APPENDIX B

CURRICULUM VITAE

FOR

VGRS TECHNICAL MANAGEMENT

MARK W. RIPPE

EXPERIENCE

VeriSign Global Registry Services, Dulles, VA (March 2000 – Present)
VP of Operations. Responsible for the operation of the master database of all com/net/org domain names, including registration functions (an OLTP database processing 100 million real-time transactions per day) and Internet resolutions functions (via a globally deployed DNS nameserver constellation processing over 6 billion transactions per day). Also responsible for the operation of the Internet a.root server and generation/publication of the Internet root zone. Operation of this Internet mission critical infrastructure requires the development and implementation of systems management and monitoring tools and functions, and the operation of a 7x24 operations staff of 60, including customer service, operations center, system administrators, database administrators, network administrators, and security analysts.

Fannie Mae, Washington, D.C. (December 1993 – March 2000)
Director of Technology Operations (March 1997 – March 2000) Responsible for the operation of Fannie Mae's corporate command center and data centers, including two 16,000 sq. ft. facilities in the Washington metropolitan area that operate on a 7x24 basis. Additional responsibilities include business continuity, mainframe and Tandem platform engineering and support, reliability management (i.e., problem/change management), systems management integration (e.g., monitoring and scheduling). Managed a $15M budget and staff of 80.
Director of Systems Management Engineering (October 1995 – March 1997) Responsible for the construction and implementation of Fannie Mae's corporate command center, including facility construction, staffing, and implementation of Tivoli for monitoring infrastructure and applications. Also responsible for 7x24 unix production support in a Sun/Solaris environment comprised of over 300 enterprise level serves.
MORNETPlus Operations Manager (December 1993 - October 1995) Responsible for the daily operation of environments that support MORNETPlus applications (including Desktop Originator, Desktop Home Counselor, Desktop Underwriter, and Desktop Trader). Established a MORNETPlus command center to facilitate the monitoring of critical system and application components. Established formal configuration management tools and procedures for the MORNETPlus client/sever environment.

SAIC, McLean, VA (October 1992 – December 1993)
Manager of SAIC activities for Fannie Mae. Responsible for the business development and technical direction of SAIC activities at Fannie Mae in Washington D.C. Assisted the Advanced Technology department in the development of the software architecture for the Loan Inventory system; coauthored the Fannie Mae Object-Oriented Development Guide (based on Rumbaugh's OMT methodology). Also participated as a member of SAIC's Software Process Group responsible for defining software development processes in order to qualify for the Software Engineering Institute (SEI) Capability Maturity Model ratings.

Logicon, Arlington, VA (1984 – October 1992)

Senior Software Engineer working Integrated-CASE (I-CASE) program (April 1992-October 1992) Member of a small group of experienced software engineers responsible for developing an integrated CASE (Computer-Assisted Systems Engineering) environment to support both software development and softrware reverse engineering

Head of Process and Automation Group (1991 – April 1992) Directed a team of three senior engineers responsible for investigating, implementing and measuring the progress/success of formal methods in the software safety analysis arena; specifically Independent Software Nuclear Safety Analysis (ISNSA) for Los Angeles class nuclear submarines.

Software Development APM (1988 – 1991) As Assistant Project Manager (APM) responsible for software development, managed and directed the activities of four teams of programmers (20 individuals) in the development of an Intel-based monte carlo discrete event simulator to model airbase resource
Utilization.

Senior Systems Analyst (1984-1988) Extensive software development in IBM Assembler using CMS in a VM environment to implement a large-scale real-time system for the intelligence community.

Grumman Data Systems, McLean, VA (1983 – 1984)

Senior Programmer Analyst. Assisted Grummand Data Systems (GDS) in establishing a market base in the Washington DC area. After the acquisition of CTEC, assisted in the preparation of the GDS technical demonstrations in response to several federal RFPs.

Central Intelligence Agency, Washington D.C. (1974 – 1983)

Computer Programmer. Performed software development and maintenance on a variety of mainframe and mini-computer platforms.

SCOTT HOLLENBECK

Eighteen years of experience in technology development, full life cycle software engineering management, information security, and TCP/IP network engineering, primarily involving the analysis, design, development, and deployment of Internet domain name registration services and worldwide secure electronic messaging systems.

MAJOR AREAS OF PERFORMANCE
Internet Standards Development and Coordination
Full Life Cycle Software Engineering Management
Software Development Program Management
Internet Domain Name Registration Services
Business Process Re-Engineering
Industry Best Practices
Quality Improvement
Customer Satisfaction
Business Development and Marketing Support
Network and Information Security
Internet Technologies, Systems Integration, and Strategies
TCP/IP and OSI Protocol Specification and Use
TCP/IP, OSI, XNS, and Microsoft LAN/WAN Integration
Programming Languages, including Ada, C, C++, FORTRAN, LISP, Perl, PL/1
Operating Systems, including Solaris, HP-UX, MULTICS, SCO ODT, SunOS, Windows NT

May 1998 to Present
VERISIGN, INC. AND NETWORK SOLUTIONS, INC.
Director of Technology Strategy and Engineering Principal

Responsible for cross-corporate technology strategy development for VeriSign Global Registry Services. Authored the Extensible Provisioning Protocol, an Internet protocol for the registration and management of Internet infrastructure data including domain names. This effort required extensive coordination with members of the Internet Engineering Task Force, including development and approval of the initial concept, formation of a working group, and leadership to see the working group through the process of developing formal specifications. Managed a group of direct reports responsible for coordination with corporate research, operations, business development, and other engineering organizations.

Developed and led an Engineering mentoring program for project technical leads. This effort was focused on demonstrating leadership by example, and provided an opportunity for individuals to share experiences, learn from each other, discuss industry best practices, and to otherwise strengthen leadership skills needed in a large Engineering organization.

Managed a group of software developers to produce an open source software client for the registration of Internet domain names in the VeriSign Shared Registration System. This effort required the development of new Engineering processes to produce and maintain open source software, including coordination with corporate attorneys to develop an appropriate licensing model.

Managed a project and small team of direct reports to define formal Engineering processes for requirements management, release management, and problem escalation based on industry best practices. Developed and coordinated a separate and distinct career ladder for Engineering professionals within VeriSign.

Responsible for overall engineering program management for the development of the Shared Registration System, a multi-million dollar corporate initiative to allow world-wide competitive registration of Internet domain names in the .com, .net, and .org global top level domains in coordination with the US Department of Commerce and the Internet Corporation for Assigned Names and Numbers. Responsible for the coordination and direction of a team of 25 engineers and managers, encompassing all engineering activities ranging from requirements analysis to maintenance programming for an ongoing, multi-phased program using a spiral software engineering model. Organized and directed the activities of the Registry Advisory Board, a group of external advisors that provided Network Solutions with critical analysis of the Shared Registration System. Developed and implemented policies and procedures to support the business-to-business relationship between the Network Solutions Registry and its registrar customers. This project eventually grew into a multi-million dollar business unit within Network Solutions and VeriSign.

March 1993 to May 1998
XEROX SPECIAL INFORMATION SYSTEMS, XEROX CORPORATION
Manager, Software Systems Engineering

Responsible for management of a group of computer systems professionals with a product development focus in secure messaging technology. Management responsibilities include both people and program management. Most recent responsibilities included full life cycle software engineering management of secure messaging technologies for the U.S. Government's Defense Message System program.

Worked as a member of the Internet Engineering Task Force's S/MIME working group. This group is chartered to develop standards, protocols, and policies for uses of security technology within the Internet with a specific focus on PKI-based electronic messaging. Contributed to two Internet standards documents that describe enhanced security services for S/MIME, a standard Internet electronic message security protocol.

Worked as a member of the Multilevel Information Systems Security Initiative Key, Privilege, and Certificate Management Working Group. This group develops policies, procedures, and technologies for key management, access control, and certificate management for worldwide DOD programs.

Served as a primary advisor to the Xerox Palo Alto Research Center's Secure Documents Systems and Services research group. This group is chartered to investigate technologies that will enable Xerox to lead the evolution of the Internet, shaping the creation of a digital infrastructure around trusted documents. Provides guidance on current technologies in confidentiality, data origin authentication, integrity, access control, non-repudiation with proof of origin, and non-repudiation with proof of delivery.

Served as a member of the Xerox Corporate Encryption Policy Working Group. This group is chartered to develop corporate positions and advise senior executives of international security policies that concern worldwide Xerox business activities.

Managed technical and customer support for the Xerox Encryption Unit, a commercial inline Ethernet encryption device endorsed through the U.S. Government's Commercial COMSEC Endorsement Program.

Managed engineering proposal and customer sales support for business development activities. Responsibilities required extensive direct customer interaction, RFP evaluation, and management of proposal development.

April 1988 to March 1993
XEROX SPECIAL INFORMATION SYSTEMS, XEROX CORPORATION
Lead Software Systems Engineer

Led a team of software professionals in the development of desktop and network applications focused on information security and computer networking. Projects include development of applications in secure messaging, encryption, key management, password management, secure printing, TCP/IP file transfer, TCP/IP terminal emulation, TCP/IP Ethernet frame routing and tunneling, network performance and management, and graphical user interfaces.

Served as Chairman of the Xerox corporate software interoperability test working group. This group oversees interoperability testing for all Xerox network and desktop software products.

Provided engineering proposal and customer sales support for business development activities. Responsibilities required extensive direct customer interaction, RFP evaluation, and proposal development.

May 1984 to April 1988
UNITED STATES AIR FORCE
1st Lieutenant, Computer Systems Analyst and Software Developer, Pentagon

Provided computer systems analysis and programming support to the Office of the Assistant Secretary of Defense, Comptroller. Designed, developed, and maintained applications programs used in the DOD budget preparation process. Key responsibilities included customer requirements analysis, systems analysis, expectation management, software development, ongoing maintenance, and day-to-day customer satisfaction.

EDUCATION

George Mason University, MS Computer Science, 1993
George Mason University, Graduate Certificate in Software Engineering, 1993
Pennsylvania State University, BS Computer Science, 1984

SECURITY CLEARANCES
ISSA/TS with full lifestyle polygraph
DOD/TS

PUBLICATIONS/PAPERS
01-2002 (RFC pending), *Extensible Provisioning Protocol*, Proposed Standard prepared for the Internet Engineering Task Force provreg Working Group.
06-1999 RFC 2630, *Cryptographic Message Syntax* (with R. Housley et al.), Proposed Standard prepared for the Internet Engineering Task Force S/MIME Working Group.
06-1999 RFC 2634, *Enhanced Security Services for S/MIME* (with P. Hoffman et al.), Proposed Standard prepared for the Internet Engineering Task Force S/MIME Working Group.
03-1994 SDN.701, *Secure Data Network System Message Security Protocol* (with others), for the National Security Agency.

HONORS & AWARDS
1984   NCAA All America Fencing team.
1982   USFA Junior National Fencing team.