

MINUTES OF THE 1996 CAS ANNUAL MEETING

November 10–13, 1996

BOCA RATON RESORT & CLUB, BOCA RATON, FLORIDA

Sunday, November 10, 1996

The Board of Directors held their regular quarterly meeting from noon to 5:00 p.m.

Registration was held from 4:00 p.m. to 6:00 p.m.

From 5:30 p.m. to 6:30 p.m., there was a special presentation to new Associates and their guests. All 1996 CAS Executive Council members briefly discussed their roles in the Society with the new members. In addition, David P. Flynn, who is a past president of the CAS, briefly discussed his role on the American Academy of Actuaries' (AAA) Casualty Practice Council.

A welcome reception for all members and guests was held from 6:30 p.m. to 7:30 p.m.

Monday, November 11, 1996

Registration continued from 7:00 a.m. to 8:00 a.m.

CAS President Albert J. Beer opened the business session at 8:00 a.m. and recognized past presidents of the CAS who were in attendance at the meeting, including Ronald L. Bornhuetter (1975), David P. Flynn (1992), Michael Fusco (1989), David G. Hartman (1987), Charles C. Hewitt, Jr. (1972), Allan M. Kaufman (1995), Thomas E. Murrin (1963–1964), and Michael L. Toothman (1991).

Mr. Beer also recognized special guests in the audience: Christopher D. Daykin, Immediate Past President of the Institute of Actuaries in the United Kingdom and Deputy Chairman of the International Forum for Actuarial Associations (IFAA); Willy Le-nearts, Secretary-Treasurer of the International Actuarial Associa-

tion; Masaaki Fujikura of the Institute of Actuaries of Japan; Wilson W. Wyatt, Jr., Executive Director of the American Academy of Actuaries; Harry H. Panjer, President-Elect of the Canadian Institute of Actuaries; and David M. Holland, President of the Society of Actuaries.

Mr. Beer then announced the results of the CAS elections. The next President will be Robert A. Anker, and the President-Elect will be Mavis A. Walters. Members of the Executive Council for 1996–1997 will be Paul Braithwaite, Vice President–Administration; Kevin B. Thompson, Vice President–Admissions; Susan T. Szkoda, Vice President–Continuing Education; Patrick J. Grannan, Vice President–Programs and Communication; and Robert S. Miccolis, Vice President–Research and Development. New members of the CAS Board of Directors will be Sholom Feldblum, Alice H. Gannon, David N. Hafling, and Richard J. Roth, Jr.

Paul Braithwaite, John J. Kollar, and Michael Miller announced the new Associates and the new Fellows. The names of these individuals follow.

NEW FELLOWS

Shawna Ackerman	Richard F. Burt, Jr.	Yves Doyon
Mark A. Addiego	Douglas A. Carlone	David M. Elkins
Elise M. Ahearn	Carol A. Cavaliere	Martin A. Epstein
Craig A. Allen	Maureen A. Cavanaugh	James G. Evans
Scott C. Anderson	Heather L. Chalfant	Judith M. Feldmeier
Steven D. Armstrong	Kasing Leonard Chung	John R. Ferrara
Douglas S. Benedict	Frank S. Conde	Kirsten A. Frantom
Wayne E. Blackburn	Brian C. Cornelison	James E. Gant
Annie Blais	Catherine Cresswell	Nicholas P. Giuntini
Ward M. Brooks	Joyce A. Dallessio	Richard W. Gorvett
Tracy L. Brooks-	Behram M. Dinshaw	Russell H. Greig, Jr.
Szegda	Jeffrey D. Donaldson	Terry D. Gusler
Lisa J. Brubaker	Norman E. Donelson	Michele P. Gust

Elizabeth E. L. Hansen	James M. Maher	Jay Andrew Rosen
Robin A. Harbage	Leslie R. Marlo	James B. Rowland
Barton W. Hedges	Kelly S. McKeethan	Kenneth W. Rupert, Jr.
Kirsten Costello	Robert F. Megens	Jason L. Russ
Hernan	Stephen V. Merkey	David A. Russell
Betty-Jo Hill	Camille Diane	Sean W. Russell
David L. Homer	Minogue	Melodee J. Saunders
Sandra L. Hunt	Madan L. Mittal	Letitia M. Saylor
F. Judy Jao	Kenneth B. Morgan, Jr.	Sara E. Schlenker
Christian Jobidon	Giovanni A. Muzzarelli	Peter R. Schwanke
Stephen H. Kantor	David Y. Na	Michelle G. Sheng
Timothy P. Kenefick	Peter M. Nonken	Elissa M. Sirovatka
Michael B. Kessler	Marc F. Oberholtzer	Raleigh R. Skaggs, Jr.
Timothy F. Koester	Douglas J. Onnen	Patricia E. Smolen
Louis K. Korth	Melinda H. Oosten	Brian M. Stoll
Gary R. Kratzer	Nicholas H. Pastor	Edward D. Thomas
Howard A. Kunst	Clifford A. Pence, Jr.	Janet A. Trafecanty
Bertrand J. LaChance	Daniel A. Powell	Joseph W. Wallen
Benoit Laganieri	Andrew T. Rippert	John M. Woosley
Matthew G. Lange	Brad M. Ritter	Cheng-Sheng P. Wu
John P. Lebens	Tracey S. Ritter	Edward J. Yorty
David R. Lesieur	Douglas S. Rivenburgh	Joshua A. Zirin
Kenneth A. Levine	Sallie S. Robinson	

NEW ASSOCIATES

Mohammed Q. Ashab	Richard J. Currie	Kathy H. Garrigan
Richard J. Babel	Sheri L. Daubenmier	Abbe B. Gasparro
Keith M. Barnes	John T. Devereux	James W. Gillette, Jr.
Michael J. Bednarick	Patricia J. Donnelly	Moshe D. Goldberg
Michael J. Belfatti	Christopher S. Downey	Michael D. Green
Bruce E. Binnig	Kevin M. Dyke	Greg M. Haft
Lesley R. Bosniack	Anthony D. Edwards	Scott T. Hallworth
Bethany L. Cass	Ellen E. Evans	Michael B. Hawley
Henry H. Chen	Sylvain Fauchon	Jodi J. Healy
Sally M. Cohen	David I. Frank	Thomas E. Hettinger

John F. Janssen	Michael B. McKnight	Cynthia L. Rice
Joseph W. Janzen	Jeffrey A. Mehalic	Chet James Rublewski
Brian E. Johnson	Jennifer Middough	Elizabeth A. Sander
Chad C. Karls	Alison M. Milford	Timothy D. Schutz
Mary C. Kellstrom	Stephen A. Moffett	Scott A. Shapiro
John Hun Kim	Lisa J. Moorey	Jill C. Sidney
Martin T. King	Roosevelt C. Mosley	Jeffery J. Smith
Elina L. Koganski	Prakash Narayan	Jay Matthew South
Andre L'Esperance	Richard D. Olsen	Catherine E. Staats
Timothy J. Landick	Abha B. Patel	Carol A. Stevenson
Betty F. Lee	Tracie L. Pencak	Roman Svirsky
Ramona C. Lee	Miriam E. Perkins	John L. Tedeschi
Brian P. LePage	Luba Pesis	Michael J. Tempesta
Steven J. Lesser	Ellen K. Pierce	Kai Lee Tse
Leslie A. Martin	Igor Pogrebinsky	Marie-Claire Turcotte
Claudia A. McCarthy	Anthony E. Ptasznik	David S. Wolfe
Patrice McCaulley	Ni Qin-Feng	Alexander G. Zhu
Douglas W. McKenzie	Andrew S. Ribaldo	

Mr. Beer then introduced Michael Fusco, a past president of the Society, who presented the Address to New Members.

Patrick J. Grannan, CAS Vice President–Programs and Communications, spoke to the meeting participants about the highlights of this meeting and what was planned in the program.

Mr. Beer then announced the recipient of the 1996 CAS Matthew S. Rodermund Service Award, Walter J. Fitzgibbon. David G. Hartman presented the 1996 CAS Charles A. Hachemeister Prize to Gregory C. Taylor for his paper, “Modeling Mortgage Insurance Claims Experience: A Case Study.” The paper is published in the CAS Forum, Winter 1997 Edition, including the Ratemaking Call Papers.

Mr. Beer then requested a moment of silence in honor of those CAS members who had passed away since November 1996. They are: Dewey G. Williams, E. Frederick Fossa, and Albert J. Walsh.

Paul Braithwaite then presented the Report of the Vice President–Administration.

Patrick J. Grannan then told attendees about the highlights of the upcoming program.

David L. Miller, chairperson of the CAS Committee on Review of Papers, announced that six *Proceedings* papers and two discussions of *Proceedings* papers would be presented at this meeting. Mr. Miller then presented the 1996 CAS Dorweiler Prize to Clive L. Keatinge for his paper, “Balancing Transaction Costs and Risk Load in Risk Sharing Arrangements.”

Larry D. Zimpleman, President-Elect of the AAA, provided an update on the Casualty Policy Issues.

Christopher D. Daykin, Chairman of the IFAA, gave a presentation on the internationalization of the actuarial profession.

Mr. Beer then concluded the business session of the Annual Meeting by calling for a review of *Proceedings* papers.

After a refreshment break, Mr. Beer introduced the featured speaker, Mark Shields, a nationally syndicated political columnist.

The first general session was held from 11:00 a.m. to 12:30 p.m.:

Lloyd’s Reconstruction and Renewal: A Progress Report

Moderator: Robert V. Deutsch
Executive Vice President, Chief Actuary, and
Chief Financial Officer
Executive Risk, Inc.

Panelists: Donald J. Greene
Senior Partner
LeBoeuf, Lamb, Greene & Macrae
Alan Punter, Ph.D.
Managing Director
Alexander Howden Developments

David Shipley
Deputy Underwriter
Harvey Bowring & Others Syndicate

Following the general session, CAS President Albert J. Beer gave his address at the luncheon. After his address, Mr. Beer officially passed the CAS presidential gavel on to new CAS President Robert A. Anker.

After the luncheon, the afternoon was devoted to concurrent sessions. The panel presentations covered the following topics:

1. The Future of State Subsequent Injury Funds

Moderator: Michael C. Dubin
Manager and Consulting Actuary
Watson Wyatt Worldwide

Panelists: Abbe S. Bensimon
Vice President
General Re Strategic Solutions, Inc.
William J. Miller
Team Leader and Actuary
National Council on Compensation Insurance,
Inc.
G. Kevin Saba
Assistant State Treasurer
Connecticut Second Injury Fund

2. Reinsurance and Alternative Funding Mechanisms

Moderator: Robert V. Arvanitis
Investment Banker
Guy Carpenter & Company, Inc.

Panelists: Paul J. Kneuer
Vice President and Actuary
Holborn Corporation

Scott C. Stevenson
Vice President
E. W. Blanch Capital Risk Solutions
Timothy Van Housen
Vice President, Client Strategies Group
Merrill Lynch

3. Territorial Ratemaking

Moderator: Michael A. LaMonica
Vice President and Actuary
Allstate Insurance Company

Panelists: Randall E. Brubaker
Consulting Actuary
Judith M. Feldmeier
Assistant Vice President and Chief Actuary
AAA Michigan
Debra L. Werland
Executive Director
United Services Automobile Association

4. Property Insurance in Florida

Moderator: Chad C. Wischmeyer
Principal
William M. Mercer, Inc.

Panelists: Dale S. Hammond
President and Chief Executive Officer
First Floridian Auto and Home Insurance
Company
Cecil L. Pierce
Director of De-Population Programs
Florida Residential Property and Casualty
JUA
Daniel Sumner
General Counsel
Florida Department of Insurance

5. Technological Innovation in Data Management

Moderator: Arthur R. Cadorine
Assistant Vice President and Associate
Actuary
Insurance Services Office, Inc.

Panelists: J. Michael Boa
Communications and Research Coordinator
Casualty Actuarial Society
Peter Corbett
Principal Consultant
Price Waterhouse LLP
Israel Krakowski
Pricing Director
Northbrook Property and Casualty
Robert H. Waldman
Second Vice President
General Reinsurance Corporation

6. Q & A with the CAS Board of Directors

Moderator: Robert A. Anker
President
Lincoln National Corporation

Panelists: Regina M. Berens
Consulting Actuary
MBA, Inc.
Claudette Cantin
Consulting Actuary
Tillinghast-Towers Perrin
David L. Miller
Second Vice President and Chief Actuary
Commercial Union Insurance Company

The 1996 CAS Hachemeister Prize was also presented at this time:

“Modelling Mortgage Insurance Claims Experience: A Case Study”

by Gregory C. Taylor
Tillinghast-Towers Perrin
Sydney, Australia

After a refreshment break from 3:15 p.m. to 3:45 p.m., concurrent sessions continued, and a *Proceedings* author gave a presentation of two of his papers. Certain concurrent sessions presented earlier were repeated. Additional concurrent sessions presented from 3:45 p.m. to 5:15 p.m. were:

1. 24-Hour Coverage

Moderator: Karen P. Gorvett
Vice President and Actuary
SCOR Reinsurance Company

Panelists: Philip S. Borba, Ph.D.
Senior Consultant
Milliman & Robertson, Inc.
Seth B. Madnick
Partner
Musick, Peeler & Garrett
James W. Stevens
Management Review Specialist
Florida Department of Insurance

2. Use of Credit Reports in Personal Lines Underwriting

Moderator: John J. Kollar
Vice President
Insurance Services Office, Inc.

Panelists: Birny Birnbaum
Consulting Economist
Lamont D. Boyd
Senior Marketing Representative
FAIR, Isaac

Richard A. Smith
Senior Actuary
Allstate Insurance Company

3. Introduction to the CAS Examination Committee

Moderator: David L. Menning
Senior Associate Actuary
State Farm Mutual Automobile Insurance
Company

Panelists: J. Thomas Downey
Manager, Admissions
Casualty Actuarial Society
Thomas G. Myers
Vice President
Prudential Property & Casualty Insurance
Company
Richard P. Yocius
Actuary
Allstate Insurance Company

4. American Academy of Actuaries' Casualty Practice
Council

Moderators: David P. Flynn
Director
American Re Asset Management, Inc.
Michael L. Toothman
Partner
Arthur Andersen LLP

The following Proceedings papers were presented:

1. "Interest Rate Risk and Capital Requirements for
Property/Casualty Insurance Companies"
by Sholom Feldblum
Assistant Vice President and Associate
Actuary
Liberty Mutual Group

2. “NAIC Property/Casualty Insurance Company Risk-Based Capital Requirements”

by Sholom Feldblum
Assistant Vice President and Associate
Actuary
Liberty Mutual Group

A reception for new Fellows and guests was held from 5:45 p.m. to 6:30 p.m., and the general reception for all members and their guests was held from 6:30 p.m. to 7:30 p.m.

Tuesday, November 12, 1996

Registration and a continental breakfast took place from 7:30 a.m. to 8:30 a.m.:

Two general sessions were held simultaneously from 8:30 a.m. to 10:00 a.m.:

Recent Developments in Targeting Underserved Urban Markets

Moderator: Steven L. Groot
President
Allstate Indemnity Company

Panelists: Daryll Fletcher
Assistant Vice President for Urban Markets
Allstate Indemnity Company
Alexander B. “Pete” Grannis
Chairperson of the Insurance Committee
New York State Assembly
Robin A. Harbage
Actuary
Progressive Insurance Company

The Actuary and Technology

Moderator: Myron L. Dye
Deputy CIO and Vice President
USAA Information Services

Panelists: Lauren M. Bloom
General Counsel
American Academy of Actuaries
Joseph A. Kazenas
I/T Manager
USAA Information Services
Joel S. Weiner
Manager
Coopers & Lybrand, L.L.P.

After a refreshment break, concurrent sessions were held from 10:30 a.m. to noon. In addition to concurrent sessions that were presented the previous day, the following four concurrent sessions, and two additional *Proceedings* papers, were presented.

1. Developments in Workers Compensation Reserving

Moderator: Anthony J. Grippa
Principal
William M. Mercer, Inc.

Panelists: Gary Blumsohn, Ph.D.
Associate Actuary
Liberty Mutual Group
Sean Downes
Vice President
Risk Data Corporation

2. Actuaries in Other Countries

Moderator: Karl P. Murphy
English Wright & Brockman

Panelists: Michael Brockman
English Wright & Brockman

3. Codification of Statutory Accounting

Moderator: Lisa Slotznick
Director
Coopers & Lybrand, L.L.P.

Panelists: Joseph Pomilia
Director of Financial Reporting and Taxation
National Association of Independent Insurers
Phillip L. Schwartz
Vice President of Financial Reporting and
Associate General Counsel
American Insurance Association
John Tinsley
Special Deputy-Examination
Delaware Insurance Department

4. American Academy of Actuaries' Council on
Professionalism

Moderator: Ken W. Hartwell
Sun Life of Canada

The following *Proceedings* papers were presented:

1. "Loss Prediction by Generalized Least Squares"
by Leigh J. Halliwell
Regional Actuary of Latin America
Zurich Compania de Seguros, Mexico
2. Discussion of "Underwriting Betas—The Shadows of
Ghosts," by Thomas J. Kozik, PCAS LXXXI, 1994
Discussion by Sholom Feldblum
Assistant Vice President and Associate
Actuary
Liberty Mutual Group

Various CAS committees met from 1:00 p.m. to 5:00 p.m. In addition, the tennis and golf tournaments were held during that time.

All meeting participants and their guests enjoyed a clam bake buffet dinner at the Boca Beach Club from 7:00 to 10:00 p.m.

Wednesday, November 13, 1996

A continental breakfast was held from 7:30 to 8:30 a.m.

In addition to concurrent sessions that had been given previously and which were repeated, one additional concurrent session and two additional *Proceedings* papers were presented. The concurrent session was:

1. Long-Term Changes in Climate and their Effect on Insurance

Moderator: Ronald T. Kozlowski
Consulting Actuary
Tillinghast-Towers Perrin

Panelists: Anthony H. Knap, Ph.D.
Director/Senior Scientist
Bermuda Biological Station for Research, Inc.
Christopher W. Landsea, Ph.D.
Research Meteorologist
National Oceanic and Atmospheric
Administration
Eric F. Lemieux
Vice President-Actuary
Hamilton Services, Ltd.

The following *Proceedings* papers were presented:

1. "Personal Automobile Premiums: An Asset Share Pricing Approach for Property/Casualty Insurance"
by Sholom Feldblum
Assistant Vice President and Associate Actuary
Liberty Mutual Group

2. “The Competitive Market Equilibrium Risk Load Formula for Catastrophe Ratemaking”
by Glenn G. Meyers
Assistant Vice President
Insurance Services Office, Inc.
3. “Estimating the Premium Asset on Retrospectively Rated Policies”
by Miriam Perkins
Assistant Actuary
Liberty Mutual Group
Michael T. S. Teng
Associate Actuary
Liberty Mutual Group

The final general session was held from 10:30 a.m. to noon after a 30-minute refreshment break:

DFA, the Actuary, and Strategic Planning

Moderator: Allan M. Kaufman
Principal
Milliman & Robertson, Inc.

Panelists: Robert B. Downer
Vice President
Farmers Insurance Group
Stephen P. Lowe
Consulting Actuary
Tillinghast-Towers Perrin
Eric M. Simpson
Vice President
A.M. Best Company
Susan T. Szkoda
President
Szkoda Actuarial Services, Inc.

After the general session, Albert J. Beer announced future CAS meetings and seminars, and officially adjourned the 1996 CAS Annual Meeting at 12:05 p.m.

Attendees of the 1996 CAS Annual Meeting

The 1996 CAS Annual Meeting was attended by 359 Fellows, 199 Associates, and 241 Guests. The names of the Fellows and Associates in attendance follow.

FELLOWS

Shawna Ackerman	Gary Blumsohn	Francis D. Cerasoli
Mark A. Addiego	LeRoy A. Boison, Jr.	Heather L. Chalfant
Elise M. Ahearn	Ronald L. Bornhuetter	David R. Chernick
Craig A. Allen	Peter T. Bothwell	Gary C. K. Cheung
Kerry F. Allison	Charles H. Boucek	Allan Chuck
Scott C. Anderson	David S. Bowen	Denis Cloutier
Robert A. Anker	Paul Braithwaite	Frank S. Conde
Timothy J. Banick	Yaakov B. Brauner	Robert F. Conger
Allan R. Becker	Paul J. Brehm	Brian C. Cornelison
Albert J. Beer	Ward M. Brooks	Francis X. Corr
Linda L. Bell	Tracy L. Brooks-	Martin L. Couture
Douglas S. Benedict	Szegda	Catherine Cresswell
Robert S. Bennett	William W. Brown, Jr.	Frederick F. Cripe
Abbe Sohne Bensimon	Lisa J. Brubaker	Alan C. Curry
Regina M. Berens	Randall E. Brubaker	Joyce A. Dallessio
G. Gregory Bertles	James E. Buck	Curtis Gary Dean
Richard M. Beverage	George Burger	Martin W. Deede
Richard A. Bill	Patrick J. Burns	Jerome A. Degerness
James E. Biller	Claudette Cantin	Linda A. Dembiec
Wayne E. Blackburn	Douglas A. Carlone	Howard V. Dempster
Annie Blais	Christopher S. Carlson	Lisa Nan Dennison
Robert G. Blanco	Michael J. Cascio	Robert V. Deutsch
William H. Bland	Carol A. Cavaliere	Edward D. Dew
Cara M. Blank	Maureen A.	Anthony M. DiDonato
Michael P. Blivess	Cavanaugh	Behram M. Dinshaw

George T. Dodd	Olivia Wacker Giuntini	Jeffrey R. Jordan
Michael C. Dolan	Spencer M. Gluck	Stephen H. Kantor
Jeffrey D. Donaldson	Karen Pachyn Gorvett	Frank J. Karlinski III
Norman E. Donelson	Susan M. Gozzo-	Kenneth R. Kasner
Victor G. dos Santos	Andrews	Allan M. Kaufman
Robert B. Downer	Patrick J. Grannan	Clive L. Keatinge
Michael C. Dubin	Gregory T. Graves	Anne E. Kelly
Myron L. Dye	Ronald E. Greco	Brian Danforth Kemp
Dale R. Edlefson	Russell H. Greig, Jr.	Timothy P. Kenefick
Gary J. Egnasko	Cynthia M. Grim	Michael B. Kessler
Valere M. Egnasko	Anthony J. Grippa	Joe C. Kim
Douglas D. Eland	Linda M. Groh	Frederick O. Kist
David M. Elkins	Steven L. Groot	Joel M. Kleinman
Jeffrey A. Englander	Terry D. Gusler	Paul J. Kneuer
David Engles	Michele P. Gust	Terry A. Knull
Martin A. Epstein	David N. Hafling	Timothy F. Koester
Dianne L. Estrada	Elizabeth E. L. Hansen	John J. Kollar
James G. Evans	George M. Hansen	Louis K. Korth
Doreen S. Faga	Robin A. Harbage	Thomas J. Kozik
Dennis D. Fasking	Christopher L. Harris	Ronald T. Kozlowski
Sholom Feldblum	David C. Harrison	Israel Krakowski
Judith M. Feldmeier	David G. Hartman	Gustave A. Krause
John R. Ferrara	Gregory L. Hayward	David J. Kretsch
Russell S. Fisher	Barton W. Hedges	Jeffrey L. Kucera
David P. Flynn	E. LeRoy Heer	Andrew E. Kudera
Kirsten A. Frantom	Kirsten Costello	Howard A. Kunst
Kenneth R. Frohlich	Hernan	David R. Kunze
Michael Fusco	James S. Higgins	Bertrand J. LaChance
Scott F. Galiardo	Betty-Jo Hill	Michael A. LaMonica
James J. Gebhard	Mark J. Homan	Blair W. Laddusaw
John A. Gibson III	David L. Homer	Dean K. Lamb
Bruce R. Gifford	Sandra L. Hunt	Matthew G. Lange
Judy A. Gillam	James G. Inkrott	Nicholas J. Lannutti
William R. Gillam	F. Judy Jao	James W. Larkin
Mary K. Gise	Christian Jobidon	Francis J. Lattanzio
Nicholas P. Giuntini	Eric J. Johnson	Pierre Guy Laurin

Marc-Andre Lefebvre	Richard B. Moncher	Jill Petker
Steven G. Lehmann	Phillip S. Moore	Steven Petlick
Urban E. Leimkuhler, Jr.	Russell E. Moore	Arthur C. Placek
Eric F. Lemieux	Robert V. Mucci	Daniel A. Powell
Kenneth A. Levine	Evelyn Toni Mulder	Arlie J. Proctor
John J. Lewandowski	Thomas E. Murrin	Mark R. Proska
Elise C. Liebers	James J. Muza	John M. Purple
Stephanie J. Lippl	Giovanni A.	Alan K. Putney
Stephen P. Lowe	Muzzarelli	Mark S. Quigley
Aileen C. Lyle	Nancy R. Myers	Richard A. Quintano
James M. Maher	Robert J. Myers	Donald K. Rainey
Barbara S. Mahoney	Thomas G. Myers	Andrew J. Rapoport
Lawrence F. Marcus	David Y. Na	Jerry W. Rapp
Leslie R. Marlo	Kenneth J. Nemlick	Donna J. Reed
Isaac Mashitz	Karen L. Nester	David E. Renze
Steven E. Math	John Nissenbaum	Ronald C. Retterath
Kelly J. Mathson	Victor A. Njakou	Donald A. Riggins
Jeffrey H. Mayer	Peter M. Nonken	Brad M. Ritter
Michael G. McCarter	David J. Oakden	Tracey S. Ritter
Charles L. McClenahan	Marc Freeman	Douglas S. Rivenburgh
Liam Michael	Oberholtzer	Sallie S. Robinson
McFarlane	Kathy A. Olcese	Sharon K. Robinson
Kelly S. McKeethan	Melinda H. Oosten	William P. Roland
Dennis T. McNeese	William L. Oostendorp	Jay Andrew Rosen
William T. Mech	Timothy A. Paddock	Allen D. Rosenbach
David L. Menning	Robert G. Palm	Deborah M. Rosenberg
Stephen V. Merkey	Donald D. Palmer	Sheldon Rosenberg
Glenn G. Meyers	Jennifer J. Palo	Gail M. Ross
Robert S. Miccolis	Nicholas H. Pastor	Lois A. Ross
David L. Miller	Charles C. Pearl, Jr.	Bradley H. Rowe
Mary Frances Miller	Marc B. Pearl	James B. Rowland
Philip D. Miller	Wende A. Pemrick	Kenneth W. Rupert, Jr.
William J. Miller	Clifford A. Pence, Jr.	Jason L. Russ
Camille Diane	Melanie Turvill	David A. Russell
Minogue	Pennington	James V. Russell
Madan L. Mittal	Andre Perez	Sean W. Russell

Melodee J. Saunders	Douglas W. Stang	Michael G. Wacek
Letitia M. Saylor	Grant D. Steer	Gregory M. Wacker
Christina L. Scannell	Phillip A. Steinen	Robert H. Wainscott
Sara E. Schlenker	Elton A. Stephenson	Christopher P. Walker
David C. Scholl	Brian M. Stoll	Thomas A. Wallace
Debbie Schwab	Edward C. Stone	Joseph W. Wallen
Peter R. Schwanke	Stuart B. Suchoff	Lisa Marie Walsh
Susanne Sclafane	Mary T. Sullivan	Mavis A. Walters
Kim A. Scott	James Surrago	Patrick M. Walton
Margaret E. Seiter	John A. Swift	William F. Weimer
Michelle G. Sheng	Susan T. Szkoda	L. Nicholas
Edward C. Shoop	Frank C. Taylor	Weltmann, Jr.
Melvin S. Silver	Michael T. S. Teng	Debra L. Werland
Christy L. Simon	Alain Thibault	Robert G. Whitlock, Jr.
Rial R. Simons	Edward D. Thomas	Peter W. Wildman
Elissa M. Sirovatka	Kevin B. Thompson	Gregory S. Wilson
Raleigh R. Skaggs, Jr.	Thomas C. Toce	Chad C. Wischmeyer
David Skurnick	Michael L. Toothman	Beth M. Wolfe
Lisa A. Slotznick	Cynthia J. Traczyk	Richard G. Woll
Christopher M.	Janet A. Trafecanty	Cheng-Sheng P. Wu
Smerald	William R. Van Ark	Paul E. Wulterkens
Michael Bayard Smith	John V. Van de Water	Richard P. Yocius
Richard A. Smith	Gary G. Venter	Edward J. Yorty
Richard H. Snader	Jennifer A. Violette	Ronald J. Zaleski
Bruce R. Spidell	Gerald R. Visintine	Joshua A. Zirin
Elisabeth Stadler	Lawrence A. Vitale	
Barbara A. Stahley	James C. Votta	

ASSOCIATES

Christopher R. Allan	Michael J. Belfatti	David R. Bowman
Nancy L. Arico	Brian K. Bell	Robert E. Brancel
Mohammed Q. Ashab	Bruce E. Binnig	Steven A. Briggs
Richard J. Babel	Raju Bohra	Donald R. Brockmeier
Glenn R. Balling	Ann M. Bok	Elliot R. Burn
Joanne Balling	Lesley R. Bosniack	J'ne E. Byckovski
Michael J. Bednarick	Erik R. Bouvin	Arthur R. Cadordine

Kenrick A. Campbell	Abbe B. Gasparro	John H. Kim
Bethany L. Cass	Eric J. Gesick	Martin T. King
Paul A. Chabarek	Nathan Terry Godbold	Elina L. Koganski
Henry H. Chen	Moshe D. Goldberg	Richard Kollmar
Philip S. Chou	Terry L. Goldberg	Frank O. Kwon
J. Paul Cochran	Gary Granoff	Timothy J. Landick
Sally M. Cohen	Michael D. Green	Thomas V. Le
Vincent P. Connor	Steven A. Green	Brian P. LePage
Warren P. Cooper	Ewa Gutman	Betty F. Lee
J. Edward Costner	Greg M. Haft	Ramona C. Lee
Richard J. Currie	Leigh Joseph Halliwell	P. Claude Lefebvre
Sheri L. Daubenmier	Scott T. Hallworth	Stephen E. Lehecka
James R. Davis	Scott J. Hartzler	Elizabeth Ann
Raymond V. DeJaco	Michael B. Hawley	Lemaster
Jeffrey F. Deigl	Jodi J. Healy	Carl J. Leo
John T. Devereux	Paul D. Henning	Steven J. Lesser
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David A. Doe	Thomas E. Hettinger	Ronald P. Lowe, Jr.
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Christopher S. Downey	David B. Hostetter	Janice L. Marks
Kevin M. Dyke	Jeffrey R. Hughes	Leslie A. Martin
Jeffrey Eddinger	Jeffrey R. Ill	Malkie Mayer
Thomas P. Edwalds	John F. Janssen	Dee Dee Mays
Dawn E. Elzinga	Joseph W. Janzen	Claudia A. McCarthy
William E. Emmons	Brian E. Johnson	Patrice McCaulley
Robert P. Eramo	Kurt J. Johnson	Heather L. McIntosh
David L. Esposito	Mark R. Johnson	Douglas W. McKenzie
Ellen E. Evans	Daniel J. Johnston	Jeffrey A. Mehalic
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Sylvain Fauchon	Chad C. Karls	Alison M. Milford
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David I. Frank	Mark J. Kaufman	Stephen A. Moffett
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Donna M. Nadeau	Chet James Rublewski	Robert W. Thompson
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Henry E. Newman	Sandra C. Santomenno	James F. Tygh
Douglas W. Oliver	Timothy D. Schutz	Cynthia L. Vidal
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Richard D. Olsen	Barbara A. Seiffertt	Benjamin A. Walden
Charles P. Orłowicz	Jeffrey P. Shirazi	Robert H. Waldman
Abha B. Patel	Kerry S. Shubat	Patricia K. Walker
Kathleen M. Pechan	Jill C. Sidney	Gregory S. Wanner
Tracie L. Pencak	Janet K. Silverman	Linda F. Ward
Miriam E. Perkins	Charles Leo Sizer	Joel S. Weiner
Luba Pesis	Gina L. B. Smith	David L. Whitley
Ellen K. Pierce	Jeffery J. Smith	William Robert Wilkins
Richard A. Plano	David C. Snow	Mary E. Wills
Igor Pogrebinsky	Jay Matthew South	Bonnie S. Wittman
Michael D. Price	Calvin C. Spence, Jr.	Calvin Wolcott
Anthony E. Ptaszniak	Catherine E. Staats	Robert F. Wolf
Ni Qin-Feng	Carol A. Stevenson	David S. Wolfe
Thomas O. Rau	Michael J. Steward II	Robert S. Yenke
Andrew S. Ribaud	Roman Svirsky	Alex Zhu
Cynthia L. Rice	John L. Tedeschi	