

Dan McMenamin and Associates (DMA)


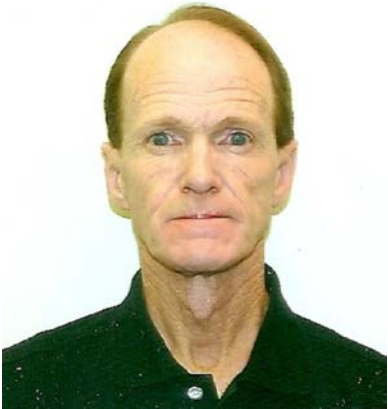





Dan McMenamin is an international telecommunications consultant with more than 11 years consulting following a 36 year career with Verizon Communications (formerly Bell Atlantic).

His background includes network equipment engineering and maintenance engineering posts covering a gamut of technologies including analog and digital switching systems, transport and radio/microwave systems, cellular systems, data centers, power systems and grounding. Dan has served on both national and international standards teams and is a member of the Lightning Protection Institute (LPI), Power Sources Manufacturer's Association, National Fire Protection Association and a Senior Member of the Institute for Electrical and Electronic Engineers (IEEE). With extensive experience at organizing and presenting technical seminars, Dan also has authored more than two dozen technical papers and articles, and has served on the Technical Program Committees of the 1990, 92, 94, 96, 98, 2000, 2002 and 2004 International TELEcommunications Energy Conferences (INTELEC). Dan has served as a featured speaker for seminars hosted by Verizon Communications, Verizon Wireless, Verizon Global Networks Inc., Marconi Corporation, Nortel Networks, Astec Corporation, Prentiss Properties, Lucent Technologies and Emerson / Liebert Corporation.



Ralph W. Carey P.E. is a graduate of Drexel University in Philadelphia with a B.S. in Civil Engineering-Construction Management. Ralph is licensed as a registered Professional Engineer in Pennsylvania. He began his career in 1972 in the Buildings Engineering Division of Bell of Pennsylvania. He held various positions of increasing responsibility- in terms of subordinates, financial accountability and geography-as Bell of Pennsylvania became Bell Atlantic and then Verizon. These positions included all aspects

	<p>of Facilities Management-space planning, building design and construction, buildings operation and maintenance, and portfolio management. Ralph's most recent position with Verizon was as Director-Building Design &amp; Construction for the Northeast with subordinates and projects from Maine to West Virginia. He managed a construction budget of \$475 million. After 9/11/2001, Ralph's organization was responsible for the reconstruction of 140 West Street in Lower Manhattan after the collapse of #1 and #2 World Trade Center to its immediate south and #7 World Trade Center to its immediate east. Ralph retired from Verizon in November 2003.</p>
	<p>Don Kearney is a 30+ year veteran of telecom. Don worked as a switch tech and supervisor in Bell of PA and then served a tour of duty as a network equipment engineer specializing in Operator Service type systems. Don took an early retirement and worked for a number of years as a field technician and maintenance support expert of Operator Switching and Automatic Call Distributors for Pac Bell and then became an installation manager for Butler communications. At Butler, Don oversaw some 160 installers and supervisors and was responsible for their quality, reliability and timeliness. Consulting with DMA, Don has managed major projects in North America and Network Equipment Installation Quality.</p>
	<p>Wayne Lail has been in the telecommunications industry for 14 years working with Bell Atlantic Mobile / Verizon Wireless in North and South Carolina on electrical power systems, power generation systems, TVSS systems, grounding systems inside and outside. For over three years he has been a project manager for installing new generator systems for the Main Switch Centers in North and South Carolina. He has been in the electrical industry for 34 years involved in commercial and industrial systems starting with a four year IBEW apprenticeship program. His duties ranged from installation, project managing, estimation, office management, design,</p>

	<p>and customer public relations.</p>
	<p>Charlie Niedzwiecki has worked in the telecommunication industry working for Verizon in various capacities in the Central Office Department. Charlie began as a equipment installation department installer installing #5xbar, Toll, and 1AESS equipment. Charlie was a Test Rated installer in both 1AESS and Toll (lead installer). He then began as a supervisor in the COEI department and managed the installation of Toll, DMS10, DMS100, 5ESS, Power, and 1AESS equipment through out the New England area. Charlie then joined the Quality assurance group as a Quality assurance Manager performing quality audits on 5ESS, DMS100, and Toll equipment. Subject Matter Expert and technical support person New England, New York, and Maryland for COEI installation for 5ESS, DMS100 and switch grounding.</p>
	<p>Clark Olson is a central office specialist with an Associates Degree in Electrical Engineering and twenty years of experience with Verizon Communications (NYNEX). His career was in central office Toll and transport, implementation, interoffice facility planning, power equipment implementation and power system technical support.</p>
	<p>Thomas Boling (Bo) Perdue – P.E. holds a Bachelor of Science degree in Mechanical Engineering from Virginia Polytechnic Institute &amp; State University and is a subject matter expert in telecommunications and data center building mechanical systems.</p> <p>During his Verizon career, Bo was responsible for design and construction for all telephone equipment and administrative buildings in Virginia and West Virginia.</p>



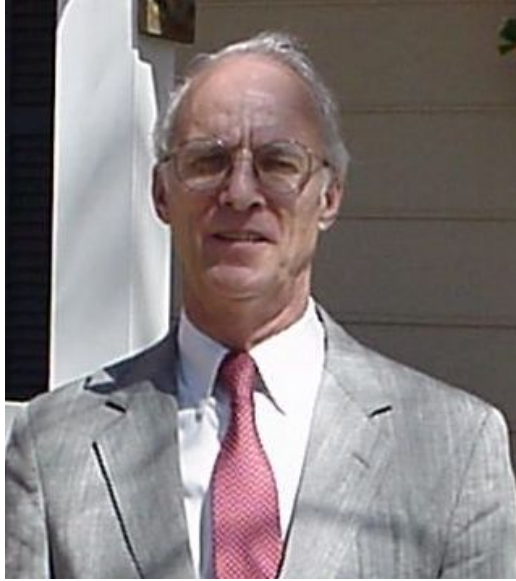
Bob Price began his career with 6 years for Western Electric, now Lucent Technologies as a 1E / 1A ESS™ Switch installer. Bob then began a new career with Bell of Pa, Bell Atlantic and now Verizon as a Maintenance Engineer, a post he held for 28 years. A systems expert in the 1 and 1A ESS™, 5ESS™ and DMS™ 100 digital switches, Bob's work includes such jobs as Cutovers, Adds, Removals, Recovery, Trouble shooting and Cause Analyses (RCA's). As a consultant with DMA, Bob is working with Echo Cancellation and timing issues.

Trademark Notes: ESS and 5ESS are registered trademarks of Lucent Technologies, DMS is a registered Trademark of Nortel Networks



#### Bio-Harvey Weintraub

Harvey has recently retired from Verizon Communications after 40 years. He began his career in communications in 1967 with the New England Telephone Company. As a Central Office Installation Technician, he specialized in the power installations of D.C. power plants and stand-by generator systems. In 1972 he joined Central Office Power engineering as an Engineer. Promoted to Central Office Power Engineering Manager in 1980, his areas of responsibility included maintenance engineering, provisioning of both AC and DC power systems, product selection, standards and test and acceptance. In 1988 he accepted a position in the Training Department. As an instructor he delivered power training for both BELLCORE and NYNEX. With subsequent mergers he continued to deliverer training across the Verizon footprint. As an instructor his power curriculum was for both Central Office and Outside Plant.



Bob Woehrle P.E. is a graduate of Virginia Polytechnic Institute & State University with a degree in Electrical Engineering. Bob has been involved with the telecommunications industry for over 40 years. Most of the time Bob was with Verizon Communications in three major areas: switching power maintenance and operations, building engineering and environmental management. Recently Bob has used his experience to Design/Build commercial and standby power, HVAC infrastructure, and remote equipment monitoring and fire suppression systems for data centers.