

**Robert A. Bear, FCAS, MAAA, CPCU**  
**Consulting Actuary, Reinsurance Consultant and Insurance Arbitrator**  
**RAB Actuarial Solutions, LLC**  
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*Actuarial, Reinsurance, and Statistical Modeling Services*

Robert Bear is a Property and Casualty Consulting Actuary, Reinsurance Consultant and Insurance Arbitrator in the firm he has established, RAB Actuarial Solutions LLC. This actuarial consulting firm's engagements have included loss reserve studies for self-insured entities and for insurance runoff operations, reinsurance pricing analyses, actuarial support for a state's financial examination of an insurance company, service as an insurance arbitrator and an actuarial expert witness in insurance and reinsurance arbitrations, resolution of complex insurance coverage claim disputes, and research on loss reserving models.

Robert Bear is an actuarial consultant with 40 years of insurance industry experience that include 20 years managing reinsurance actuarial services. After beginning his career at Insurance Services Office, he served as an actuarial manager at Prudential Reinsurance, Signet Star Reinsurance and SCOR Reinsurance Company. He then served as Senior Vice President and Chief Actuary of PXRE Group, where he was responsible for loss reserving functions and pricing model development, along with related corporate modeling.

RAB Actuarial Solutions LLC offers the following actuarial, statistical modeling and reinsurance consulting services: (1) loss reserve studies (2) reinsurance arbitration and pricing, including reinsurance commutations (3) actuarial and reinsurance expert witness and litigation support (4) research on loss reserving and reinsurance pricing models, including claim modeling using ReservePrism software ([www.reserveprism.com](http://www.reserveprism.com)), and (5) statistical and econometric modeling, including optimization studies.

Robert Bear is a Fellow of the Casualty Actuarial Society, a member of the American Academy of Actuaries, and a Chartered Property Casualty Underwriter. He has earned MS degrees in theoretical mathematics from New York University and in applied mathematics (focusing on mathematical statistics) and in economic systems from the Polytechnic Institute of New York. He graduated summa cum laude with a BA in mathematics from the University of Bridgeport.

Robert Bear has served as Vice Chairperson of the AIRROC Actuarial Committee, Chairperson of the CAS Dynamic Risk Modeling Committee, Chairperson of the Reinsurance Association of America (RAA) Actuarial Committee and as President of Casualty Actuaries in Reinsurance (CARE). He has also authored several CAS discussion papers and articles on reinsurance pricing, loss reserving, and risk modeling issues that are noted on his Curriculum Vitae. His blog on actuarial and statistical modeling issues is available at [rabactuarial.blogspot.com](http://rabactuarial.blogspot.com). He co-manages the Linked In professional groups focused on discussion of Commercial and Industry Arbitration and Mediation issues and Reinsurance Claims issues.

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**Robert A. Bear, FCAS, MAAA, CPCU**  
**Consulting Actuary, Reinsurance Consultant and Insurance Arbitrator**  
**RAB Actuarial Solutions, LLC**

### **Actuarial Expert Witness and Arbitration Services**

Robert Bear is a Property and Casualty Consulting Actuary, Reinsurance Consultant and Insurance Arbitrator in the firm he has established, RAB Actuarial Solutions LLC. In addition to his traditional actuarial consulting assignments, he has served as an insurance arbitrator and as an actuarial and reinsurance expert witness in arbitration proceedings, provided litigation support and resolved complex insurance coverage claim disputes.

He has been retained twice as a party appointed arbitrator (both cases were resolved with reasoned awards), five times as an actuarial expert witness, twice as an actuarial expert to resolve disputes arising in a London solvent scheme of arrangement, and he has provided litigation support in five cases. He was retained by the plaintiff in two of the five litigation support cases. In the two cases where he served as an actuarial expert to resolve claim disputes for a London solvent scheme of arrangement, he essentially fulfilled the role of an umpire in resolving those disputes.

Most of his litigation support and expert witness work has related to loss reserving issues and/or insurance policy (or reinsurance contract) issues. One litigation support case related to intellectual property rights, while another involved a shareholder class action suit. Another case involved the impact that a potential large claim settlement could have on a company's rating and ability to continue in business based upon capital requirements.

He has been deposed as an actuarial expert in one insurance arbitration case and in three reinsurance arbitration cases. He has testified before two reinsurance arbitration panels.

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### **Statistical Modeling Services**

Robert Bear's statistical modeling work has included the following accomplishments:

1. Consulting assignments modeling the risk that insurance loss reserves will develop adversely, especially for long-tailed lines of business.
2. Worked with PXRE Group's underwriting, actuarial, and systems professionals to measure the potential impact of each risk underwritten on economic capital requirements and profitability levels. This required extensive work with alternative catastrophe models.
3. Extensive experience fitting loss severity distributions and loss emergence patterns to insurance claims data.
4. Extensive experience pricing reinsurance treaties required the development of complex loss simulation models. This work has included numerous risk transfer analyses for finite reinsurance contracts.
5. Research performed as a consultant in developing and testing econometric loss reserving models.
6. Econometric research at Insurance Services Office leading to improved forecasting techniques in ratemaking (received outstanding performance award for Inflation Adjusted Trend Procedure).

In his statistical modeling work, he applies the Industrial Version of the Decisions Tools Suite of Excel add-ons developed by Palisade Corporation which includes the widely used @Risk simulation tool, StatTools for statistical analyses, Evolver for optimizing non-linear models, and neural tools for fitting neural networks which are predictive models.

As Chairperson of the Casualty Actuarial Society's Loss Simulation Model Working Party (LSMWP), he led the development of the Loss Simulation Model that can be used to test loss reserving methods and models. He contributed to the LSMWP paper on "Modeling Loss Emergence and Settlement Processes" that was published in the 2011 Winter CAS E-Forum.

Robert Bear also authored an article on "An Introduction to Extreme Value Theory," that was published in the May 2011 edition of the CPCU International Insurance Interest Group periodical. This topic has attracted much interest after recent natural and financial catastrophes.

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## Curriculum Vitae of Robert A. Bear

### Professional Designations

Fellow of the Casualty Actuarial Society (1986), member of the American Academy of Actuaries (1987), Chartered Property Casualty Underwriter (1993).

### Business Experience

**RAB Actuarial Solutions, LLC**      **Actuarial, Reinsurance, and Statistical Modeling Services**  
**Consulting Actuary, Reinsurance Consultant and Insurance Arbitrator**      2004-Present

RAB Actuarial Solutions LLC offers the following actuarial, statistical modeling and reinsurance consulting services: (1) loss reserve studies (2) reinsurance arbitration and pricing, including reinsurance commutations (3) actuarial and reinsurance expert witness and litigation support (4) research on loss reserving and reinsurance pricing models, including claim modeling using ReservePrism software ([www.reserveprism.com](http://www.reserveprism.com)), and (5) statistical and econometric modeling, including optimization studies.

**PXRE Group Ltd. - Senior Vice President and Chief Actuary**      1999-2004

Actuarial Department Manager and Appointed Actuary for companies within group.

Responsible for loss reserving functions and pricing model development, along with related enterprise risk management (ERM) modeling. Worked with PXRE Group's underwriting, actuarial, and systems professionals to measure the potential impact of each risk underwritten on economic capital requirements and profitability levels. Worked with catastrophe modeling staff to develop preliminary loss estimates after each major catastrophe. Priced finite treaties and reinsurance commutations. Provided actuarial support for capital raising efforts and purchase of retrocessional coverage.

**SCOR Reinsurance Company - Vice President & Actuary**      1995-1999

Actuarial pricing manager. Merger & Acquisition and retrocessional analyses.

Developed actuarial pricing programs and priced complex treaty proposals including finite treaties.

**Signet Star Reinsurance Company - Vice President & Actuary**      1987-1995

Developed and managed corporate actuarial function, with responsibilities for loss

reserves, corporate modeling, and pricing research and development.      1993-1995

Second Vice President and Technical Unit Manager, with responsibilities for pricing

model development, training and price monitoring. Priced finite treaties and

commutations. Merger & Acquisition and retrocessional analyses.      1987-1993

**Prudential Reinsurance Company - Actuarial Manager**      1984-1987

Pricing responsibilities for two years and reserving responsibilities for one year.

Developed pricing programs and priced finite treaties.

**Insurance Services Office - Senior Actuarial Analyst**      1975-1984

Commercial Casualty rate reviews, research and data quality projects.      1975-1978

Econometric research leading to improved forecasting techniques in ratemaking

(outstanding performance award for Inflation Adjusted Trend Procedure).      1978-1984

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**New Jersey Institute of Technology - Adjunct Lecturer**

1986-1987

Taught review course for Credibility and Loss Distributions sections of actuarial exam.

**Training:** ARIAS certified insurance and reinsurance arbitrator (2005-2013)

**Education**

***POLYTECHNIC INSTITUTE OF NEW YORK***

MS, Economic Systems 1982

MS, Industrial and Applied Mathematics (focusing on mathematical statistics) 1975

**NEW YORK UNIVERSITY**

MS, Mathematics 1972

**FAIRLEIGH DICKINSON UNIVERSITY**

Teaching Certification in Mathematics 1972

**UNIVERSITY OF BRIDGEPORT**

BA, Mathematics (summa cum laude) 1969

**Industry Service:** Service to the actuarial profession has included terms as Vice Chairperson of the AIRROC Actuarial Committee, Chairperson of the CAS Dynamic Risk Modeling Committee, Chairperson of the Reinsurance Association of America (RAA) Actuarial Committee, President of Casualty Actuaries in Reinsurance (CARE), Chairperson of the CAS Committee on Reinsurance Research, and member of the CAS Syllabus Committee and the Committee on Theory of Risk. Currently co-manages the Linked In professional groups focused on discussion of Commercial and Industry Arbitration and Mediation issues and Reinsurance Claims issues. Presented numerous actuarial seminars at professional meetings.

**Publications**

(1) Authored article on “An Introduction to Extreme Value Theory,” that was published in the May 2011 edition of the CPCU International Insurance Interest Group periodical.

(2) As Chairperson of the CAS Loss Simulation Model Working Party (LSMWP), Robert Bear led the development of the open source Loss Simulation Model that can be used to test loss reserving methods and models. He contributed to the LSMWP paper on “Modeling Loss Emergence and Settlement Processes” that was presented at the 2010 Casualty Loss Reserve Seminar.

(3) Authored discussion of Donald Mango’s 2005 ASTIN paper on “Insurance Capital as a Shared Asset,” that was published in the CAS 2006 Fall Forum.

(4) Authored article on “Measuring Returns after Reflecting the Rental Cost of Rating Agency Capital,” that was published in the July 2006 edition of the CAS Risk Management Section periodical.

(5) Authored discussion of Rodney Kreps’ paper on “Riskiness Leverage Models,” that was published in the 2005 CAS Proceedings.

(6) Authored discussion of the Pinto-Gogol paper on “An Analysis of Excess Loss Development,” that was published in the 1992 CAS Proceedings.

(7) Co-authored with Kenneth Nemlick the paper “Pricing the Impact of Adjustable Features and Loss Sharing Provisions of Reinsurance Treaties,” that was published in the 1990 CAS Proceedings. This paper won the 1991 Woodward-Fondiller prize, which recognizes evidence of ability for original research and the solution of advanced insurance problems.

(8) Co-authored with Daniel Minoli the paper “Hyperperfect Numbers,” that was published in the 1975 University of Oklahoma Pi Mu Epsilon Journal. Paper is referenced in Wikipedia under “hyperperfect number.”