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Steven J. Brams is Professor of Politics at New York University. He is the author or coauthor of nine books, including *Rational Politics: Decisions, Games, and Strategy* (1985), *Superpower Games: Applying Game Theory to Superpower Conflict* (1985), *Superior Beings: If They Exist, How Would We Know?* (1983), and, with Peter C. Fishburn, *Approval Voting* (1983). He was awarded a Guggenheim Fellowship for 1985–1986, during which he completed (with D. Marc Kilgour) *Game Theory and National Security*, to be published in 1988 by Basil Blackwell.

Miklós Csörgő is Professor in the Department of Mathematics and Statistics, Carleton University, Ottawa, Ontario; **Sándor Csörgő** is Professor at the Bolyai Institute, Szeged University, Szeged, Hungary. They are brothers. Sándor Csörgő has applied the parallel estimation theory presented in their paper to a general model of random censorship (“Estimating Percentile Residual Life under Random Censorship,” *Contributions to Stochastics in Honor of W. Eberl, Sr.* W. Sendler, ed. Heidelberg: Physica Verlag, 1987, pp. 19–27). He has also considered the problem in a special censorship model (“Estimation in the Proportional Hazards Model of Random Censorship,” to appear in *Statistics*). He is currently working with one of his students on the simulation project described in Section 4 of the present paper, in order to make the confidence bands in (i) and (ii) of Theorem 5 more readily applicable.

Sándor Csörgő, see **Miklós Csörgő**.

Carlos F. Daganzo is Professor of Civil Engineering, and Research Engineer for the Institute of Transportation Studies, at the University of California, Berkeley. He has served as Associate Editor of *Transportation Science* and *Transportation Research*, and has written numerous refereed articles, reports, books and monographs. His work on traffic science, demand forecasting methods, networks, terminal operations (such as ports, railyards and airports), and logistics has appeared in a wide variety of journals. This article is part of a series that also examines one-to-many networks and the various roles of transportation terminals. The cumulative work, which was supported by the National Science Foundation and the Institute of Transportation Studies, was motivated by Professor Daganzo's desire to uncover generic principles and procedures for logistic system design.

Gregory Dobson, who holds a B.S. from Cornell University and a Ph.D. from Stanford University, is Associate Professor of Operations Management and Operations Research at the William E. Simon Graduate School of Business Administration, University of Rochester. His research interests include production scheduling, location, and product line design. He is a member of both ORSA and TIMS, and of the Special Interest Group in Manufacturing (SIGMA) of ORSA.

George S. Fishman is Professor of Operations Research at the University of North Carolina at Chapel Hill. He is currently investigating the application of Monte Carlo methods to counting problems for which the computation of exact solutions is infeasible. His article arose from a desire to show how the Monte Carlo method can efficiently estimate the sensitivity of system reliability to changes in a small number of component reliabilities.

Carl M. Harris is Chairman and Professor, and **Karla L. Hoffman** is Associate Professor, in the Department of Operations Research and Applied Statistics, George Mason University; **Patsy B. Saunders** is a Mathematician in the Center for Applied Mathematics, The National Bureau of Standards. Their article is one in a series that describes the simulation, queueing and data analysis involved in their study to determine how the Internal Revenue Service might best deploy its limited resources. Professor Hoffman and Ms. Saunders performed this work while they were members of the Operations Research division of the National Bureau of Standards; Professor Harris was a consultant to the Bureau and to the IRS.

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Ming S. Hung is an Associate Professor in the Graduate School of Management, Kent State University. He is interested in mathematical programming, and is currently involved in designing algorithms in the areas of nonlinear programming, linear programming, and network flow.

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Julian Keilson is a member of the faculty of the Sloan School of Management at the Massachusetts Institute of Technology, a Senior Staff Scientist at GTE Laboratories, Waltham, Massachusetts, and Professor Emeritus at the University of Rochester. He was at the William E. Simon Graduate School of Business Administration of the University of Rochester while much of this work was conducted. He is past president of the Applied Probability College of TIMS/ORSA. **Leslie D. Servi** is a principal member of the Technical Staff of the Network Performance Analysis department at GTE Laboratories. Their article arose from the need to understand the dynamic behavior of processor schedules in telecommunication switches, as well as the conditions required for the legitimacy of steady-state analysis under changing system loads. Related papers include "D/G/1 Queues with Vacations" by Dr. Servi (*Operations Research*, Vol. 34, pp. 619–629), and, by both authors, "Oscillating Random Walk Models for GI/G/1 Vacation Systems with Bernoulli Schedules" (*Journal of Applied Probability*, 1986, Vol. 23, pp. 790–802) and "Blocking Probability for M/G/1 Vacation Systems with Occupancy Level Dependent Schedules" (to appear in *Operations Research* in 1988).

D. Marc Kilgour is Professor and Chairman of the Mathematics Department at Wilfrid Laurier University, Waterloo, Ontario, as well as Adjunct Professor of Systems Design Engineering at the University of Waterloo. He is interested in mathematical modeling, principally in conflict modeling and game theory. His article is part of an extended collaboration with Steven J. Brams on the analysis of deterrence and related questions. Their research will be published as a book, *Game Theory and National Security*, in 1988 by Basil Blackwell.

Michael A. Langston is Associate Professor of Computer Science at Washington State University, where he has been a faculty member since entering academia in 1981. His article is partly an outgrowth of his earlier work on abstract problems of robot movement, as

reported in his paper with C. D. Kim, "Movement Coordination for Single-Track Robot Systems" (*Journal of Robotic Systems*, 1987, Vol. 4, pp. 49–62). Professor Langston's contributions to the theory of scheduling, packing, routing and other problems of discrete near-optimization have appeared in a number of computer journals. His current interests include the design and analysis of computer algorithms, concrete complexity theory, combinatorial optimization, and very-large-scale integrated computer design.

Leon S. Lasdon, whose current research focuses on nonlinear programming algorithms, software and applications, holds the David Bruton, Jr., Centennial Chair in Business Decision Support Systems in the School of Business, the University of Texas at Austin. He has recently published several nonlinear programming applications articles in this journal: "Development Planning and Management of Petroleum Reservoirs Using Tank Models and Nonlinear Programming," with James W. McFarland and Verne Loose, 1984, Vol. 32, No. 2, pp. 270–289; and "Optimal Hydrocarbon Reservoir Production Policies," with Paul E. Coffman, Jr., Robert MacDonald, James W. McFarland and Kamy Sepehrnoori, 1986, Vol. 34, No. 1, pp. 40–54.

William S. Lovejoy is Assistant Professor of Decision Sciences at the Graduate School of Business, Stanford University. His note is part of an ongoing investigation into the structure of optimal policies in partially observed dynamic systems. The work was completed while the author was Assistant Professor of Management Sciences in the College of Management, Georgia Institute of Technology.

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which grew out of a performance analysis of certain packet switches in data networks.

Patsy B. Saunders, see **Carl M. Harris**.

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J. George Shanthikumar is Associate Professor of Management Science at the School of Business Administration, University of California, Berkeley. **David D. Yao** is Associate Professor of Systems Engineering at the Division of Applied Sciences, Harvard University. Their article is part of their ongoing investigation of stochastic monotonicity and convexity in queueing networks in order to provide structural properties for solving optimization problems in queueing networks. Related publications include "The Effect of Increasing Service Rates in Closed Queueing Networks" (*Journal of Applied Probability*, 1986, Vol. 23, pp. 474–483); "Optimal Server Allocation in a System of Multi-Server Stations" (*Management Science*, 1987, Vol. 34), "Second-Order Properties of the Throughput in a Closed Queueing Network" (*Mathematics of Operations Research*, to appear), and "General Queueing Networks: Representation and Stochastic Monotonicity" (Proceedings of the 26th IEEE Conference on Decision and Control, 1987).

Richard M. Soland is Professor of Operations Research in the School of Engineering and Applied Science of The George Washington University. The Strategic Defense Initiative (SDI) reawakened his interest in missile attack/defense problems, which dates back to around 1970, when he was employed at Research Analysis Corporation. He enjoys the challenge of working on such problems because they often lead to structured nonlinear discrete optimization models, many of which possess stochastic elements as well. Other research interests include iterative methods for multiple criteria decision making and optimization methods for models with "black box" functions.

Allan D. Waren is a Professor in the Department of Computer and Information Science at the James J. Nance College of Business Administration, Cleveland State University. His current research includes mathematical programming theory, algorithms, software and applications. He has worked with Leon S. Lasdon on nonlinear programming since the early 1960s, and with Ming S. Hung on the transportation problem since 1978.

David D. Yao, see **J. George Shanthikumar**.