

From Evolution to Revolution: The Founders and the Headliners of Information Security

**Georgia Tech Information Security Center
Panel session, 22nd National Information Systems Security Conference**

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Panel Chair:

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Session Abstract:

The purpose of this panel session is to present an overview of the issues which span the history of, and developments in, the field of Information Security. We aim to accomplish this by presenting selected key players to present a chronological, first-hand account of the following points:

- *Where have we come from?*
- *What have we forgotten?*
- *Where are we now?*
- *Where are we headed?*
- *What are the current government and industry demands, and how do those differ from 30 years ago?*

We propose that these panel sessions be videotaped for later use in developing a complete history of the evolution of Information Security and preserving the business lessons learned.

GTISC would like to extend special thanks to Cynthia Irvine of the Naval Post Graduate School for her contributions to the creation of this panel.

Background of Target Audience:

The GTISC panel presentation is intended for anyone interested in the aforementioned issues. As key emphasis will be placed on the importance of the *future* of Information Security, young attendees are strongly encouraged, and therefore no background “prerequisites” exist for this panel session.

Panelists:

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Steve Lipner

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ABSTRACT

Achieving Assurance: What will we do?

For thirty years, high security, multilevel security, and the goal of protecting sensitive or classified information from hostile code have been the holy grails of computer security research. We have now reached the point where the threats defined as academic hypotheses in 1975 are manifest on the Internet. Meanwhile, attempts to build systems that could respond to those threats have failed the test of the marketplace. This presentation will review some of the history of threats and countermeasures. It will then discuss some options for achieving effective protection of sensitive information that have a chance of achieving technical and market success.

BIOGRAPHY

Steven B. Lipner is director of Mitretek's Systems Technology Center division. In this role, he leads over one hundred staff who conduct specialized engineering projects in INFOSEC, software technology, and Internet applications. With almost thirty years of experience in INFOSEC, Mr. Lipner has been responsible for the evolution of Mitretek's INFOSEC work to provide additional focus on research and innovative technologies. Mr. Lipner serves as the executive agent for the cross-agency INFOSEC Research Council under a contract from the National Security Agency to Mitretek.

Prior to joining Mitretek, Mr. Lipner spent about fifteen years as a business unit manager and development manager responsible for COTS INFOSEC products. As an executive vice president of Trusted Information Systems (TIS), he was responsible for the Gauntlet Internet Firewall product line, and was the principal inventor of the TIS cryptographic key recovery technology. As manager of the Secure Systems Group at Digital Equipment Corporation, he was responsible for the development of secure operating system, network encryption and security management products including an operating system for VAX

computers that was targeted at Class A1 of the Orange Book. Mr. Lipner was one of the original industry members of the National Computer Systems Security and Privacy Advisory Board.

Peter Neumann

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BIOGRAPHY

Peter G. Neumann is a Principal Scientist in the Computer Science Laboratory at SRI (where he has been since 1971), concerned with computer system survivability, security, reliability, human safety, and high assurance. He is the author of Computer-Related Risks, Moderator of the ACM Risks Forum (comp.risks), Chairman of the ACM Committee on Computers and Public Policy, and Associate Editor of the CACM for the Inside Risks column. He was founder and for 19 years Editor of the ACM SIGSOFT Software Engineering Notes. He is currently a member of the U.S. General Accounting Office Executive Council on Information Management and Technology. See his Web site <<http://www.CSL.sri.com/neumann/>> for Senate and House committee testimonies, reports, papers, a partial bibliography, and RISKS material.

Neumann is a Fellow of the American Association for the Advancement of Science, the ACM, and the Institute of Electrical and Electronics Engineers (of which he is also a member of the Computer Society). He has received the ACM Outstanding Contribution Award for 1992, the first SRI Exceptional Performance Award for Leadership in Community Service in 1992, the Electronic Frontier Foundation Pioneer Award in 1996, the ACM SIGSOFT Distinguished Service Award in 1997, and the CPSR Norbert Wiener Award for in October 1997, for ``deep commitment to the socially responsible use of computing technology."

Todd Inskeep

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ABSTRACT

Mr. Inskeep will briefly discuss the circular history of computer security practices, and the difficulty of building systems today with applications that lack assurance, and requirements to enforce security policies that are beyond the capability of today's distributed system. Mr. Inskeep will also discuss both the need for education and some current trends in INFOSEC education.

BIOGRAPHY

Mr. Inskeep has over 15 years of Information Security experience ranging from military communications through policy, security evaluation, trusted operating systems, secure applications including PCMCIA cards and smart cards, and Public Key Infrastructure implementation. After a variety of work at the National Security Agency, Mr. Inskeep joined NationsBank as it began merging with Bank of America. At Bank of America, Mr. Inskeep explores, develops, and documents security architecture across various bank projects. These projects include distributed secure applications, secure connections to legacy systems, and application architectures for demilitarized zones (DMZ) within the firewall system. His focus is on the bank's internal PKI implementation, and the bank's implementation of the Identrus PKI - an international banking effort to enable trusted electronic commerce world-wide.

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