APPENDIX 2

December 1999 Conference Participants

DREW C. ARENA Former Senior Counsel to the Assistant Attorney General, U.S. Department of Justice; former Counselor for Criminal Justice Matters at the U.S. Mission to the European Union (EU) in Brussels, Belgium. Now retired from over twenty years of federal government service, he has served as the Attorney General's senior representative in Europe for multilateral affairs and has been responsible for Justice Department relations with the EU, the Council of Europe, the United Nations Commission on Criminal Justice, and the G-8's Senior Experts Group on Organized Crime. He has worked extensively with all these organizations on issues relating to cyber crime.

JOSEPH BETSER Project Leader, Business Development and Program Management, Aerospace Corporation, El Segundo, California. He has served as a Defense Advanced Research Projects Agency (DARPA) Principal Investigator for a number of network management and information assurance projects and led activities in the growing commercial satellite network business, as well as in Department of Defense space architecture planning, and Battle Awareness and Data Dissemination (BADD). He also led the CalREN (California Research and Education Network) ATM Research Consortium (ARC), among the first ATM networks in Southern California, consisting of eleven premier university and research organizations.

CASPAR BOWDEN Director, Foundation for Information Policy Research (FIPR), London, United Kingdom (*http://www.fipr.org*), an independent nonprofit organization that studies the interaction between information technology and society, identifies technical developments with significant social impact, and commissions research into public policy alternatives. He is the coorganizer of the Scrambling for Safety public conferences on U.K. cryptography policy. He was formerly an e-commerce and Internet security consultant, senior researcher of an option-arbitrage trading firm, a financial strat-

egist with Goldman Sachs, and chief algorithm designer for a virtual reality software house.

SUSAN BRENNER Associate Dean and Professor, University of Dayton School of Law, Dayton, Ohio. The author of numerous publications, she counts cyber crime among her many and diverse interests. In particular, her "Cybercrimes Seminar," featured in a story broadcast by "NBC Nightly News," is a law school seminar taught entirely online, the output of which includes the "Model State Computer Crimes Code" (*http://www. cybercimes.net*).

ALAN B. CARROLL Supervisory Special Agent (SSA), National Infrastructure Protection Center (NIPC), U.S. Federal Bureau of Investigation (FBI). During his long career in law enforcement, he has specialized in undercover narcotics investigations, as well as bank robbery, kidnapping, and extortion cases. In addition, he has most recently worked in the areas of violent crimes, white-collar crimes, domestic terrorism, and foreign counterintelligence investigations.

GEORGE C. C. CHEN Principal, Law Firm of Tsai, Lee & Chen, Taipei, Taiwan; former Director of the Science and Technology Law Center, Institute for Information Industry. He has some twenty years of professional experience, having practiced law at a number of firms in Sydney, Taipei, and Toronto; served as an arbitrator for the Commercial Arbitration Association of Taiwan; and taught computer law and international trade law at Tunghai University. He has published extensively in the field of intellectual property law.

WILLIAM R. CHESWICK Member, Technical Staff, Lucent Technologies, Murray Hill, New Jersey. He has worked in the area of operating system security for nearly thirty years. His experience includes various positions in system management, consulting, software development, and communications design and installation at Temple University, LaSalle College, the Harvard Business School, Manhattan College, and the New Jersey Institute of Technology. He has specialized in firewalls, network security, PC viruses, mailers, and interactive science exhibits, co-authoring in 1994 the first full book on Internet security in 1994 (with Steven M. Bellovin), *Firewalls and Internet Security: Repelling the Wily Hacker* (Reading, Mass.: Addison-Wesley, 1994).

K. C. CLAFFY Research Scientist, San Diego Supercomputer Center (SDSC)/

Principal Investigator, Cooperative Association for Internet Data Analysis (CAIDA), University of California, San Diego (UCSD), La Jolla. The recipient of numerous grants and awards, she has extensive publications to her credit in her fields of specialization: symbolic systems, and computer science and engineering. Her professional experience also includes positions at the Sony Computer Science Laboratory in Tokyo, Japan; the U.S. Federal Reserve Board; AT&T Bell Laboratories; and Harry Diamond Laboratories.

MARIANO-FLORENTINO CUÉLLAR Law Clerk to the Honorable Judge Mary M. Schroeder, U.S. Court of Appeals for the Ninth Circuit. A member of the Bar of the State of California, from 1997 to 1999 he served as Senior Adviser to the Under Secretary for Enforcement, U.S. Department of the Treasury. While in Washington, D.C., he co-chaired the Initiatives Subcommittee of the Attorney General's Council on White Collar Crime. He has also worked at the President's Council of Economic Advisers and the American Bar Foundation. He holds a Ph.D. in political science from Stanford University and a J.D. from Yale Law School.

DOROTHY E. DENNING Professor, Department of Computer Science, Georgetown University, Washington, D.C. She has over thirty-two years of professional experience, twenty-four in universities (including Purdue University, the University of Rochester, and the University of Michigan) and eight in industry (including work at the Systems Research Center at Digital Equipment Corporation and the Computer Science Laboratory at SRI International), working mainly in the areas of information warfare and security and the impact of information technology on society. She has written over 100 articles and is the author of such books as: *Information Warfare and Security* (New York: ACM Press; Reading, Mass.: Addison-Wesley, 1999), *Internet Besieged: Countering Cyberspace Scofflaws* (New York: ACM Press; Reading, Mass.: Addison-Wesley, 1998), and *Cryptography and Data Security* (Reading, Mass.: Addison-Wesley, 1982).

WHITFIELD DIFFIE Distinguished Engineer, Sun Microsystems. He is best known for his 1975 discovery of the concept of public key cryptography. He has occupied the position of Distinguished Engineer at Sun since 1991 and, since 1993, has worked largely on public policy aspects of cryptography. His opposition to limitations on the business and personal use of cryptography has been the subject of articles in the *New York Times Magazine*, *Wired*, *Omni*, and *Discover*, and he is the author, with Susan Landau, of *Privacy on*

the Line: The Politics of Wiretapping and Encryption (Cambridge, Mass.: MIT Press, 1998).

EKATERINA A. DROZDOVA Doctoral Candidate, Department of Information Systems, Stern School of Business, New York University; former Researcher, Consortium for Research on Information Security and Policy (CRISP), Stanford University; Center for International Security and Cooperation (CI-SAC), Stanford University. She holds a master's degree in international policy studies from Stanford and has experience in information technology consulting in the Silicon Valley. She has conducted an in-depth survey and analysis of national laws in fifty countries to determine the extent of international consensus against cyber crime, and has published on the impact of the Internet on human rights.

DAVID D. ELLIOTT Member, Executive Committee, Consortium for Research on Information Security and Policy (CRISP), Stanford University; Consulting Professor, Center for International Security and Cooperation (CI-SAC), Stanford University; former senior staff member, U.S. National Security Council. A physicist, he has served in senior positions in government and the defense industry, including supervising the SRI International's Strategic Study Center and, as Senior Vice President, overseeing strategic planning at Science Applications International Corporation (SAIC). He has a Ph.D. in high-energy physics from the California Institute of Technology.

MICHAEL ERLINGER Co-Chairman, Intrusion Detection Working Group, Internet Engineering Task Force (IETF); Professor of Computer Science, Harvey Mudd College, Claremont, California. He has practical experience in managing industrial computer networks both as an employee and as a consultant to various aerospace firms. At IETF, he is developing protocols for the communication of intrusion information. He was formerly chair of the IETF Remote Network Monitoring Working Group, which developed the SNMP-based RMON MIB (RFC 1271) and the Token Ring extensions to RMON (RFC 1513), both of which have gained wide marketplace acceptance.

GEORGE L. FISHER Professor, Stanford Law School. An award-winning teacher and acknowledged expert in the fields of evidence and criminal law and procedure, he has been an Assistant Attorney General and Assistant District Attorney in the State of Massachusetts. He has also served as a law clerk on the U.S. Court of Appeals for the First Circuit.

JACK L. GOLDSMITH Professor, University of Chicago School of Law. Formerly an associate professor of law at the University of Virginia School of Law, he has clerked for the U.S. Court of Appeals for the Fourth Circuit, the United States Supreme Court, and the Iran-U.S. Claims Tribunal. Among his many publications are: "Against Cyberanarchy," *University of Chicago Law Review 65* (1998): 1199, and "The Internet and the Abiding Significance of Territorial Sovereignty," *Indiana Journal of Global Legal Studies 5* (1998): 475.

MARC D. GOODMAN Former Officer-in-Charge of the Los Angeles Police Department's (LAPD's) Internet and New Media Unit, LAPDO*nline*; Master's Degree Candidate in Management of Information Systems, International Computer Crime and Security Research Centre, London School of Economics; Visiting Fellow, Hoover Institution; Visiting Fellow, Center for International Security and Cooperation, Stanford University. A veteran police officer, Mr. Goodman has had myriad experiences throughout his career, including working as a high-technology crime investigator, a police manager and supervisor, an internal affairs investigator, police watch commander, undercover vice investigator, patrol officer, and police academy instructor. He is the author of "Why the Police Don't Care About Computer Crime," *Harvard Journal of Law and Technology* 10 (Summer 1997): 465.

SEYMOUR E. GOODMAN (*Conference Co-Chair*) Professor of International Affairs and Computing, Georgia Institute of Technology, Atlanta; Director, Consortium for Research on Information Security and Policy (CRISP), Stanford University; Visiting Professor, Institute for International Studies (IIS), Stanford University. Professor Goodman studies international developments in the information technologies and related public policy issues. In this capacity, he has served on many government and industry advisory study committees. He has been the International Perspectives Contributing Editor for the Communications of the ACM for the past ten years. He earned his Ph.D. from the California Institute of Technology.

BARRY RAVEENDRAN GREENE Senior Consultant, Corporate Consulting, Office of the Chief Technology Officer (CTO), Cisco Systems, Inc. Mr. Greene is responsible for business development, network design, and scaling issues for strategic Telecommunications, Internet, Multimedia, System Security, and On-Line service providers, specializing in ISP design, architecture, business planning, and service provisioning; Content Routing, WWW Caching, and Content Replication Technology Development; System and Network Secu-

rity; Campus Level Systems Integration; and Broadband Network Integration with the Internet. He was formerly Deputy Director of Planning and Operations, SingNet and the Singapore Telecom Internet Exchange. His papers (along with those of others in the CTO Group) are available: *http://www.cisco.com/public/cons/isp/docuements*.

GREGORY D. GROVE Visiting Scholar, Consortium for Research on Information Security and Policy (CRISP), Stanford University; Visiting Scholar, Center for International Security and Cooperation (CISAC), Stanford University. A member of the Bar of the State of California, he has served as a criminal prosecutor, studied military law, and has practiced intellectual property and high-technology venture-capital law. His recent publications include a study of legal restrictions upon, and resulting discretion in, the use of military personnel to protect critical infrastructures and an analysis of international legal implications of active defense responses to computer attack. Mr. Grove received an S.B. in electrical engineering from the Massachusetts Institute of Technology and a J.D. from Harvard Law School.

BOAZ GUTMAN Advocate, Computer Law Lecturer, Ruppin Institute Academic Center; former Chief Superintendent, Computer Crime Division, National Anti-Fraud Investigation Unit "B," Israeli National Police, Tel Aviv, Israel. As lawyer and legal educator, as well as a veteran policeman, in recent years he has been involved in major investigations of cyber crimes in Israel, including cooperative investigations with other countries. In March 1998, he led, together with the FBI, the "Solar Sunrise" (Pentagon hackers) investigation in Israel.

ROBERT E. KAHN Former senior member, Advanced Research Projects Agency (ARPA), subsequently Defense Advanced Research Projects Agency (DARPA); Chairman, CEO, and President, Corporation for National Research Initiatives (CNRI), Reston, Virginia. An author with extensive publications, and a recipient of numerous awards and honors, he has over thirty-five years of experience, at—among other places—Bell Laboratories and the Massachusetts Institute of Technology. He is one of the founders of Arpanet, the first packet-switched network, and he conceived the idea of open-architecture networking. He has served as Defense Advanced Research Projects Agency's (DARPA's) Director, Information Processing Techniques Office (IPTO), and is a co-inventor of the Transmission Control Protocol/ Internet Protocol (TCP/IP) structure. He also coined the term "National In-

formation Infrastructure" (NII) in the mid-1980s, which later became more widely known as the "Information Super Highway."

THOMAS A. LONGSTAFF Manager of Research and Development, Computer Emergency Response Team (CERT)/Coordination Center (CC), Software Engineering Institute (SEI), Carnegie-Mellon University, Pittsburgh, Pennsylvania. He currently manages research and development (R&D) in Survivable Network Technology (SNT) for the Networked Systems Survivability Program at the SEI. His activities include analysis of vulnerability and security incidents and methods for assessing survivability. Prior to joining SEI, he was the technical director for Computer Incident Advisory Capability (CIAC) at Lawrence Livermore National Laboratories (LLNL), Livermore, California.

STEPHEN J. LUKASIK Visiting Scholar, Consortium for Research on Information Security and Policy (CRISP), Stanford University; Visiting Professor, Georgia Institute of Technology; Director Emeritus, Advanced Research Projects Agency (ARPA, now Defense Advanced Research Projects Agency (DARPA)); former chief scientist, Federal Communications Commission (FCC). In addition to long government service involving various leadership and advisory roles with the National Research Council (NRC) and Office of Technology Assessment (OTA), among others, he has held senior positions in industry, including vice president of TRW, Inc., the Xerox Corp., the Northrop Corp., and RAND Corporation. He has lectured at Pepperdine University, and has served on the Board of Trustees of Stevens Institute of Technology and Harvey Mudd College, and on the Engineering Advisory Council for the University of California, Berkeley.

JOHN MARKOFF West Coast Correspondent, New York Times, covering the Silicon Valley, computers, and information technologies. He and Lenny Siegel co-authored The High Cost of High Tech: The Dark Side of the Chip (New York: Harper & Row, 1985). Also, with Katie Hafner he co-authored *Cyberpunk: Outlaws and Hackers on the Computer Frontier* (New York: Simon & Schuster, 1991). In addition, he co-authored with Tsutomu Shimomura Takedown: The Pursuit and Capture of Kevin Mitnick, America's Most Wanted Computer Outlaw—by the Man Who Did It (New York: Hyperion, 1996).

MICHAEL M. MAY Former Co-Director, Center for International Security and Cooperation (CISAC), Stanford University; Professor, Department of Engineering-Economic Systems and Operations Research, Stanford Univer-

sity; Director Emeritus of Lawrence Livermore National Laboratories (LLNL). He worked at LLNL from 1952 to 1988, holding a variety of research and development positions and serving as director from 1965 to 1971. He was technical adviser to the Threshold Test Ban Treaty negotiating team; a member of the U.S. delegation to the Strategic Arms Limitation Talks; and at various times has been a member of the Defense Science Board, the General Advisory Committee to the AEC, the Secretary of Energy Advisory Board, the RAND Corporation Board of Trustees, and the Committee on International Security and Arms Control of the National Academy of Sciences.

RAISUKE MIYAWAKI Chairman, Ochanomizu Associates, Tokyo, Japan; Senior Adviser, Commission on Critical Infrastructure Protection, Tokyo, Japan. Having joined Japan's National Police Agency (NPA) in 1956, he ultimately served as director of the NPA's criminal investigation division, where he headed the NPA's anti-underworld campaign. From 1986 until 1988, he served in the Senior Cabinet Secretariat of the Prime Minister of Japan, as Adviser for Public Affairs to Prime Minister Yasuhiro Nakasone. Since then, he has been Chairman of Ochanomizu Associates, a Tokyo-based think tank, and an adviser on crime, cyber terrorism, politics, public affairs, and other issues to the top leaders of a number of Japan's largest companies, among them Nippon Telegraph & Telephone (NTT), Dentsu, Inc., and ITO-CHU, Inc. He is the author of *Gullible Japanese: The Structure of Crises In Japan* (Shincho-sha, 1999).

CLIFFORD NEUMAN Professor, Computer Science Department, University of Southern California (USC); Senior Research Scientist, Information Sciences Institute, USC; Chief Scientist, CyberSafe Corporation. An expert on security and electronic commerce, he is the principal designer of the Kerberos system, a widely used technology for user authentication in Microsoft's Windows 2000, and he recently led development of Defense Advanced Research Projects Agency- (DARPA-) funded extensions to Kerberos, supporting authorization integration with the Public Key infrastructure. He is also the designer of the NetCheque system, a system for electronic micro-payments, and he has served as program chair for both the Internet Society's Symposium on Network and Distributed System Security and the Association for Computing's (ACM's) Conference on Computer and Communications Security.

DIETRICH NEUMANN Detached National Expert, Justice and Home Affairs, General Secretariat of the Council of the European Union (EU), Brussels, Belgium. A lawyer and former senior police officer in the Federal Bureau of

Investigation in Wiesbaden, Germany (Bundeskriminalamt Wiesbaden), he advises the Secretariat and the Presidency of the EU on questions related to organized crime and to the implementation of the EU's 1997 Action Plan to Fight Organized Crime. He also deals with questions regarding the EU's strategy for combating cyber crime, especially the question of how to integrate the work of the other international fora into the EU's efforts.

PETER G. NEUMANN Principal Scientist, Computer Science Laboratory, SRI International, Menlo Park, California. With over forty years in various capacities as a computer professional, including twenty-eight at SRI (formerly called the "Stanford Research Institute"), he has long been concerned with security, reliability, human safety, system survivability, and privacy in computer-communication systems and networks, and with how to develop systems that can dependably do what is expected of them. He is the author of *Computer-Related Risks* (Reading, Mass.: Addison-Wesley, 1994) and of "Computer Security in Aviation: Vulnerabilities, Threats, and Risks" (1997), prepared for the White House Commission on Aviation Safety and Security headed by Vice President Al Gore (see *http://www.csl.sri.com/neumann/ air.html*). He is chairman of the Association for Computing (ACM) Committee on Computers and Public Policy, and Moderator of its widely read Internet newsgroup "Risks Forum."

DONN B. PARKER Senior Management Systems Consultant, Advanced Information Technology, Atomic Tangerine (formerly SRI Consulting (SRIC)), Menlo Park, California. An award-winning, world-renowned consultant, lecturer, writer, and researcher on computer crime and security who is frequently quoted in the news, he has spent thirty of his forty-seven years in the computer field at SRI working in information security and against computer crime and abuse. He is the founder at SRIC of the International Information Integrity Institute (I-4), continuously serving more than seventy-five of the largest multinational corporations in the world for over thirteen years in the protection of their information assets. He has written six books on computer crime, ethics, and information security management, including *Fighting Computer Crime: A New Framework for Protecting Information* (New York: John Wiley & Sons, 1998).

RAYMOND C. PARKS Principal Member of Technical Staff, Information Design Assurance Red Team and Secure Networks and Information Systems Department, Sandia National Laboratories, Albuquerque, New Mexico. A former U.S. Air Force officer, he is an expert in "red-team" system-intrusion

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assessment efforts. His research at Sandia has included work on browserbased CORBA clients for remote monitoring of nuclear materials, multiple hypothesis tree tracking of vehicles with unattended ground sensors, UNIX system internals, nuclear weapons component surety and safety analysis, synthetic aperture radar data warehousing, and satellite sensor testing.

VIDYUT PATEL Program Director, Information Systems Security Infrastructure, U.S. Federal Aviation Administration (FAA).

WILLIAM J. PERRY Former U.S. Secretary of Defense; Senior Fellow, Hoover Institution; Michael and Barbara Berberian Professor at Stanford University, with a joint appointment in the Department of Engineering–Economic Systems and Operations Research and the Institute for International Studies. He was the nineteenth U.S. Secretary of Defense, serving from February 1994 to January 1997, and his previous government experience included the posts of Deputy Secretary of Defense (1993–94) and Under Secretary of Defense for Research and Engineering (1977–81). His business experience includes positions as laboratory director for General Telephone and Electronics (1954–64); founder and president of ESL (1964–77); executive vice president of Hambrecht & Quist (1981–85); and founder and chairman of Technology Strategies and Alliances (1985–93).

RICHARD POWER Editorial Director, Computer Security Institute (CSI), San Francisco, California. He is the author of *Current and Future Danger: A CSI Primer on Computer Crime and Information Warfare* (3d ed., San Francisco: CSI, 1999) and *Tangled Web: Tales of Digital Crime from the Shadows of Cyberspace* (New York: Que/Macmillan Publishing, 2000). Recognized as a leading voice on information security, computer crime, industrial espionage, and related subjects, he directs the annual CSI/FBI Computer Crime and Security Survey, and also writes and edits numerous other prominent industry publications, such as *Computer Security Alert*, the *Computer Security Journal*, and *Frontline*.

TONYA L. PUTNAM Doctoral Candidate, Department of Political Science, Stanford University; J.D. Candidate, Harvard Law School. From 1998 to 1999 she served as a member of counsel on the international legal team of the Republic of Namibia in litigation before the International Court of Justice. Her primary research concerns the extraterritorial jurisdictional reach of U.S. federal courts and its implications for the development of de facto international regulatory frameworks.

JOHN RAISIAN Director and Senior Fellow, Hoover Institution, Stanford University. An economist with numerous publications to his credit, he has specialized in national and international labor markets and in human resource issues. His professional career has included positions at the RAND Corporation, the University of Washington, the University of Houston, the U.S. Bureau of Labor Statistics, and the U.S. Department of Labor. He was president of Unicon Research Corporation, an economic consulting firm in Los Angeles, after leaving the Labor Department, working there until joining the Hoover Institution in 1986.

STEVEN D. RIZZI Vice President at Science Applications International Corporation (SAIC) for Advanced Information Technology, Annapolis, Maryland; Appointee of the Governor to the Maryland High Speed Network Development Task Force; Co-chair, Maryland Information Technology Board subcommittee on Internet User Privacy; Member, University of Maryland University College Technical Advisory Group (TAG); Co-chair, SAIC Information Security Subcommittee. He leads a laboratory of computer scientists and engineers who are involved in a range of information technology projects for both government and commercial clients. These projects include basic research in advanced information technology (such as reasoning systems, artificial life, collaborative tools), electronic commerce, information security and protection, intelligent city development, and networked multimedia systems.

STEIN SCHJOLBERG Chief Judge, Moss Byrett, Norway. In his thirty-year career he has served not only as a judge but also as the Assistant Commissioner of Police and as a Police Attorney in Oslo, Norway. He has published extensively on computer-assisted crime and computers and penal legislation and is a member of an international think tank on global court technology, recently organized by the National Center for State Courts in Williamsburg, Virginia. He has consulted widely on computer crime, including at Interpol, the Organization for Economic Cooperation and Development (OECD), and the Norwegian Ministry of Justice. His authoritative website is located at: *http://mossbyrett.of.no/info/legal.html*.

RANDALL E. SMITH Principal Engineer, Multilevel Secure Systems, Boeing Phantom Works, Seattle, Washington. His recent research activities include Principal Investigator for the Defense Advanced Research Projects Agency (DARPA) Strategic Intrusion Assessment Multi-Community Cyber Defense contract, where he is investigating issues involved in scaling an intrusion

detection and response framework to a cyber defense system spanning multiple administrative domains. He is a member of the DARPA ISO Information Assurance (IA) Experiment Working Group, and has extensive experience developing high-assurance MLS software, specializing in A1 security kernel development, device driver software, and embedded software development, including work on the design, analysis, development, and testing of Boeing's A1 MLS LAN product.

ARIEL T. SOBELMAN Design-Labs, Herzellia, Israel. Former Senior Research Associate and Director of the Information Warfare Project, Jaffee Center for Strategic Studies, Tel Aviv University, Tel Aviv, Israel. A veteran of the Israeli Air Force, his Ph.D. dissertation concerned adaptive network routing algorithms under severe real-time constraints. His experience includes having held the position of U.S.A. Post-Doctoral Project Development Officer at the Trans-European Research and Education Networking Association, Amsterdam, the Netherlands, where he focused on starting a Trans-European Computer Emergency Response Team (CERT).

ABRAHAM D. SOFAER (*Conference Co-Chair*) George P. Shultz Senior Fellow, Hoover Institution; Professor of Law, by Courtesy, Stanford Law School. He served as Legal Adviser to the U.S. Department of State from 1985 to 1990, negotiating several treaties, including extradition and mutual legal assistance agreements, and led the U.S. delegation in negotiations on the International Maritime Organization Convention for the Suppression of Unlawful Acts Against the Safety of Maritime Navigation (the "Maritime Terrorism Convention"). He was a federal district judge in New York City from 1979 to 1985; a Professor of Law at Columbia University School of Law from 1969 to 1979; and a federal prosecutor from 1967 to 1969. He has written extensively on international legal subjects, and currently teaches a course on Transnational Law and Institutions at Stanford Law School.

BARRY STEINHARDT Associate Director, American Civil Liberties Union (ACLU), New York, New York; former President, Electronic Frontier Foundation. He is chair of the ACLU Cyber-liberties Task Force, which coordinates the ACLU's extensive program of information technology issues. He was a co-founder of the Global Internet Liberty Campaign (GILC), the world's first international coalition of Non-Governmental Organizations (NGOs) concerned with the rights of Internet users and one of the originators of the Internet Free Expression Alliance (IFEA), which was formed to monitor issues related to Internet content rating and filtering.

DAVID J. THELANDER Senior Vice President and Chief Counsel, International Division, Charles Schwab & Co., Inc., San Francisco, California. His distinguished business and legal experience includes significant posts in investment/financial services/banking groups and private law firms. He also served with the U.S. Securities and Exchange Commission in Washington, D.C., initially as Attorney Adviser with the Division of Corporation Finance, and subsequently as Senior Counsel in the Enforcement Division, specializing in complex financial fraud matters.

H. H. WHITEMAN Director General, Security and Emergency Preparedness, Transport Canada, Ottawa, Canada. In federal government service with Transport Canada since joining the Canadian Coast Guard in 1973, he has held a number of increasingly senior positions, including Director of Security Policy Planning and Legislative Programs, responsible for the development of security policies, regulations, and measures for air, marine, and rail transportation. In August 1995 he assumed, as Acting Director General, Security and Emergency Planning, responsibility for all aspects of departmental and transportation security and emergency preparedness, and in August 1997 he was appointed Director General. He has overseen a major revision of civil aviation security requirements, managing the transfer of responsibility for aviation security screening equipment from the federal government to the air carrier industry, as well as the implementation of new arrangements for protective policing at airports.

GEORGE D. WILSON Research Fellow, Hoover Institution, Stanford University. Admitted to practice law in California, Colorado, the District of Columbia, and Maryland, as well as various federal courts, he was in private practice in Washington, D.C., and San Francisco from 1987 to 1993, working in the areas of domestic transactional business, legislative, and regulatory law. In 1994 he joined the Hoover Institution as a research assistant, and in 1998 he was appointed a research fellow. At Hoover he focuses on research and writing related to diplomacy, national security, terrorism, and transnational law.