/30/2011	DIFFERENCE
CAS Surplus	\$4,810,728	\$5,045,265	\$234,538
Michelbacher Fund	158,491	161,162	2,671
CAS Trust - Operating Fund	197,383	237,075	39,692
Centennial Fund	250,634	304,420	53,786
ICA 2014 Fund	52,963	66,505	13,542
Research Fund	250,786	276,521	25,736
Subtotal Unrestricted	\$5,720,985	\$6,090,949	\$369,964
Temporarily Restricted	9/30/2010	9/30/2011	DIFFERENCE
Scholarship Fund	\$3,789	\$3,351	(438)
CAS Trust - Ronald Bornhuetter Fund	55,911	56,853	942
CAS Trust - Reinsurance Prize Fund	28,774	29,259	485
Subtotal Temporarily Restricted	\$88,474	\$89,463	\$990
TOTAL MEMBERS' EQUITY	\$5,809,458	\$6,180,412	\$370,954

Leslie Marlo, Vice President - Administration

AUDITED

CAS Audit Committee: Kenneth Quintilian, Chairperson;

Jeanne Crowell, Vice-Chairperson, Lisa Canzit, David Klein, James Merz, and John Tierney

2011 EXAMINATIONS—SUCCESSFUL CANDIDATES

Spring sittings for Exams 3L, 5 (Transition Exams 5A and 5B), 7-Canada, 7-United States, and 9 of the Casualty Actuarial Society were held May 3-6, 2011. Fall sittings for Exams 3L, 6, and 8 of the Casualty Actuarial Society were held October 25-27, 2011.

Exams 1, 2, 3F/MFE, and 4 are jointly sponsored by the Canadian Institute of Actuaries, Casualty Actuarial Society, and the Society of Actuaries. These computer-based examinations are administered multiple times each year. Candidates successful on these examinations were listed in joint releases of the Societies.

Following are the lists of passing candidates for 2011 CAS Examinations.

Exam 3L, Spring 2011

Amy E. Ahlbrecht Songphol Arrewijit Jennifer M. Aschenbrenner Sarah K. Ashworth Brendan P. Barrett Timothy D. Benham Annette M. Berry Clarke D. Bjarnason Lucas Burlingame Michael Alan Carter Jeffrey James Cecil Chi Ho Cheng Bryn Louis Clarke **Daniel Anthony Collins James V. Curcio** Andrew Wells Dalton Thomas D'Onofrio Paul Charles Favale

Exam 5, Spring 2011

Sarah Elizabeth Adams Laura Anne Allen Oi An Jamie Lynn Anderson Jennifer Kay Angelosante Kyle Babirad David M. Baldwin Kenneth C. Beckman Blake Timothy Berman Taijiro I. Bernstein Nicole Marie Bigos Suzanne Leata Bilodeau Kari A. Boersma Laura Michelle Bonja Dimitry Borchenko Ayla Brice Shaner Boyd Zachary T. Brogadir Stephen T. Brumley Sheridan B. Buckland Andrew Deven Chandler Chia-Ming Chang Heidy Shu-Yu Chang Lon Chang David Michael Charlton Eric P. Chassie Derrick C. Chen Shuai Chen

Rodney Anthony Gaines James Garbe Mengda Gong Erin L. Griffin Jerod Wayne Hartley David E. Herson Chaoqun Jin Adam Johari Gregory S. Kim Hsin-Hong Lai Richard Christopher Lally Angel Lam Peng B. Lee Sophia Zhonghua Lee Ran Lin Mark Jesse Lockwood Nicholas R. Madine Howard J. Mapp

Kudakwashe F. Chibanda Chan-Ip Chio Christine H. Chou Benjamin J. Clark Lane Garrison Coonrod Daniel Surrell Corder Darcie R. Cox Laura Cremerius Zhiliang Dai Jean-Philippe Daigle Steven Mark Manuel D'Cruz Marcus A. Deckert Simon Deschatelets Patrick Desjardins Vasilis Panagiotis Dikeakos Phillip Walter Dlugosz Bryan Donkersgoed Ross Williman Donovan Andrew J. Draper Jonathan G. Eshelman Melinda Sue Etschman David D. Evans Benjamin Ewbank Hang Fan Yuan Fang Lei (Justin) Feng Aaron Frederick Fezatte

Cody Lee Marsh Nichole M. Martella Jorge Luis Martin Amy Jo Maue Darrin Robert Most Caroline Christopher Muegge Leigh J. Murdick Stephen Nash James H. Panning Rebecca Ann Peterson Carolyn A. Pfeffer James J. Pilarski Anthony Frank Pragovich Vera Quiroa Nathaniel Lee Schmitt Alexandra Seregina Monica Marie Shokrai Amanda Jean Smith

Yin Fatt Foo James Thomas Fry Vladislav Gantman Mengda Gong Michael I. Gordon Stewart Brent Guerard Julie A. Hagerstrand DongMei Han Charles Griffith Hollar Bridget L. Hollenbeck Jing Hong Emily Y. Huang Xiaodong Huang Pamela Suzanne Hughes Naheed Z. Jaffer Matthew R. Jahnke Zhiwei Jin Simon Jomphe Munsif N. Karim Steven A. Kline Ryan J. Koelemay Eric P. Krafcheck Christopher Kwok Sz-Fan Lai Cathine K. Lam John Le Carol Hsing-Chin Lee

Alan Speed Jeremy Stalberger Brett Lawrence Stocks Kimberly A. Thompson Danielle Nicole Trinkner Christian Philip Twietmeyer Adam Vachon Beth A. Walsh Kimberly Walters Cody Webb Hu Wei Daniel Francis White Derek M. Wong Yi Wu Derek Ryan Ziegler

Kenneth Lee Victor Yusen Li Winson See-Hung Li Brittany A. Lillegard Charles Lindberg Joseph Kenneth Lindner Brandon Lord Cheuk Kuen Lui Leonor C. Lujan Cameron Dale Maffit Justin Mah Sohini Mahapatra Tara Nicole Malinowski Brittany Manseau Simon Marchesseault-Groleau A.I. Charles Markham Steven Luther Martin Gina Marie Marzullo Jessica Marie Matthews James Jerome McCarthy Yao Meng Florian Milanovici Raoul Jacob Milgraum Ian Colan Mui Helen E. Muller Mark Naccache Nongkoh Dvukah Ndefru

John Allen Newbrough III Audrey Tchamga Nguetie Pradnya Nimkar David Michael Nye Shawn Eugene O'Kelley Catherine Pallivathuckal Alan M. Parham Ioshua William Parvin Benjamin Marshall Permut Ionathan David Peters Evan C. Petzoldt Matthew J. Phillips Vincent Phillip Pomo Geoffrey David Purvis Emily K. Putzler Seemab Faseeha Qaderi Yue Qi Kory F. Raisbeck

Kaitlvn S. Raser Kyle B. Reed Christopher David Reich Bradley Ray Rockers Thomas S. Roth Anne Lindsay Rowand Nathan C. Rugge Wenwen Salerno Warren P. San Luis Jonathan David Sanders Patrick Santala Carlo Santamaria-Bouvier Antoine Sasseville Juliana Schulz Tiffany Tan Shi En Gregory Murphy Sollenberger Leigh A. Soltis Laura M. Spencer

Robert Baird Stewart Adam N. Sturt Doug A. Summerson Zhaofeng Sun Kevin W. Sutanto Jonathan Russell Taccone George Colby Tacquard Andrew Lucien Talarowski Ling Feng Tan Yaoxing Tang Paul Aaron Taylor Carcasole Annie-Claude Toupin William A. Uffenbeck Leonard S. Untung Julie Caroline Wagner Ernest L.Y. Wan Liang Wang Wei Wang

Christopher V. Mackeprang

Cody Webb Brant Thomas Whitaker Thomas S. Wilk Jr. Pan Corlos Wong Tsz Kit Wong Michael Scott Woods Zilu Peter Xia Junkai Xu Jennifer Yeh Iianhui Yu Thomas Nelson Zdon Feng Zhang Jin Zhu Zhang Yawei Zhang Albert Zhou Zhong Zhou

Transitional Exam 5A, Spring 2011

Neal James Anderson Diego Fernando Antonio Colleen Patricia Arbogast Mathieu Bellemare Matthew Robert Belter Michael Bergeron Debdatta Bose Pascal Boucher Adam Joseph Braithwaite Jeffrey A. Buero Yang Cao Minlei Chen Hui Ying Chin Bryan Clark Weiwei Dai Andrew Wells Dalton Zheming Deng Grant T. Donkervoet Fanny Duquette Murphy Paul Michael Eaton Zachary M. Eisenstein Iennifer Robin Fucile Wei Gao Timothy James Gaugler Delvan Dimov Georgiev Brandon D. Gilbert Michael Ryan Gittings

Mark M. Goldburd Carl Roy Gullans Ir. Samuel B. Hanig David Yoshitaka Hausman Sara J. Hemmingson Rachel C. Hemphill Bradley M. Henderson Weiming Hong Frank Yeou-Gong Huang Mu-Chun Huang Shengli Huang Ika Marissa Irsan Anand Khare Sandra F. Kipust Guillaume R. Labrecque Apundeep S. Lamba Garret J. Larson Denys Lebedev Anne-Marie Levasseur Biiuan Li Chia-Ching Lin Ruide Lin Steven Ling Juhong Liu Iun Liu Nathan Lester Luketin Wenchan Ma

Victoria Marciano David N. Martindale Michael Mendel Amy Qiuxiao Mo Nerissa S. Nandram Brad Thomas Neilson Ian A. Neubauer Iuniuan Ni Chanyuth Norachaipeerapat Shze Yeong Ong Patrick J. ORourke Craig Steven Pacelli Stephen Kihyun Park Chih-Heng Peng Ashley M. Persson Jennifer Kew Petit Janette Pollard David Allen Prevo Daniel Lee Price Bernard Provencher Iose Antonio Ramos Katrina Andrea Redelsheimer Adam David Rinker Anne Ruel Eric Ruppert Quinn Saner

Michael James Seeber **Jing Shao** Cunhua Shi Xiang Shi Ian MacKenzie Sims Jonathan E. Swartz Ray Wei-Hao Tang Kristen Leigh Tolman Lukasz Tomaszewski Diana Tsz Yan Tse Fan Wang Hongyu Wang Peng Wang John Wanielista Chi Hang Wong Dennis C. Wong Jason K. Wong Zhen Ye Ying Yuan Qianping Zeng Wei Zhang Rui Zhong Wenqian Zhou Yi Zhuang Anna Zilber

Transitional Exam 5B, Spring 2011

Andrea Ondine Ahern Anthony R. Alexiou Robert Brian Anderson Ashwin Arora Michael Ban Daniel P. Barker Mark V. Barovich Simone R. Beauford Karen Lenoir Bethea Eliezer Yosef Blum Nicolas Boivin Jason Braun Jeffrey James Britton Kristin J. Brown Christopher R. Burgess Lori L. Burton Michael W. Buttke Lori Anne Capota Farhan N. Chaudhry Ja-Lin Chen Gengsheng Cheng Chia Ling Chiang Raymond Ioi Meng Chiang Tammy Choy Rachael J. Christens Zuhaib Chughtai Waley Chun Bernadette M. Chvoy Christian Citarella Sarah Marie Clemens Remil Colozo Andrew E. Corzine Tina M. Costantino Joshua J. Crumley Patrick Curley John Czebe

YEARBOOK AND PROCEEDINGS

Maki Dahchour Andrew S. Dahl Robert Jonathan De Jesus Christopher J. DeCleene Anne M. DelMastro Marie-Anne Demers Mathieu Desjardins Yi Dong Zachary M. Drennen Brian Elliott David Andrew Fletcher Dorothy Fong Maxime Gagnon Alicia Marie Gasparovic Christopher John Graham Jeffrey A. Gruel Alison Guest Amy Bennett Guice Geoffrey D. Hackman Christine M. Hadley Thomas James Harrington Andrew Keith Heikes **Jennifer Ann Hellmuth** Sarah Ann Hillman **Jennifer** Ho Xuefen Huang Steven James Hunke Matthew M. Iseler Bobby Jacob Vibha N. Jayasinghe Matthew J. Jewczyn Caroline F. Jo Lars T. Johnson Sayali Jayant Joshi

Exam 7, Spring 2011

Chi-Jou Liu Exam 9, Spring 2011 Tisha Abigail Abastillas Rachel A. Abramovitz Alex Rudolf R. Agatep Jr. Brian C. Alvin Theodore M. Apostol Janejira Aranyawat Elizabeth A. Arsenault Ling Bai Zachary Ballweg Shane Eric Barnes Brandon Lee Basken Jennifer Lee Beers George M. Belokas Sokol Berisha Sebastien Bernard Anthony Joseph Bierke Charles H. Birckhead Karl Adam Bloch Michael Bordeleau-Tassile James T. Botelho Jennifer Bouchard

Kimberly S. H. Kaune Lisa M. Kerns Kevin Paul Kerr Shira Chava Kessock Andrew J. Kiel Alvin Hwehmin Kim Korey G. Klister Samuel M. Kloese Irina Kretskaia Jeremy Dean Lakey Spencer Cregg Larson **Jennifer Bishoff Leach** Melanie Colleen Leavy Kristeen Y. Lee Trenton A. Lehmann Ho Shan Anna Leung David S. Levy Lu Li George R. Ling Chi-Jou Liu Christopher S. Locker Edwin David Lopez Walter Erik Loteczka Hui Huan Lu Vincent Chi Yau Luk Roman Fedorovich Makordey Cyan Justina Manuel Antoine Marquis Kevin S. McBeth John Wesley McNear Caroline Meilleur Joshua D. Metzger Tamara Georgeievna Mihaelyan Daniel C. Mikos

Alissa Joy Bowen Adam E. Bremberger Louis M. Brown David Burack Scott G. Burke Colleen M. Burroughs Brandon John Buss Hannah Michelle Butler Cuiliu Cai Wesley Campbell Xiaobin Cao Amanda Marie Castello Eric Daniel Cathelyn Derek P. Cedar Eric Chan Monica Ying Kwok Chan Dana Tung Chang Karen Kam On Chang Som Chatterjee Mingqiong Chen Alice Cheng Andrew M. Cheng Haoxuan Cheng

Freeman K. Miller Steve Brian Monge John T. Montgomery Sang Pil Moon Andrew Dennis Moriarty Judy Pool Mottar Jacqueline Elizabeth Muschett Deepa Chembazhi Nair Gary J. Nelson Kasey Ka-Chuen Ng Jin Ye Ngu Simon Noel Roberge James Patrick O'Donovan Iulie L. Palmer Scott A. Paluska Youngok Park Alyssa M. Potter William Joseph Prucknic Harry L. Pylman Keith J. Raymond Emily J. Redder Nicholas John Reybrock Jason Q. Rubel Brian J. Samuelson Jonathan D. Sauer Ryan Daniel Scheetz Roni Y. Schwartz Jennifer Diane Shay Jaehong Danny Shin Courtney Gerard Sims Mikhail Skorobogat Jason Thomas Smith Aaron Spiller Shane Taylor Steele

Jie Cheng Xiangyu Cheng Sarah Ashley Chevalier Stephanie Wei Chin Penn Wang Chou Emily Daters Cilek Matthew D. Clark Devyn K. Clifford TJ Clinch Etienne Collard-Proulx Vincent Coulombe Caroline Emily Cygnar Jie Dai Mary Elizabeth Daly Wade Daniluk Arijit Das James E. Davidson Jill L. Deakins Cameron E. Deiter Joshua Jeremiah DeLong Jeremie Desgagne-Bouchard Denise Susan Di Renzo Emilie Rovito Dubois

Gennady Stolyarov Yilin Sun Kyle Jennings Surface Patrick Daniel Suter Theron R. Teter Luc Theberge Adam M. Thompson Katherine Ann Tollar Alec William Trachtman Max Trinh Keven Trottier Adam John Ugulini Alexander Schmatz Vajda Sarah M. Voit Julia Vul Li Wang Wei Wang Xiaoying Wang Elena V. Wilcox Anson Y.H. Wong Jason Tso Yee Wong Zack Wagar Woodring Jason Daniel Wright Jinghao Wu Michael A. Wykes Caixia Yang Gabriel Ronald Young Keith Young Steve Yun Dongwen Zhan Jiavin Zheng Bojan Zorkic Quncai Zou Derek D. Dunnagan Darci Rae Earhart

Mark B. East Michael Epstein Matthew B. Estes David C. Fairchild Lu Fang Xiaohan Fang Gary M. Feder Kevin L. Feltz Yi Feng Benjamin Carl Ferguson Gregory Andrew Finestine Adam Christopher Fleming Sarah J. Fore Dennis A. Franciskovich Jonathan Frost Cory Michael Fujimoto Philippe Gagne Meghan Therese Gallagher Chad J. Gambone Yunbo Gan Mauro Garcia Jr.

Feng Ge Stephane Genereux Ryan David Givens Jio Young Goh Ruchama Graff Brent R. Gray Joshua Thomas Greene Kathy Gu Isabelle Guerin Libin Guo Todd A. Gutschow Hai Na Han Ridhima Handa Kevin James Hanson Jeremy Huston Harlow Benjamin Harrison Haynes David Joseph Heilbrunn Michael A. Henk Rachel Henry Andrew S. Herman Roberto A. Hernandez Gordon Hamilton Hines Ashish Rasik Hingrajia Karim Hobeila Lisa Marie Holloway Heidi Marie Holtti Chenyan Huang Chien Che Huang Dennis Dar You Huang Min Huang Peter P. Huang Qi Huang Wei Q. Huang Michelle Lynne Humberd Michelle Lynn Iarkowski Molly Catherine Ingoldsby Brian M. Ironside David Itzkowitz David R. Iverson Brett D. Jaros Matthew J. Jewczyn Rongfang Ji Bin (Chris) Jiang Daniel Joseph Kabala Sandip A. Kapadia Mallika Kasturirangan Shannon M. Katzmayr Craig Stuart Kerman Aditya Khanna Alena Kharkavets Matthew G. Killough Lee W. Knepler Richard A. Knudson Jr. Dea Kondi Parker B. Koppelman Uri A. Korn Mariana Radeva Kotzev Zachary M. Kramer Jinghua Kuang Carrie H. Kuczak

Christopher S. Kwon Maxime Lafleur-Forcier Steven P. Lafser Guillaume Lamy Matthew James Lange Julie Laverdiere Marc-Andre Lebeau Chan-Hoon Lee David F. Lee Isaac Lee Jean-François Lessard Elchanan Y. Levy Jennifer Ann Lewis Jingwen Li Joyce Cheuk Chi Li Rong Li Yali Li Yuan-Chen Liao Henry Hang-Lei Lim Lynda Ming Hui Lim Siew Gee Lim Xiaoyun Ling Daniel A. Linton Anna Liu Xianfang Liu Kean Mun Loh Kwan Ying Loi Achraf Louitri Jenna Dawn Luft Pin Chin Lung Keyang Luo Davy Ly Benjamin James Lynch Emily A. Lyons Jinbing Ma Paul J. Majchrowski Tamara Lynn Manges Eric Mitchell Mann Hongjian Mao Allison Marie Marra Christopher B. Martin Liana Martuccio Elizabeth M. Mauro Andrew William Maxfield Matthew E. May Kyle Arthur McDermott Steven G. McKinnon Peter A. McNamara Gregory F. McNulty John H. Meisse Joseph Scott Merkord Thomas Walter Mezger Christopher G. Moore Richard P. Moore Lia Juliana Morelli Christopher John Morkunas Brett E. Myers Nicolas Nadeau Christian Nadeau-Alary Stephen M. Nagy

Todd M. Nagy Sikander Shiraz Nazerali Brad Thomas Neilson Judy Wai Yan Ng Jennifer L. Nicklay Alison Marie Norton Melissa Nowalk Michael Gordon Nute Seoh Oh Aleksandra V. Orlova Melanie Ostiguy Veronique Ouellet Elisa Pagan Yvonne Naa Korkor Palm Sergei A. Panafidin Pierre Parenteau Brett A. Parmenter Glen Michael Patashnick Lela K. Patrik Paul Pelock Alden Penn Matthew Eric Petro Christopher August Petrolis Petya Svilenova Petrova Ashley S. Pistole Michaela C. Porter Derek Paul Pouliot Thomas M. Prince Stephane Provost Joshua J. Pyle Wenli Qiao Olivier Elie Quesnel John Bradley Raatz **Justin Taylor Ranney** Nanxia Rao Melissa A. Remus Michael J. Reynolds Cheryl Lynn Roberts Alexander Robert Rosteck Lydia Roy Sean A. Ruegg Nathan E. Rule Julia Methling Ryan Joelle Saba Marion K. Sajewich Jonathan R. Sappington Brett Andrew Saternus Michael Robert Scarpitti Adam Koloman Scarth Christopher Merlin Schumacher Rachel Marie Seale Dara Marlene Seidler Kaushika Sengupta Jessica Marie Serafin Xiang Shi You-Im Sim Dany Simard Peter Felix Skerlj Taralyn Slusarski Michael L. Smith

Kam Sang So Kunkook Son Sneha Ramesh Soni Tracey Ellen Steger Jared Wallace Steinke Katherine Stelzner Stephen R. Sten Bryan M. Stewart Joseph John Stierman John Paul Stonestreet Chih L. Su Ping Su Heidi Joy Sullivan Kelly Aline Sullivan Kevin M. Sullivan Sean P. Sullivan Xiaowei Sun Laura Lucy Sutter Whitney Lenae Sykora Kuanshuan Helen Tai Simon Tam Shui Man Sherman Tang Samantha M. Taylor Olivier Tessier Dan Omer Tevet Alyssa Thao Cameron Ross Thomas Ryan Bransford Thomas Andrew Bond Thompson Thomas J. Thornburgh Lijia Tian Pierre Charles Tiani Keou Allison C. Tiller Kvle W. Tompkins Philip Traicus April M. Truebe Chee Lim Tung Dustin James Turner Alexander J. Turrell Adam B. Tyner Tracy Leslie Valentine Nicholas Garret Van Ausdall Patricia Murphy Van Ausdall Karen L. Van Cleave Andrew Vega Chinatsu H. Vergara Michael Thomas Villano Oleg Voloshyn Cong Wang Hao Wang Jiacheng Wang Qing Janet Wang Rina Meng-Jie Wang Thomas Steve Wang Wenliang Wang Yao Wang Jaris B. Wicklund John Michael Wiechecki Annie On Yee Wong Shawn A. Wright

Chuan-Wei Wu Eric James Wunder Yanchong Xia Lin Xing Joanne Yammine Bo Yan

Exam 3L, Fall 2011

Nicholas E. Alicea Casey H. Anderson Nicolas Dorian Annoni Robert Alexander Antochy Douglas J. Barritt Stephanie Lynn Berkemeyer Angelo Besana Candace Louise Bon Michelle Kathryn Brinton Robert Feng Cao Nicholas A. Cerminara Chun Chen Si Chen Cheng Cheng Cindy Wan-Hsin Chou David Chung-Chum-Lam Daniel King Clayman Amanda Lynn Corney Alex J. Craig Ryan Alan Crooks Dan William Cunningham Christopher K. Deaver Daniel DiMugno Kyle Dolisi James Peter Englezos Adina Erdfarb Michael Justin Fairchild Gregory W. Fears

Exam 6-Canada, Fall 2011

Jeffrey David Baer Ling Bai Mathieu Bellemare Sebastien Bernard Ghislain Brault-Joubert Gavin David Brown-Jowett Qian Cao Sarah Ashley Chevalier Etienne Collard-Proulx Dorothy Fong

Exam 6-U.S., Fall 2011

Tisha Abigail Abastillas Brian C. Alvin Neal James Anderson Jennifer Kay Angelosante Diego Fernando Antonio Colleen Patricia Arbogast David M. Baldwin Weifeng Yao James Ki Yick Sabrina Yuen-Ming Yip Jenny Man Yan Yiu Michael Scot Young Stefanie M. Zacchera

Daniel Enrique Fernandez Kimberly M. Feucht Tiffany L. Fodera Daniel Joseph Forsman Christopher Richard Fox Andres Ruediger Gentzen Nicholas J. Getter Andrew James Giacalone Lisa Samantha Glover Bryan James Hartwig Christopher D. Hickey Rebecca Hoffmann Sean David Holden Yedia Leonel Boris Houngbadji Timothy Paul Jensen Alex Jurhs Adam Jeffrey Kallin Max Kehrli Corey M. Kientoff Samuel Leviton Kriegman Andrea Arlene Lamberson Madeleine Lavery Nathan Patrick Lindsay Brian J. Lock Patrick D. Lynch Ryan Joseph Mackinnon Julie Ann Mardin Ruth W. Maringi

Jonathan Frost Philippe Gagne Patrick Guillemette Hai Na Han Simon Jomphe Alena Kharkavets Apundeep S. Lamba Julie Laverdiere Marc-Andre Lebeau Chun King Lee

Shane Eric Barnes Brendan P. Barrett Adam Bates Kenneth C. Beckman Matthew Robert Belter Michael Bergeron Yvan Berthou Julieta A. Zambrano Li Zeng Lingang Zhang Nan Zhang Yan Zhang Yu Zhang

John Nicholas Massari Denny Mathew Anthony Matteo Charlotte Paige McAuliffe Kevin C. McCarthy Katherine E. McGovern Matthew C. Moran Samantha Amy Morrison Laura M. Mullaney Samir Mullick Unni Parameswaran Mundaya Aung A. Naing Nancy Anne Narisi Philip B. Natoli Tian Yu Oh Erica Nicole Palm Naeun Park Andrew Winston Parr Dev M. Patel Krishna R. Patel Rachel M. Pereira Brian William Phelps David Podwojski Denis Poulin-Lacasse Peter Joseph Reggiannini Todd Remias Donte L. Riddick Peter Riihiluoma

Anne-Marie Levasseur Henry Hang-Lei Lim Yaming Luo Eric Mercier Bashir Moallim Matthew J. Phillips Chantal Nicole Piche Frederic Potvin Jennifer E. Prosser William Steve Randolph

Whitney A. Billerman Suzanne Leata Bilodeau Tyler John Birkel Laura Michelle Bonja Ayla Brice Shaner Boyd Kirsten J. Boyd Zachary T. Brogadir Pavel Alexander Zhardetskiy Zhen Zhong Ao Zhou Adolphe Emery Zielinski Wenchao Zong David E. Zurndorfer

Brad Joseph Rosin Michael Salerno Alvaro R. Sanchez Nicholas Michael Schneider Kristen Leigh Schuck Neil Schwarzenberger Sameer Shah Furquan Shamsud-Din Pragya Sharma Dev Shukla Rajat Kumar Sinha Eric K. Slavich Justin P. Smith Molly Smith Gregory K. Stone Katelyn M. Swartz Aaron E. Ting Andrew Lee Verdon Kate Emily Walker Steven J. Walsh Amanda Robin Watters Richard A. Wein Carly Williams Kelly E. Witte Wenyuan Wu Hengyu Yuan

Lydia Roy Anne Ruel Antoine Sasseville Huinian Wang Zheng Yu Wang Dylan R. Williams Sylvia Sze Wai Wong Joanne Yammine

Ryan A. Byrd Alex M. Carges Derek P. Cedar Eric P. Chassie Sa Chen Hui Ying Chin Deborah Marie Chomiuk

YEARBOOK AND PROCEEDINGS

Penn Wang Chou Emily Daters Cilek Ioel D. Clark Matthew Charles Coatney Robyn K. Coffman Allan M. Cohen Ariel T. Cohen Rvan Crabtree Andrew Wells Dalton Michael Edward Day Phillip Walter Dlugosz Mark R. Doucette Mark B. East Paul Michael Eaton Yocheved Ephrathi Matthew B. Estes Dave Evans Benjamin Ewbank Jayson C. Farrell Ivan M. Fernandez Vadim Filimonov Patrick John Ford Sarah J. Fore Dennis A. Franciskovich Cory Michael Fujimoto Alicia Marie Gasparovic Timothy James Gaugler Brandon D. Gilbert Michael Ryan Gittings Heidi Kathryn Givens Ryan David Givens John Peter Glauber Mark M. Goldburd Meghan Sims Goldfarb Paul M. Grammens Jesse Yehuda Groman Kathy Gu Carl Roy Gullans Sarah Y. Haberman Nicole A. Hackett Jillian Elise Hagan Jeremy Huston Harlow

Exam 8, Fall 2011

Scott Nelson Applequist Sarah Jane Austin Daniel Karl Bardo Lauren Barozie Debdatta Bose Jennifer Bouchard Alissa Joy Bowen Michael Burnett Amy M. Chang Xin Chen Yung-Chih Chen Devyn K. Clifford Christina Contento Colleen A. Cornell James E. Davidson

Gregory L. Helser Sara J. Hemmingson Rachel C. Hemphill Rachel Henry Chi Ho Terence Ho Anthony Hovest Elaine T. Huang Peter P. Huang Wei Q. Huang Xiaodong Huang Rachel Andrea Intveld Matthew M. Iseler Brett D. Jaros Matthew J. Jewczyn Karen Jordan Levi Kamenetsky Aditya Khanna Sandra F. Kipust James Andrew Kirtland Roy Kohl Uri A. Korn Steven P. Lafser Iulie Ann Lederer Dorothy Ann Leemhuis Amy Rachele Lerch Guillermo Andres Letona Elchanan Y. Levy Lu Li Victor Yusen Li Xuan Li Melody Ko Lin Steven Ling Xiaoyun Ling Baixiu Liu Kwan Ying Loi Danielle Marie Long Nathan Lester Luketin Daphne Y. Lum Pin Chin Lung Jinbing Ma Christopher V. Mackeprang Paul J. Majchrowski

Denise Susan Di Renzo Emilie Rovito Dubois Katherine Ann Eenigenburg Zachary M. Eisenstein Michael Epstein David Anthony Gamble Margaret Hendrix Glenn David Govonlu Andrew S. Herman Gordon Hamilton Hines Ashish Rasik Hingrajia Emily Y. Huang Molly Catherine Ingoldsby Brian M. Ironside Yehuda S. Isenberg

Tamara Lynn Manges Steven Luther Martin Victoria Arias Mayen Kevin S. McBeth Gregory F. McNulty Joseph Scott Merkord Raoul Jacob Milgraum Kellen Miller Tara Lynne Miller Michael H. Miniaci Marc Michael Molik Landon Kimball Mortensen Matthew Grayton Murphy Nerissa S. Nandram Nongkoh Dvukah Ndefru Kai-Ting Neo Daniel Lee Price William Joseph Prucknic Ravi Ranjan Laura Ann Rapacz Mary E. Reading Katrina Andrea Redelsheimer Kvle B. Reed Yan Ren David Adam Ring Adam David Rinker Matthew Robert Roddy Amber M. Rohde Jason Lee Rohlfs Anne Lindsay Rowand Jared F. Rubinstein Sean A. Ruegg Eric Ruppert Zachary K. Rutledge Julia Methling Ryan Marion K. Sajewich Crystal Valarie Sala Jonathan R. Sappington Dawn M. Schulze Christopher Merlin Schumacher Andrew James Scott Brian P. Scott

David Itzkowitz David R. Iverson Parker B. Koppelman Paul E. Kutter Chun Wing Li Hua Li Jingwen Li Yun Li Xianfang Liu Emily A. Lyons Peter Anthony Magliaro Hongjian Mao Laura S. Marin Walter T. Matthews Amy Qiuxiao Mo

David I. Sheridan Steffen Siegel Eric M. Sligay Jeremy C. Smith Katrina E. Smith Leigh A. Soltis Trevor Jon Soupir Aaron Spiller Shane Taylor Steele Iared Wallace Steinke Katherine Stelzner Bryan M. Stewart Laura Michelle Stromberg Alison N. Stroop Adam N. Sturt Ping Su Kelly Aline Sullivan Robert C. Swiatek Michael Brandon Synowicki Samuel Tashima Allison C. Tiller Kristen Leigh Tolman Katherine Anne Vacura Melissa Anne Elke Villnow Sarah M. Voit Elizabeth M. Vomscheidt Kimberly Ann Walker Marilyn Ashley Wilson Tsz Kit Wong Michael Scott Woods James Tyler Word Michael A. Wykes Yan Yan Jin Zhu Zhang Chao Zheng Oian Zhou Yuanli Zhu Thomas Anthony Ziniti Quncai Zou David E. Zurndorfer

Nirav N. Modi Lia Juliana Morelli Christian Nadeau-Alary Sikander Shiraz Nazerali Jean-Sebastien Nepton Diana Marie O'Brien Nemanja Odzakovic Sergei A. Panafidin Nadia Pelletier Sarah Power Peter Wright Quackenbush Michael J. Reynolds Sean Thompson Ritson Kelly A. Rothermel Phillip F. Schiavone

YEARBOOK AND PROCEEDINGS

Kaushika Sengupta Kirsten M. Singer Matthew Lee St. Hilaire Tracey Ellen Steger Garry Steven Sui-Tit-Tong Mark Taber Chien-Ling Tai Jingli Tang Blerta Tartari Lijia Tian Lukasz Tomaszewski Bruno Tremblay Adam B. Tyner Mitchell Lee Underwood Tracy Leslie Valentine Michael Thomas Villano Ernest L.Y. Wan Fan Wang

- Wenfang Wang Zachary Samuel Webber Radost Roumenova Wenman John Michael Wiechecki David Wolpov Annie On Yee Wong Chunpong Woo Xiaohui Wu Ce Xiong
- Bo Yan Jue Yang Julieta A. Zambrano Nan Zhang Yan Zhang Ao Zhou

NEW FELLOWS ADMITTED IN MAY 2011



Row 1, (left to right): Katherine Therese Werner, Sophia Cyma Banduk, Esperanza Borja, Ashley Arlene Reller, CAS President Ralph S. Blanchard, Jonathan Laux, Randall K. Motchan, Huiyan A. Zhou, Caryl Marie Fank, Elizabeth Louise Cohen.

Row 2, (left to right): Joseph David Rakstad, Jennifer Rae Schwartz, Sandy Wu, Gang Richard Xu, Vinu Kuriakose, Xingzhi Wu, Lindsay Aaron Roy, Matthew Ryan Purdy, Hsing-Pei Chen, Virginia M. Zeigler.

Row 3, (left to right): Christopher J. Loyd, Nicholas Thoemke, Robert Jerome Foskey, Chad P. Wilson, Evgueni Venkov, Kevin M. Cleary, Michael Brandon McPhail, Christopher T. Andersen, Grant C. Owens.

NEW FELLOWS ADMITTED IN MAY 2011



Row 1, (left to right): Jing Li, Samantha Lynn Nieveen, William Paul Borgen, Kai Kang, CAS President Ralph S. Blanchard, Xiaoyan Ma, Jess B. Broussard, Jeffrey N. Roth, Lian-Ching Lim.

Row 2, (left to right): Iva Yuan, Christie Lai Yin Lee, Karen B. Buchbinder, Susan C. Hendricks, Chad Alan Davis, Leigh Maurice Duhig, Jennifer Lynn Kaye, Irina Viktorovna Odushkin, Richard Brian Levy, Alanna Catherine Anderson.

Row 3, (left to right): Matthew Thomas Laitner, Rodney Christopher Kleve, Joseph A. Milicia, Kwame Akil Davis, Bridget Jonnsson, Jeremy M. Lehmann, Charles Chaoyuen Lee, Douglas E. Pirtle.

New Fellows not pictured: Amel Arhab, Andra Catalina Ban, Richard E. Burke, Meng-Fang Chung, Robert Alan Cole, Li Cui, Patrick Arthur Fillmore, Minh-Huyen Nguyen, Robert V. Phipps.

NEW ASSOCIATES ADMITTED IN MAY 2011



Row 1, (left to right): Julieta A. Zambrano, Tanya D. Havlicek, Rebecca Lyn Pettingell, Kaushika Sengupta, CAS President Ralph S. Blanchard, Haoxuan Cheng, Tracy Leslie Valentine, Matthew Charles Van Vleet, Emily Stone Allen, Eric J. Schmidt.

Row 2, (left to right): Jennifer R. Fiorita, Kim Ho Lo, Christine Doyle, Jonathan C. Abbott, Robert Emmet Lighthizer Jr., Dana Tung Chang, Margaret Hendrix Glenn, Kayne M. Lammers, Emilie Rovito Dubois.

Row 3, (left to right): Sarah Jane Leszczuk, Emily A. Lyons, Zachary Samuel Webber, Steven Ray Lindley, Adrian Ralph Wood, Phillip Anthony Victory, Thomas M. Prince.

NEW ASSOCIATES ADMITTED IN MAY 2011



Row 1, (left to right): Albert H. Johnson, Jarod James Brewster, Tetteh Otuteye, Kim Dorani, CAS President Ralph S. Blanchard, Jared A. Helms, Shu Fang, Joyce Cheuk Chi Li, Brian M. Ironside, Elizabeth E. End.

Row 2, (left to right): Alexander F. Morrone, Olivier Elie Quesnel, Michael J. Reynolds, Nan Zhang, Rochelle M. Pereira, Leigh Miselis, Michael Scott Foulke, Melissa Nowalk, Aleksandra V. Orlova, Etienne Trudel, Nicole Kristen Belmonte, Arlene M. Richardson, Andrew S. Herman.

New Associates not pictured: Subhayu Bose, Paul Andrew Brezovec, Amy M. Chang, Aritra Chatterjee, Cynthia Cheng, Ryan Michael Conrad, Michael Epstein, David Anthony Gamble, Demetria Anne Gianopoulos, David Itzkowitz, Michael J. Lavazza Jr., Chiouray Lin, Bradley W. Lippowiths, Brian Michael Lubeck, Carrie F. Miller, Laura Ann Mottl, Brett A. Parmenter, Robert M. Sanders, Philip Traicus, Ming Yi Wong, Bei Zhou.



Row 1, (left to right): Richard Burke, Colleen Marie Burroughs, John Stonestreet, Wenli Qiao, CAS President-Elect Pat Teufel, Louis M. Brown, David Burack, Stephen R. Sten, George Belokas.

Row 2, (left to right): Michael Bordeleau-Tassile, Nicholas Garret Van Ausdall, Patricia Murphy Van Ausdall, Sokol Berisha, Brandon John Buss, Kunkook Son, Brandon Basken.

Row 3, (left to right): Dustin Turner, Elizabeth Arsenault, Alexander J. Turrell, April Truebe, Adam Bremberger, Joshua Jonathan Pyle.



Row 1, (left to right): TJ Clinch, Philip Traicus, Stephanie Chin, Dara Seidler, CAS President-Elect Pat Teufel, Rachel Seale, Theodore Apostol, Lin Xing, Caroline Cygnar.

Row 2, (left to right): Lingang Zhang, Rina Meng-Jie Wang, Rachel Abramovitz, David Heilbrunn, Yu Zhang, Yan Zhang, Vincent Coulombe, Pavel Zhardetskiy, Brett Saternus, Karen Van Cleave, Li Zeng.

Row 3, (left to right): Adam Koloman Scarth, Matthew Petro, Kyle Tompkins, Derek Pouliot, Alyssa Thao, Christopher Moore, Xiangyu Cheng, Chad Gambone, Thomas J. Thornburgh.



Row 1, (left to right): Xiaobin Cao, Jane Aranyawat, Kuanshuan Helen Tai, Lela K. Patrik, CAS President-Elect Pat Teufel, Chinatsu H. Vergara, Michelle Iarkowski, Lynda Ming Hui Lim, Chung Yin Eric Chan.

Row 2, (left to right): Simon Tam, Chien Che Huang, Shawn Ashley Wright, Michelle Lynne Humberd, Kevin Sullivan, Feng Ge, Brent R. Gray, Yvonne Naa Korkor Palm, Xiaohan Fang, Kam Sang So, Olivier E. Quesnel, Cong Wang.

Row 3, (left to right): Guillaume Lamy, Ruchama Graff, Robert Cole (FCAS May 2011), Cameron E. Deiter, Nanxia Rao, Haoxuan Cheng, John Bradley Raatz.



Row 1, (left to right): Brett E. Myers, Ming Qiong Chen, Dana Chang, Samantha Taylor, CAS President-Elect Pat Teufel, Chih Su, Justin Ranney, Yi Feng, Andrew Vega.

Row 2, (left to right): Wade Daniluk, Elisa Pagan, Cheryl Roberts, Christopher Morkunas, Lu Fang, Eric Cathelyn, Amanda Castello, Greg Finestine. Row 3, (left to right): Richard Moore, Dan Tevet, Mallika Kasturirangan, Andrew William Maxfield, Lisa Holloway, Thomas W. Mezger, Adolphe Zielinski.



Row 1, (left to right): Dea Kondi, Seoh Oh, Zachary M. Kramer, Gary M. Feder, CAS President-Elect Pat Teufel, Richard A. Knudson Jr., Derek D. Dunnagan, Glen Patashnick, Jill Deakins.

Row 2, (left to right): Oleg Voloshyn, Achraf Louitri, Dany Simard, Matthew Killough, Thomas Prince, Darci Rae Earhart, Michael A. Henk.
 Row 3, (left to right): Benjamin Lynch, Mariana Kotzev, Matthew May, Daniel Joseph Kabala, Matthew D. Clark, Som Chatterjee.



Row 1, (left to right): Andrew Cheng, Michelle Sun, Anna Liu, Mary Daly, CAS President-Elect Pat Teufel, Taralyn Slusarski, Craig Kerman, Yali Li, Dennis Dar You Huang.

Row 2, (left to right): Roberto Alonso Hernandez, Paul Pelock, Michael Scot Young, Alex Rudolf Ramirez Agatep Jr., Steven G. McKinnon, Shannon Katzmayr, Liana Martuccio.

Row 3, (left to right): Todd Nagy, Alexander R. Rosteck, David C. Fairchild, Jenna Dawn Luft, Peter Andrew McNamara, Jean-François Lessard.

NEW FELLOWS ADMITTED IN NOVEMBER 2011



Elizabeth M. Mauro, pictured above, was posthumously awarded her CAS Fellowship as part of the November 2011 class. Close friends of Ms. Mauro provided the photo to the Actuarial Review. Ginette Pacansky, a friend of Ms. Mauro, wrote: "I studied with Liz last spring and I know how hard she worked for her FCAS designation. She very much deserves to be pictured with the other new Fellows."

New Fellows not pictured: Charles H. Birckhead, James T. Botelho, Hannah Michelle Butler, Cui Liu Cai, Alice Cheng, Yunbo Gan, Jio Young Goh, Isabelle Guerin, Min Huang, Qi Huang, Jinghua (Chloe) Kuang, Yuan-Chen Liao, Keyang Luo, Allison Marie Marra, Jennifer L. Nicklay, Pierre Parenteau, Ashley S. Pistole, Michael Robert Scarpitti, Heidi Joy Sullivan, Sean P. Sullivan, Laura Lucy Sutter, Chee Lim Tung, Qing Janet Wang, Thomas Steve Wang, Yao Wang, Lin Xing.

NEW ASSOCIATES ADMITTED IN NOVEMBER 2011



Row 1, (left to right): Jianwei Xie, Kristin J. Brown, Amy M. Chang (ACAS May 2011), Diana O'Brien, CAS President-Elect Pat Teufel, Michael Seeber, Carrie Miller (ACAS May 2011), Kelly Rothermel, David Raikowski. Row 2, (left to right): Thomas R. Daly, John William Myers, James Panning, Michael Mendel, Jennifer Ann Hellmuth, Hua Li, Brian Elliott.

New Associates not pictured: Kitty Bao, Timothy Allen Gault, Korey G. Klister, Peng B. Lee, Michelle Anne Pederson, Jeffrey A. Turner.

Jasmin Alibalic James F. Brannigan Stanley C. DuRose Jr. Michael B. Epstein James A. "Jim" Hall III Howard H. Kayton Morris B. Kole John R. Linden **Elizabeth M. Mauro Michael G. McCarter** George E. McLean **Richard J. Mills** John A. Potter **Yves Provencher** Matthew Rodermund Philip R. Thompson Frank T. White

Jasmin Alibalic 1979-2011

Jasmin Alibalic died September 22, 2011, at the age of 31.

Born October 6, 1979, in Sarajevo, Bosnia, to Nazifa and Sefket Alibalic, Mr. Alibalic lived in the former Yugoslavian countries of Bosnia and Croatia until the age 15, when he moved to the United States with his parents. His family first lived in Harrisburg, Pennsylvania and then several years later moved to Shreveport, Louisiana. He attended Centenary College in Shreveport, majoring in Mathematics with minors in physics and computer science, and graduating Summa Cum Laude in 2002. In addition to being an honor student at Centenary, he was one of six students chosen nationally for the National Science Foundation Research Experience for Undergraduates program.

Upon graduation from Centenary, Mr. Alibalic moved to Boston, Massachusetts, and began his actuarial career with Liberty Mutual Insurance Company. During his time with Liberty Mutual, he put his talents to use in several areas, most notably workers compensation excess pricing and personal lines reserving. His enthusiasm for actuarial science, and his team-first attitude, were hallmark traits of his career, and were evident from the start with Liberty.

His love of warm weather eventually got the best of him, and in 2006, he accepted a position with The Republic Group, a regional company in Dallas, Texas. His initial duties at Republic were in the loss reserving unit, but he really found his niche in the personal lines pricing area, where he made numerous contributions in the development and pricing of new products, competitive analysis, rate adequacy studies, and catastrophe modeling and pricing. In addition, Mr. Alibalic continued to assist with reserving issues as needed, and really thrived in the work environment at Republic, which allowed him to work on a broad range of issues.

In addition to his work duties, he attacked the CAS exams with a vengeance, and in 2009 achieved his goal of attaining his FCAS designation before the age of 30. Following this accomplishment he became a CAS volunteer, serving on the Exam Committee in 2009–2010. Besides work and studying, Mr. Alibalic found time to play tennis in local Dallas leagues, continuing his lifetime love for the sport. Mr. Alibalic was not just a tennis fan, but had a love for almost all sports; he was a huge soccer fan, cheering particularly loudly for his native Croatia in the World Cup. He was also an avid fan of NCAA and NBA Basketball, and the Indianapolis Colts of the NFL. His passion for sports was not outdone by his passion for travel. With family and friends on two continents, he loved taking in new sights and exploring the world. Usually in his company on these excursions were two of his former Liberty co-workers and best friends, Allen Hope (FCAS 2003) and Vadim Mezhebovsky (FCAS 2002).

In 2010 he was diagnosed with a very rare form of cancer. Like all things in his life, he went after this with gusto, and often uplifted the spirits of those around him during the process. After a long and courageous battle, he finally succumbed to the condition on September 22, 2011.

Debbie King (FCAS 1999), Chief Actuary at Republic and Mr. Alibalic's supervisor for much of his time with the company, notes that "Jasmin was an energetic and talented member of our actuarial team. His enthusiasm for his profession, and life in general, was remarkable. He was loved and admired for his team spirit, his kindness, and his laugh, which was bigger than life. He was truly a member of the Republic family, and will always be so."

Vadim Mezhebovsky from Liberty Mutual adds, "Jasmin brought talent and energy to every project he worked on. He was well respected by his co-workers, and many business units wanted Jasmin on their team. He made many friends at Liberty and these friendships lasted many years. He will be missed."

Dr. Mark Schlatter, Associate Professor of Mathematics at Centenary recalls, "Jasmin was a great student to have in class: always noisy, always fun, and always at the top of his game. His drive and commitment were inspirational."

Mr. Alibalic is survived by his parents, to whom he was the light of their life, and by many other relatives and friends.

Obituaries

James F. Brannigan 1932-2011

James F. Brannigan passed away at his home in Seal Beach, California, on July 18, 2011. He is survived by his wife Ellen; his sister, Frances Meade; his son, Steven; his daughters, Mary, Peggy, and Judy; five grandchildren of his own family; and three extended grandchildren.

Mr. Bannigan was born January 26, 1932, in Hartford, Connecticut, attended Catholic schools, and graduated from Hartford Public High School in 1949. He was a veteran of the Korean War, serving in the U.S. Air Force from 1949 to 1953. He attended the University of Connecticut on the GI Bill of Rights and was a member of Sigma Alpha Epsilon. He majored in business administration and mathematics. He met his wife of 52 years, Ellen Stevens, while working on the campus newspaper. Throughout the years, the couple was staunch supporters of the men's and women's championship basketball programs at the University of Connecticut.

Following graduation, Mr. Brannigan was employed at the Travelers Insurance Company in Hartford through November 1969, as an associate actuary. He became a Fellow of the Casualty Actuarial Society in 1960. From November 1969 to January 1974, he was assistant vice president and actuary and manager of actuarial services division with the Great American Insurance Company in New York and Los Angeles. From January 1974 to March 1985, Mr. Brannigan served the H.F. Ahmanson & Company and the Ahmanson Insurance Companies in Los Angeles as senior vice president and actuary. He was a charter member of the American Academy of Actuaries.

Mr. Brannigan entered the consulting field in March 1985, when he founded Independent Actuarial Services, a California corporation, for which he served as president. In 1999 he and his wife moved to the Palm Springs, California, area, joining Bickerstaff, Whatley, Ryan & Burkhalter, Consulting Actuaries, in their Indian Wells office. He remained fairly active with that firm until he retired in 2007, after which he and his wife moved to Seal Beach to be closer to their family.

The couple enjoyed bicycling in Poland, Austria, Hungary, and Eastern Europe with the Bicycle Adventure Club. They took long bicycle trips in California and the United States, always making sure to find a church somewhere to attend Mass. A devout Catholic, Mr. Brannigan served in the Palms Springs Knights of Columbus.

Mr. Brannigan is the author of "Current Ratemaking Procedures in Boiler and Machinery Insurance" in the 1966 Proceedings of the Casualty Actuarial Society.

Stanley C. DuRose Jr. 1923-2010

Stanley C. DuRose Jr., 86, passed away at the HospiceCare Center in Fitchburg, Wisconsin, on March 21, 2010.

Stanley was born on October 26, 1923, in Joliet, Montana, to Stanley Sr. and Wilhelmena (Zwicky) DuRose. He and his family moved to Madison, Wisconsin in 1926. Stanley was employed by the Wisconsin Department of Insurance. From 1948 to 1965, he was deputy commissioner of insurance, and from 1965 to 1969, he was appointed commissioner of insurance. He was also employed as a senior vice president for Cuna Mutual Insurance Society from 1970 to 1988. He was a member of the Casualty Actuarial Society (ACAS 1958) and the American Academy of Actuaries.

Mr. DuRose will be especially remembered for his volunteer work at the Blackhawk Ski Club in Middleton, Wisconsin, where he helped to build ski jumps and downhill slopes so that children could learn the sports and enjoy them, just as he had for many years.

Mr. DuRose is survived by his wife, Lorraine, and many relatives, especially nieces and nephews. He was preceded in death by his parents and his twin brother, George DuRose.

Michael B. Epstein 1949-2011

Michael B. Epstein, 61, died on January 6, 2011, at Northwest Memorial Hospital in Chicago after a battle with a rare form of cancer. He is survived by his wife, Carol Obertubbesing; his sister, Kate Baker; his mother, Doris Epstein; and his brother-in-law, Mark Thomsen. His father, Herbert Epstein, died in 2003.

Mr. Epstein was born in Elmira, New York, on April 26, 1949. He attended Hendy Avenue School and graduated from Elmira Free Academy in 1967. He graduated from Princeton University with an A.B. in Philosophy in 1971. He followed in his father's footsteps and went into the insurance business. He worked for a short time at Unigard, then joined Johnson & Higgins in 1974, where he became a risk manager, actuary, and a managing director. He became an Associate of the Casualty Actuarial Society in 1983. He moved to the Chicago office of J&H in 1989, and when the company merged with Marsh in 1997, he remained with the company. He went to work for Arthur Andersen from 2000 to 2002, and then returned to Marsh as senior client advisor for two years. In 2005 he joined Willis, where he was senior vice president for Willis Enterprise and Risk Finance Practice.

Mr. Epstein married his wife Carol in Prospect Garden on the campus of Princeton in 1975. The couple had an apartment in Chicago and a house in Woodstock, Illinois. His wife said that many of his favorite memories stemmed from vacations at the family summer cottage on Lake Keuka, New York. He enjoyed reading, music, and spending time with his wife and dogs. He was a trustee of the Sherwood Conservatory of Music in Chicago, which focuses on economically deprived students, and belonged to the Princeton Club of Chicago.

James A. Hall III 1946-2011

James A. (Jim) Hall III, age 64, died peacefully after a stroke on Monday, March 7, 2011.

Jim Hall was born on August 9, 1946, in Passaic, New Jersey. He graduated from Notre Dame High School in Elmira, New York in 1963; he then attended Cornell University in New York and Loyola College in Baltimore, Maryland, from which he obtained his Bachelor of Science in mathematics with high honors.

He was an avid outdoorsman, political activist, and music lover. His love of music was deeply instilled at an early age by his musical brothers. As an adult he sang with a Gregorian Schola Choir.

His passions led him around the world promoting social change and random acts of kindness, accompanied by his beloved wife, Francine. Their enthusiasm for outdoor activities and their desire to bring joy to the lives of others combined to inspire a bike trip across the country geared at helping those in need. The success of this venture led to similar campaigns across Europe.

Mr. Hall earned his ACAS and FCAS designations in 1973 and 1974, respectively. He later became a founder of Coopers and Lybrand Actuarial Group, Hallmark Actuarial Consulting, and International Actuarial Services. He was well known and respected within insurance circles as an expert witness, and through his appearances at many actuarial and insurance conferences.

The honesty, integrity, and dry sense of wit displayed in Mr. Hall's philanthropic endeavors also led to a remarkably successful career as a professional actuary. Mr. Hall was an active CAS volunteer, beginning in 1974 as a member of the Examination Committee. His CAS activities covered a wide range of his interests, including education, research and development, and community outreach. He served as chair of the International Relations Committee (1993-1995) and the University Relations Committee (2005-2007). His most recent CAS activities were serving as a member of the CAS Trust Scholarship Subcommittee, Member Advisory Panel, ERM Committee, and the Climate Change Committee, and as a University Liaison.

His faith was also a defining characteristic of his life, and he was proud to serve as a lector at St. John Vianney Catholic Church in South Burlington, Connecticut. His constant efforts to increase the peace and love in a tumultuous world earned him the nickname "Gentle Giant."

Mr. Hall is survived by his wife, best friend, and confidant, Francine Simone Hughes; his parents, Dr. James A. Hall and Marie Wassel Hall of Timonium, Maryland; and his brother, John J. Hall and wife, Pamela, of Dover Plains, New York. He also leaves behind his son, James A. Hall IV, Esq. and wife, Veronica, of Providence, Rhode Island; his former daughter-in-law, Molly Dodd, of Mystic, Connecticut; his daughter, Leila Hall, MD, and husband, Paul Lebar, of Bethesda, Maryland; his son, David Cassidy Hall of Williston, Connecticut, and his former wife, Mary Lucia O'Donoghue. In addition, he was the proud stepfather to Francine's two sons, Sean Hughes of Austin, Texas, and Ethan Hughes and wife, Sarah, of La Plata, Missouri. He is also survived by six grandchildren and a niece. He was predeceased by his brother, Jerome M. Hall.

In lieu of flowers, the family requested donations be made to the Catholic Worker Cabot House in St. Louis, Missouri.

Obituaries

Howard H. Kayton 1936-2011

Howard Kayton, 74, of Los Angeles, California, passed away on September 4, 2011.

Mr. Kayton was born on November 19, 1936. He began his career with New York Life in 1958, and, took a position at Pacific Mutual Life in 1967. In 1971, he left Pacific Mutual Life to be a consultant with Milliman & Robertson in their Pasadena, California office. While there, he became a Fellow of the Casualty Actuarial Society in 1972. He was the author of the paper "The Merger of Mutual Companies," which was published in *Transactions* and explored the relative equity of the policyholders of both companies. After three years he became a principal in Milliman & Robertson.

Mr. Kayton left Milliman & Robertson in 1977 to join a start-up annuity marketing firm, Security First Group, in Century City, California, where he was vice president and chief actuary. For the next 23 years, he was involved in the acquisition and licensing of both Security First Life Insurance Co. and Fidelity Standard Life Insurance Co., giving the agency control of its products, which he also designed.

While living in California, Mr. Kayton became interested in backpacking. He climbed Mt. Whitney and Half Dome and made two backpacking treks across the Sierra Nevada. He also traversed the Grand Canyon twice. When he retired from Security First Group in October 2000, he pursued an active retirement that involved jogging, hiking, biking with his wife along the beach bike path, travel, and volunteering at the Jewish Home for the Aging.

He is survived by his wife Myrna, five children, and eight grandchildren.

Morris B. Kole 1914-2011

Morris B. Kole died on October 24, 2011. He was 97.

Born Morris B. Koloditzsky on March 1, 1914, he changed his surname to Kole sometime in the 1940s. He earned his ACAS designation in 1937 and his FCAS designation in 1941.

His entire actuarial career was with the New York State Insurance Fund (NYSIF) in New York City. NYSIF is a non-profit agency consisting of the Workers Compensation Fund, created in 1914, and the Disability Benefits Fund, established in 1949. New York voters approved the Workers Compensation Act of 1914 by referendum. The law was spurred by two significant events in American history—the 1909 Wainwright Commission that reported on the conditions and treatment of injured workers, and the Triangle Shirtwaist factory fire of 1911, among the most deadly in New York City history.

Mr. Kole was named associate actuary of the Fund in 1947. In 1951 he became principal actuary and in 1960 he was named director of insurance fund planning and data processing. He made a slight career change in 1967 as the director of accounts and finance, but returned to actuarial work in 1969, remaining in this capacity for the rest of his career. He retired in 1980.

Mr. Kole lived for a time in Roslyn Heights, Long Island, before retiring to West Palm Beach, Florida.

John R. Linden 1930-2011

Mr. Linden was born November 1, 1930, in Hartford, Connecticut, the son of the late John and Antonia Linden. He was a U.S. Army veteran who served during the Korean War. He became a Fellow of the CAS in 1960 and worked for 19 years at the Aetna Insurance Company. He later worked as an actuary for the State of Connecticut Insurance Department.

He was an avid tennis player and a fan of both the University of Connecticut men's and women's basketball teams.

Mr. Linden is survived by four sons: Michael J. Linden and his wife Anne of Wethersfield; Robert J. Linden and his wife Diane of Mooresville, North Carolina; Thomas J. Linden of Wethersfield; and Matthew J. Linden of Manchester. He is also survived by his former wife Judith Linden and his five grandchildren: Stephanie, Christopher, Tyler, Brendan, and Alec.. He was predeceased by his brothers, Herman and Joseph Traunig and a sister, Ann Byrne.

Elizabeth M. Mauro 1973-2011

Elizabeth "Liz" Mauro died September 29, 2011, at the age of 37.

Born on October 10, 1973, Ms. Mauro held BS and Masters' degrees in psychology from Illinois State University.

She began her career as a social worker but later decided to pursue actuarial science, studying for actuarial exams while working. Her persistence and initiative served her well, and she found her work as an actuary fulfilling and rewarding. Ms. Mauro earned her ACAS in May 2010 and her FCAS in May 2011. Her brother, Paul, accepted the honor in her memory at the CAS Annual Meeting in Chicago in November 2011.

Ms. Mauro's actuarial career saw her working at State Farm, CNA, and Zurich, all in the Chicago area. During her tenure at each company, her coworkers quickly became her friends. Wit, humor, and positive perspective were hallmarks of her character, and proved contagious among those close to her. She was well-known for her empathy; even at her busiest, she was always interested in the endeavors and exploits of her friends and colleagues. She combined a clever analytical mind, keen business acumen, and appropriately outré fashion sense. Her empathy, laughter, and signature outfits are missed by those fortunate to have known her.

Ms. Mauro was predeceased by her mother, Michele Mauro, Psy D. She is survived by her father and stepmother, Anthony and Freeda Mauro; brothers, Anthony, Paul, and Aaron Mauro; boyfriend, Matt Bisbey; step-siblings Joe (Beverly) Sanford, Suzanne (Robert) Kutuk, Tracy (James) Pillow, and Beth (Tim) Stone; and many aunts, uncles, and cousins.

Obituaries

Michael G. McCarter 1952-2011

Michael Gaines McCarter died on November 14, 2011. He was the beloved husband for 31 years of the former Barbara Penyak.

He was born in Murfreesboro, Tennessee, on August 11, 1952, the son of Leona Gaines McCarter and the late Roy M. McCarter. He grew up in Camp Springs, Maryland and attended Suitland Senior High School in Forestville, Maryland. He graduated cum laude in 1974 from Harvard University with a degree in mathematics. Later, he received an MBA from the Wharton School of the University of Pennsylvania.

From the late 1970s to the mid-1980s, Mr. McCarter worked for Reliance Insurance Company in Philadelphia, holding the posts of director of planning, assistant secretary, and secretary. He then moved to Cigna in Boca Raton, Florida, where he was assistant vice president and actuary. In 1986 he moved back north to Harleysville, Pennsylvania, where he was senior vice president and CEO for Harleysville Insurance Company. Ten year later he made the move to AIG in New York City where he was senior vice president and chief actuary. Shortly after coming to AIG he was named vice president of industry and regulatory affairs for the company.

Mr. McCarter was a member of the American Academy of Actuaries. He became an Associate of the Casualty Actuarial Society in 1977 and a CAS Fellow in 1990. A devoted volunteer and advocate for the actuarial profession, Mr. McCarter was extensively involved in the CAS, the Academy, and the National Association of Insurance Commissioners (NAIC).

Among his CAS activities, he chaired the Task Force on Fair Value Case Studies (2001-2002) and was a long-time member of VFIC (the Committee on Valuation, Finance, and Investments). He was also a member of the Valuation & Financial Analysis Committee and the CAS Special Task Force on Fair Value of Liabilities, and was one of the founding members of the CAS Seasoned Actuaries section.

Mr. McCarter was very active in the Academy throughout the 1990s and 2000s. His work for the Academy centered on the efforts of the Risk Management and Financial Reporting Council and the Casualty Practice Council.

From 2005 to 2008, Mr. McCarter took on the role of chair of the Academy's Terrorism Risk Insurance Subgroup. The subgroup was formed in 2005 to study terrorism insurance issues in response to a request for assistance from Congressional staff who were considering extensions to or replacements for the original Terrorism Risk Insurance Act of 2002 (TRIA). On behalf of the subgroup, Mr. McCarter presented a statement before the NAIC Public Hearing on Terrorism Insurance Matters, which was held in New York City on March 29, 2006. He discussed the potential size of insured losses that could be caused by terrorists, the types of events that could cause such losses, and considerations that could affect the willingness or ability of insurers to provide coverage that responds to such events.

Other Academy service includes work on the Joint Risk-Based Capital Work Group of the Academy's Solvency and Risk Management Task Force, the Fair Value Work Group of the Academy's Accounting Policies and Procedures Task Force, and the Committee on P&C Risk-Based Capital (2001), of which he was chairperson.

Among his numerous NAIC activities, Mr. McCarter served on the Terrorism Insurance Implementation Working Group.

He coauthored the CAS *Forum* paper "Is the 'Best Estimate' Best?" with Jan Lommele in 1998. As a member of the Academy's Catastrophe Management Work Group he contributed to the public policy monograph titled, "Insurance Industry Catastrophe Management Practice," issued in June 2001.

CAS President Pat Teufel (2011-2012) said of Mr. McCarter, "We lost Mike far too early. He was one of the 'young-uns' when I was at little Aetna. I loved connecting with Mike at NAIC meetings. At the time he was responsible for public policy at AIG and I was serving as chair of the Academy's Committee On Property and Liability Financial Reporting (COPLFR). Mike was a stickler for details. Stubborn as they come, but he always had the interest of the profession at heart. He was a person I was proud to call a colleague."

Former CAS President Ralph Blanchard (2010-2011) worked with Mr. McCarter as part of the Casualty Practice Council. Mr. Blanchard said of his friend and colleague, "I will always remember Mike for his tremendous insights in an area that too few P&C actuaries participate—accounting and financial reporting. He had a sharp mind and a kind heart. He was also not afraid to take an unpopular position on a topic, willing to say what needed saying even if some didn't want to hear it. He was a good friend and I will miss him."

In addition to his wife, Barbara, Mr. McCarter is survived by his daughter, Kaitlin R. McCarter; his son, Michael R. McCarter; three sisters, Marjorie Stevens, Mary De La Torre, and Alice Wilson; and 13 nieces and nephews. He was preceded in death by a sister, Ann Lynn McCann.

The McCarter family requested that memorial contributions be made to the Boston College Undergraduate Financial Aid Fund.

George McLean 1922-2011

George McLean, 89, of Venice, Florida, died on Dec. 6, 2011. He became a Fellow of the Casualty Actuarial Society in 1961.

Mr. McLean served in the Pacific during World War II, and fought in the New Guinea and Philippine invasions. He was first lieutenant in the 10th Company, 3168 Signal Service Battalion. On January 15, 1945, his unit was attached to the XIV Army Corps during the invasion of Luzon, in the Philippines.

In a 2009 interview in the Charlotte Sun newspaper, Port Charlotte, Florida, Mr. McLean described his part in the Philippine invasion:

We came ashore on the second day of the invasion with all our equipment to set up a communications center in Manila... It took us two or three days of sporadic fighting to reach the capital. I was told to take 100 men and establish a communications center in a badly damaged three-story hotel along Dewey Boulevard in downtown Manila. We set up our Teletype machines, shortwave radios, and phone system on the first floor.

It was here that he received a "top secret" Teletype from General Douglas MacArthur, commander of all Allied forces in the South Pacific, soon after MacArthur had made his historic landing at Leyte. "I remember almost every word of it, even though it was nearly 65 years ago," Mr. McLean said. "It read:

I, General of the Army Douglas MacArthur, will arrive in Manila at 0800:

You will turn out the guard.

You will fire a 21-gun salute.

You will declare a holiday.

Mr. McLean was responsible for filming the general's arrival. "He arrived on the appointed morning at 0800. He showed up in a jeep, his corncob pipe clenched in his teeth, wearing brown Ray-Ban glasses and a crushed officer's hat covered with gold 'scrambled eggs," McLean said.

MacArthur climbed out of the jeep in front of the palace. The 21-gun salute was firing in the background and a color guard was standing at attention, just as the general had commanded.

Mr. McLean later met General Eisenhower in Manila when he arrived to meet with MacArthur. When Eisenhower ran for president in the 1950s, Mr. McLean was the Republican campaign chairman in the Massachusetts county where he lived.

After Mr. McLean's retirement as chief executive officer of Blue Cross/Blue Shield of Maine, he and his wife, Valerie, moved to Venice, over 20 years ago.

Mr. McLean held memberships in the American Legion, VFW, Shriners, and Masons. He was on the Venice Board of Zoning Appeals from 1997 to 2003; was a charter member of the Venice Area Historical Society, and its second president, from 1992 to 1993; was chair of the committee for the Gunther Gebel-Williams statue; and was a member of the Antique Auto Club of America.

He is survived by his wife, Valerie; daughters Susan McLean of Portland, Maine, and Judy Ferretti of Venice; and four grandchildren.

Richard J. Mills 1928-2011

Richard J. Mills died on April 4, 2011. He was 82.

He was born in Chicago, Illinois, on August 7, 1928, to Ruth and John A. Mills. He married Ethel Ellen Rutter in 1951. He served as a Temporary Staff Sergeant with the U.S. Marine Corps during the Korean War.

Mr. Mills began working for Kemper Insurance at the age of 15, and retired 42 years later as a statistical actuary. He earned his ACAS designation in 1953 and his FCAS in 1957.

He lived in the Chicago area until 1990, when he and his wife relocated to Punta Gorda, Florida. They took advantage of their retirement years by traveling throughout the world.

John Kemper, a coworker at Kemper Insurance, wrote of Mr. Mills, "I worked with Dick for many years; particularly, in the early days of the computer system design and implementation. He had an excellent mind and wasn't satisfied to just do something; he was more interested in doing something the best way. We had many discussions coming up with the best solution."

Mr. Mills is survived by his children, Roxanne Fiedor of Chicago, Richard and Cindy Mills of Tampa, and Kristine and John Torvik of Cape Coral, Florida; grandsons, Brian and Colt Mills of Tampa; his brother and sister-in-law, John and Mildred Mills of New Mexico; cousins, Kathleen, Mike (Kathleen), and Timothy (Terry) McCabe. In addition to his parents, Mr. Thompson was preceded in death by a brother, Tom, son-in-law, Frank Fiedor, and his loving wife of 51 years, Ethel. He will be missed by all who knew and loved him, including his best friend and cherished companion of seven years, Rachel Beck.

The family requested that memorial contributions be made to Joey's Greyhound Friends, a Cape Coral rescue organization for retired greyhounds.

John A. Potter 1942-2010

John A. Potter, 68, of Galena, Illinois, and formerly of Barrington, Illinois, died on November 20, 2010.

He was born in Chicago, Illinois, on September 30, 1942. Mr. Potter earned his ACAS designation in 1976. From 1977 to 1986 he was vice president and actuary for the American Association of Insurance Services in Chicago. From there he went on to Shand, Morahan & Co. Inc. in Evanston, Illinois, where he worked as an actuarial analyst. In the late 1980s he began a long association with the Signature Group in Schaumburg, Illinois. He stayed with the company until 1999, serving as associate actuary, actuary, and assistant vice president-casualty actuary. In 1999, The Signature Group was acquired by GE. Mr. Potter stayed with the new management, serving as assistant vice president-casualty actuary for GEFA Partnership Marketing Group and assistant vice president property-casualty & club actuary for the GE Partnership Marketing Group. In 2010 he took on his last post as appointed actuary for Heritage Casualty Insurance Co. in Schaumburg.

An avid Chicago Bears fan, he loved playing golf and baseball, and feeding his backyard birds.

He was preceded in death by his parents, Donald and Nellie Potter. He is survived by his wife, Mina; his sister Nancy Sheridan; his brothers Bill, Jim, Tom, and Charlie; and many nieces and nephews. In lieu of flowers, the family requested that memorial contributions be made to either the American Cancer Society or the American Lung Association.

Yves Provencher 1957-2011

Yves Provencher died June 26, 2011, in Staten Island University Hospital, Ocean Breeze, New York, of a heart attack. He was 53.

He was born on November 5, 1957, in Montreal, Quebec, Canada. While attending Concordia University in Montreal, he supported himself by working in a paint factory and as a guard in a wax museum. He graduated in 1985 with a B.Sc. degree in mathematics.

Mr. Provencher became an Associate of the Casualty Actuarial Society in 1993 and was a member of the American Academy of Actuaries. He was a member of the CAS Committee on Reinsurance Research from 2005 to 2009.

From 1985 to 1991, Mr. Provencher was an actuarial analyst for Dominion of Canada General Insurance Company in Toronto. In 1991 he immigrated to the United States and began working for Home Insurance Company New York City. In 1995 he was named director—personal lines for the company. He continued in this capacity through the late 1990s, when Home Insurance became REM/Home Insurance Company and later REM Ltd. Mr. Provencher also worked for a short while at the end of the decade as actuary for Risk Enterprise Management (1997) and vice president for Guy Carpenter & Co. (1998).

In 1998 Mr. Provencher joined Willis Faber North America, later known as Willis Re Inc. In his last position, he served as executive vice president and managing director of Willis Re Analytics. With an extensive background in financial analytics for the insurance and reinsurance industries, he managed Willis Re's analytical areas, including actuarial services, catastrophe management services, enterprise risk management, structured solutions, financial services, and rating agency services. While with Willis Re, Mr. Provencher broadened the scope of analytic services, presented Willis Re's analytic capabilities to prospective clients, and managed other strategic initiatives.

Mr. Provencher supported numerous causes and organizations, including the New York Public Library, the ASPCA, and Doctors Without Borders. He coached his daughter's soccer team at St. Joseph Hill Academy in Staten Island from the time she was in kindergarten. He was interested in reading about the origins of the universe, game theory, and black holes. He especially enjoyed the television show "The Big Bang Theory" and the works of Stephen Hawking. Mr. Provencher was also a parishioner of Our Lady of Good Counsel Roman Catholic Church in Tompkinsville, New York.

His wife of 14 years, Mary Farag, said her husband's friends, neighbors, and co-workers remembered him as "A good man, a great man, and a fine gentleman," who was known for his integrity and diligence. "You couldn't ask for a better human being, man, and father...People were drawn to him," said Ms. Farag. "He rose in the industry because he connected with people."

Peter C. Hearn, Willis Re chairman, said, "Yves was an integral member of Willis Re senior management in North America. This is a terrible loss to his family and Willis Re."

Mr. Provencher is survived by his wife, Mary Farag; his daughter, Gabrielle; his mother, Therese Dion; and his sister, Louise Provencher. He was preceded in death by his father, Laurent Provencher. In lieu of flowers, the family encourages friends to make memorial donations to the following organizations: The New York Public Library, ASPCA, Doctors Without Borders, The Alzheimer's Association, and The New York Organ Donor Network.

Matthew Rodermund 1916–2011

An Appreciation: Matthew Rodermund's Life of Service*

By C.K. "Stan" Khury, Actuarial Review Editor Emeritus

Matthew Rodermund demonstrated what it means to live a life of service. From the time of his Fellowship in 1947 until well after retirement, his life was an unbroken chain of service to the CAS and the actuarial profession. In 1990 the CAS memorialized this remarkable dedication by creating a special award carrying his name, The Matthew Rodermund Service Award. Appropriately, this award recognizes CAS members who have made significant volunteer contributions to the actuarial profession *over the course of a career*, as Matt had done.

Matt began his career at the Interboro Mutual Indemnity Company and worked there until 1961, when he joined the Munich American Reinsurance Company as Vice President –Actuary. He remained there until his retirement in 1981. Matt's service to the CAS spanned virtually all aspects of its operations. He held multiple leadership roles including serving as a member of the Council, the governing body of the CAS, from 1957 to 1960; Editor of CAS publications from 1964 to 1973; and chair of numerous committees on all aspects of CAS operations, both technical and administrative.

Perhaps no service rendered by Matt to the CAS community better exemplifies his commitment than his work on *The Actuarial Review* from 1974-1988. Four years prior to the first issue of *The Actuarial Review* there was an informal publication titled *The CAS Newsletter*, penned largely by the then-president. In 1974 Matt was asked to lead the regular production of *The CAS Newsletter*.

Matt produced the first issue of *The CAS Newsletter* in February 1974. It didn't take him long to introduce significant enhancements and innovations including the new name, *The Actuarial Review*, in the very next issue. Much of what Matt did survives today. He recruited talented members of the CAS to head various departments including a puzzle editor, a cartoonist, a columnist for a regular column of clever commentary then called "Maunderings," and a crossword afficionado who would create an occasional Actuarial Crostic for the enjoyment of CAS members.

Producing a single issue of *The Actuarial Review* required a herculean effort in those days before desktop computers and word processing. Everything had to be typed, then type-set on what was affectionately known as "stickies" (text printed on long narrow strips of special paper treated with a light adhesive), cut and pasted by hand to actually compose a complete page of copy. Then after the copy was proofread, a mock-up was sent to the printer who in turn produced a proof for final editing. After the final editing, it would be sent to the printer for printing and distribution. With the exception of the proofreading, Matt did all of this – for 15 years! The magnitude of Matt's achievement becomes even more impressive when one considers that the CAS office staff at that time consisted of only two persons. In all of this, Matt was a stickler for proper writing. He conveyed his standard by giving a copy of Strunk & White's *Elements of Style* to anyone who served on the staff of *The Actuarial Review*.

Matt did not do his own proofreading. He required that an "outsider" conduct this task because he knew that the writer of a piece cannot reliably proofread his or her own work. Matt assigned the proofreading task to another Fellow, who in turn recruited his wife to do the proofreading with him.

The "family affair" aspect of producing *The Actuarial Review* extended well beyond the proofreading husband-and-wife team. Matt's wife, Edythe, assisted him. She was, by Matt's own determination, the most dedicated staffer that he had working on *The Actuarial Review*. Not only did she help with all aspects of production, she was talented in her own literary way. She used to write an occasional clerihew (a light verse form, usually consisting of two couplets, with lines of uneven length and irregular meter, the first line usually containing the name of a well-known person). She always signed her clerihews with the initials "A.W." No one ever knew what these initials stood for. Edythe gave away this secret on a social visit when she inadvertently revealed that "A.W." stood for Actuarial Wife. Her dedicated and selfless service to the CAS was not publicly acknowledged contemporaneously because neither she nor Matt wanted it known that she was, for all intents and purposes, serving as the co-editor of *The Actuarial Review*. But now her contribution can be revealed and memorialized alongside the recitation of Matt's many contributions.

Matt wrote a number of papers and reviews of papers including the introduction to the original 1990 edition of the CAS textbook *Foundations of Casualty Actuarial Science*. In 1983 Matt wrote a style manual for all CAS publications to assure that all CAS publications had the same look and style, irrespective who was editing what publication. He had a streak of wit in him that was hard to miss. That is perhaps best illustrated in his well-known 1964 *Proceedings* paper titled "How to Tell a Pure Actuary from a Lay Actuary." This timeless paper still rings fresh and true. For example, in distinguishing between a "pure" actuary and a "lay" actuary, Matt wrote, "A rate derived by the method of moments is one fashioned with care by a pure actuary. A rate derived in a matter of moments is one pulled out of the air by a lay actuary."

Two examples illustrate the breadth of Matt's creative talents. He often entertained his fellow actuaries at CAS meetings by playing the piano and leading songfests. Those who participated, as well those who merely listened, remember those evenings with great affection. The other example is his mammoth project of writing, producing, and directing an actuarial play titled, *How to Succeed as an Actuary Without Really Trying*, performed in November 1973 at the CAS annual meeting at the Sheraton Boston (with an encore performance in May 1977 in Washington, D.C., on the occasion of a joint meeting with ASTIN). The cast consisted of actuaries and their relatives. It was adapted from the 1961 Frank Loesser hit Broadway musical *How to Succeed in Business without Really Trying*. An entertaining review of this performance can be found on the last page of this link: http:// casact.org/pubs/actrev/historic/feb74.pdf.

After Matt's retirement from *The Actuarial Review*, the CAS Board adopted a resolution recognizing Matt's contribution with a special Lifetime Achievement Award. Matthew Rodermund was one of a kind, a light that enriched the CAS faithfully for more than 50 years.

*First published in the May 2012 Actuarial Review.

Philip R. Thompson 1920-2011

Philip Richard Thompson, 90, of Owatonna, Minnesota, died on May 25, 2011. He was buried with full military honors.

Mr. Thompson was born to Clarence and Ella (Carlson) Thompson in Albert Lea, Minnesota, on November 24, 1920. Following his graduation from Albert Lea High School in 1938, he attended Albert Lea Junior College. He transferred to the University of Minnesota, joined R.O.T.C., and earned his Business Administration degree in 1942. Upon graduating from college, he completed naval officer training school and served honorably in the U.S. Navy during World War II.

He married Joan Romer in 1949. He was a member of St. Joseph Catholic Church, the Elks Club, and the American Legion. He had several hobbies, including golf, tennis, cards, reading, and furniture restoration, but his greatest joy in life was his family.

Mr. Thompson began his career with Federated Insurance in 1947 where he worked in the actuarial services department until his retirement in 1986. He earned the ACAS designation in 1963.

Steve Judd (FCAS 1982), a coworker of Mr. Thompson's at Federated, said, "Phil came through the hard way...he was one of a generation who came to do their jobs and later learned about the actuarial exams." Mr. Judd characterized him as a humble man who took the actuarial exams not to advance his career necessarily but to simply do his job better.

In the early days of Mr. Thompson's career at Federated Insurance, the company was a small one in a small town in rural Minnesota, before technology and sophisticated computers. Paul Otteson (FCAS 1957), a prolific contributor to CAS actuarial literature, hired Mr. Thompson and developed the processes for the office. "The two of them were the actuarial department for Federated," said Mr. Judd. He said that both men were "pretty down-home guys," who were doing sophisticated work on par with the financial centers of New York and Chicago.

Survivors include his wife, Joan of Owatonna; his six children, Susan (Grant) Cassem of Prior Lake, Minnesota, William (Lorie) Thompson of Owatonna, Patricia (Steve) Radke of Mukilteo, Washington, Sara (George) Wacek of Owatonna, Katherine (Scott) Holzerland of Owatonna, and Steven (Brad Larson) Thompson of North Branch, Minnesota; 14 grandchildren; three great-grandchildren; and many nieces and nephews. He was preceded in death by his parents and his sister, Fern Moss.

The family requested that memorial contributions be made to St. Joseph Catholic Church in Owatonna or the Owatonna Area Hospice Patient Fund.

Frank T. White

The Casualty Actuarial Society learned of Frank T. White's death in 2011. Mr. White was one of the first CAS members to serve as a CEO of a self-insurance program for workers compensation. He earned his Associate designation in 1978.

"Frank was originally a school teacher who taught math in public school," said Anthony "Tony" Grippa (FCAS 1976). Mr. Grippa first hired Mr. White in the 1970s as an actuarial trainee for NCCI in New York City. From there Mr. White worked his way up to supervisor. Mr. Grippa characterized Mr. White as a "good worker—smart, pleasant, energetic."

Mr. White later made the move to Boston to work for Commercial Union. From 1978 to 1982, he served the company as assistant actuary, assistant vice president, and vice president and actuary. While at Commercial Union, he made friends with David Miller (FCAS 1978). The two worked in different areas but connected over their shared experiences as new actuaries struggling to be successful, and as newly married men. They spent time together with their wives playing golf and cribbage, and occasionally bowling.

Mr. Grippa was impressed enough to rehire Mr. White in 1982 as a vice president and actuary responsible for most of the NCCI's actuarial production work. In 1984 Mr. White was happy to make the move back to his native Florida to work for NCCI in Boca Raton, where he advanced to senior vice president.

In 1990 Mr. White left his long-time company to take on the role of CEO for Associated Industries Insurance Co. in Boca Raton. The company distributed workers compensation insurance, and provided third-party administrative services for businesses throughout Florida.

Alfred Weller (FCAS 1981) was also a former NCCI colleague of Mr. White's. The two men were fellow panelists on the 1993 CLRS panel discussion titled, "Reserving Issues for Workers' Compensation." Mr. Weller spoke of Mr. White as a "hard-working, business-oriented actuary," who was an innovator in the field of workers compensation and an example of actuaries venturing into new careers. "By getting actuaries involved in managing self-insurance programs, Frank White expanded what actuaries do," said Mr. Weller.

In 2004 Mr. White formed his own firm, FT White Consulting Inc., in Boca Raton.

His interests varied, ranging from deep sea fishing and golf to horticulture. Joe Volman, an NCCI colleague, recalled that Mr. White was an orchid aficionado, who had a screened-in area built in his home outfitted with automatic sprinklers to raise orchids.

He is survived by his wife, Eileen, and sons, Brian and Sean.