David J. Scarpato, P.E.
President & Founder
Scarptec, Inc.

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Mr. Scarpato is President of Scarptec, Inc., a premier provider of rock engineering solutions for the civil, mining, and energy industries. He is a geological engineer by training, with graduate degrees in both engineering and geology, and has 15 years of nationwide experience with mining, heavy civil-construction, and infrastructure development type projects. His areas of expertise include surface and underground rock mechanics, rock reinforcement design, rock excavation/blasting methods, slope stability evaluation and slope remediation, geologic hazards, icefall evaluation/mitigation, and rock mass characterization. He has instructed at numerous industry training seminars and has also served as a rock engineering expert witness on various claims cases. He is passionate about educating his clients about risk mitigation measures and is an advocate for stakeholder participation from project inception through completion. Mr. Scarpato has been both a Project Manager and Client Leader, and given his diverse geotechnical background, has the unique ability to take on very challenging projects that require a multidisciplinary approach.

Education

M.S., Geological Engineering, University of Nevada-Reno, NV. (2005)
M.S., Engineering Geosciences, Radford University, Radford, VA. (2002)
B.S., Environmental Geology, Northeastern University, Boston, MA. (1998)

Licenses

New Hampshire (Active) - Professional Engineer (Civil/Geotechnical), No. 12067
Alaska (Active) – Professional Engineer (Civil), No. 14514
NCEES Record (Active) – No. 55457
Massachusetts (Pending) – Professional Engineer (Civil)
New Hampshire (Pending) – Professional Geologist
Others (Pending)

Affiliations

Association of Environmental & Engineering Geologists (AEG)
American Rock Mechanics Association (ARMA)
American Society of Civil Engineers (ASCE)/Geo-Institute/BSCES
Society for Mining, Minerals, and Exploration (SME)
International Society of Rock Mechanics (ISRM)

Certifications
Engineering Intern (E.I.), State of Nevada (2004)
MSHA Surface Metal/Non-metal Mine Safety Certification
OSHA Hazwoper (40 hr)/First Aid Certification – Expired 2010
OSHA Confined Space Entry
OSHA Fall Protection
CUIRE Trenchless Technology New Construction Methods Certification
Arctic Engineering Certificate (University of Alaska - Anchorage)
SPRAT Level I - Certified Industrial Ropes Access Technician

Committees
ASCE Rock Mechanics Committee
AEG Natural Resource/Mining Technical Working Committee
ARMA Future Leaders Program 2012 – 2015
ASCE Subcommittee on Trenchless Installation of Pipelines (TIPS)
ASCE TIPS Task Group on Revision to Horizontal Auger Boring Manual of Practice (Small Boring Units in Hard Ground)

Continuing Education
List to be provided upon request

Project-Specific Experiences
List to be provided upon request

Volunteer
ARMA 2013 Session Chair – Dams & Foundations Session
AEG Book Reviewer
ARMA 2013 Symposium Volunteer for Student Competition, Poster Reviewer
AEG BWH Section, Radford Student Chapter – BWH Field Trip Co-presenter
Sandwich Public Library 2011 – "Dad's, Donuts, and Me – Dads 'Rock'"!
Girl Scouts of America – Geology Session to "Daisies"
Bourne Public Schools – 2012 & 2013 Geology Presentations (two sessions each)
Bourne Public Library 2013 & 2014 Summer Series - Kids Geology Presentation
Bourne Public Schools – Spring 2013 & 2014 Science Fair, Judge Committee
Boy Scouts of America, Camp Greenaugh – 2013 Summer Camp Geology Session

Experience Summary

January 2015 – Current **Scarptec, Inc.**
President **Bourne, MA**
Company start-up, including team building, development of BD/marketing materials, retention of accounting, legal, graphics, website design, and insurance experts. Initiate rock engineering project work in February 2015, focused on geohazard assessment, risk mitigation, and excavation design.

2007- 2014 **Haley & Aldrich, Inc.**
Senior Engineer to Technical Expert/Rock Mechanics **Bedford, NH**
Provided clients with specialty rock engineering services related to rock slope design, blasting/rock excavation, rock foundations, dams, and trenchless methods (HDD, tunneling) design. Assumed project management and client leadership responsibilities including proposals, business development strategies, and client reports. Provided litigation support and value engineering services, and forensics investigations. Assisted with company strategy relative to growth opportunities, new markets, and mining initiative.

2006-2007 **Golder Associates Inc.**
Staff Geotechnical Engineer **Manchester, NH**
Supported senior geologists and geotechnical engineers with civil/transportation rock slope design, analysis, and assessment of remedial options. Completed report preparation and provided client consultation. Conducted geotechnical rock core logging, field mapping, soil exploration, and instrumentation installation/monitoring. Provided other Golder offices with continued assistance in mine design in Nevada. Assumed basic business development/marketing tasks related to rock mechanics services.

2004-2006 **Golder Associates Inc.**
Mining-Geotechnical Engineer **Reno, NV**
Assisted senior level rock mechanics engineers with mine rock slope design and analysis. Responsibilities included geotechnical/oriented core logging, installation/calibration of monitoring instrumentation, geological data analysis, and report preparation. These duties were primarily in support of pit slope design evaluations for open pit metal mining operations. Also assisted senior engineers with the geotechnical evaluation of tailings dams, waste rock piles, underground workings and pipeline geologic hazard evaluation.

2003-2004 **Converse Consultants**
Staff Geologist and Geotechnical Engineer **Reno, NV**
Assisted senior engineers with analysis and design of foundations, slopes, and pavements. Provided engineering geologic insight with respect to site investigation, seismic hazard analysis, and aggregate assessment. Prepared geotechnical investigation reports and made recommendations on project proposals. Performed field and lab testing, construction inspection, and subsurface logging and sampling of geo-materials.

Select Publications & Presentations

Scarpato, D., *Constructability Challenges for Perimeter Control Blasting and Slope Development in Shale and Other "Weak" Rocks*, ISRM 2015, Shale Symposium, Scheduled for publication and presentation May 12, 2015.

Scarpato, D., Abhinav, H., Doherty, D., *Are We Doing Our Due Diligence Before Designing HDD Projects Through Rock?* North American Society for Trenchless Technology (NASTT), 2015 No-Dig Show, Denver, CO. Scheduled for publication and presentation March 17, 2015.

Scarpato, D., Woodard, M., Smith, K., Presented Implementing Effective Mine Blast Management Practices to Mitigate the Impacts to the Surrounding Environment, Session on Mine Reclamation and Geologic Materials, Association of Engineering Geologists National Meeting, Seattle, WA., 13 September 2013.

Woodard, M., Scarpato, D., Granger, A., Rock Reinforcement Performance Evaluation Based on Comparisons Between Design Criteria and Post-Design Tension Test Data, Session on Rockfall Mitigation, Association of Engineering Geologists National Meeting, Seattle, WA., 13 September 2013.

Scarpato, D., Geotechnical Considerations for Trenchless Technology, Presented 2 hr. lecture for Trenchless Technology Course, University of Texas – Arlington, 9 July 2013.

Scarpato, D., Presented: Bringing Our Entire Geotechnical Practice into The 21st Century; Capitalizing On (and Struggling With) Technological Enhancements to Our Craft, Haley & Aldrich Geotechnical Symposium, internal presentation, 1 June 2013.

Boakye, K., Scarpato, D., Paper on Evolution of Blasting Practices at Dragon Products Company Quarry Operation, Maine, USA, included in Proceedings from Society for Mining & Exploration (SME) February 2013 conference in Denver, Colorado.

Muindi, T., Miller, B., Scarpato, D., Geotechnical School for Pipelines & Trenchless Technology, Presented 8 hr. short course for Centre for Underground Infrastructure Research and Education (CUIRE), at UCT Conference, Houston, Texas, 27 January 2013.

Scarpato, David. J., Book Review – Rock Fractures in Geological Processes, by Agust Gudmundsson. Review published in Environmental & Engineering Geoscience Journal, November 2013, Vol. XIX, No. 4.

Scarpato, D. Practical Design Considerations for Rock Anchors and Rock Dowels, Presented 4 hr. Short Course for Boston Society of Civil Engineers Section of ASCE, 13 December 2012.

Scarpato, D., Woodard, M., Presented and published paper on Evaluation and Mitigation of Icefall Hazards for Civil Engineering Works, International Snow Science Workshop (ISSW), Anchorage, Alaska, 20 September 2012.

Granger, A., Woodard, M., Scarpato, D., Chadbourne, W., PPL Holtwood Hydroelectric Expansion Project: Extensive Rock Reinforcement Program Adjacent to Existing Power Station, Holtwood, PA., Granger presentation at Association of Engineering Geologists 2012 National Meeting, Salt Lake City, Utah.

Scarpato, D., Published journal article on Rock Mass Properties and Their Potential Impacts on Trenchless Projects, Underground Construction Magazine, Vol. 67, No. 8, August 2012.

Najafi, M. (2013). Trenchless Technology – Planning, Equipment, and Methods, McGraw-Hill, New York, NY.; Chapter 5 Authored by Scarpato, D., Rock Mass Properties and Trenchless Project Feasibility.

Scarpato, D.J., Boakye, K., Presented and published paper on Evaluation of Structurally-Controlled Failures in Large Quarrying Operations, in proceedings of the American Rock Mechanics Association Symposium, Chicago, Illinois, June 2012.

Scarpato, D., Woodard, M, Rockfall Assessment & Mitigation, presented 1 day short course to ASCE – Vermont Section, Geo-Institute, held at Norwich University, 22 April 2012.

Scarpato, D., Rock Mass Properties and Their Effects on Trenchless Projects, presented for Center for Underground Infrastructure Research and Education, at the Trenchless Technology “Geotechnical School”, UCT Conference, San Antonio, Texas, 22 January 2012.

Scarpato, David, presented Rockfall Assessment & Mitigation in New England, American Society of Civil Engineers – Vermont Section, Geo-Institute Sponsored Monthly Meeting, Norwich University, Norwich, Vermont, October 2011.

Scarpato, D., Woodard, M., Breskin, K., Steinert, B., presented The Icing on The Cake – Evaluation & Mitigation of Hazards Resulting from Ice Accumulation on Rock Slopes, Association of Environmental & Engineering Geologists, Annual Meeting, Anchorage, Alaska, 22 September 2011.

Scarpato, David. J., Book Review – Soil & Rock Description in Engineering Practice, by David Norbury. Review published in Environmental & Engineering Geoscience Journal, August 2011, Vol. XVII, No. 3.

William Hardy, David J. Scarpato, Steep Challenges for U.S. Route 7 Extension, Published in Land & Water Magazine, January/February 2011.

Scarpato, David & Woodard, Martin, Co-Developed and Co-Instructed Rock Engineering Short Course, Maine Department of Transportation, 14 – 16 December, 2010.

Scarpato, David & Martin Woodard, Presented Rock Engineering – Still A Core Discipline, Internal Haley & Aldrich Presentation, 1 December, 2010.

Scarpato, David, Rock Engineering Excavation Support, Route 7 Bypass Project, ADSC-IAFD Anchored Earth Retention Seminar Presentation, 4 November, 2010.

Scarpato, David, Rock Engineering Excavation Support, U.S. Route 7 Bypass Project, Internal Haley & Aldrich Presentation, 28 October, 2010.

Scarpato, David, Rock Engineering Challenges of The Route 7 Bypass Project, Northeastern University Student Chapter Presentation, American Society of Civil Engineers, April 7, 2010.

Scarpato, David, Rock Slope Design – The Industry Dictates the Approach, Internal Haley & Aldrich Power Point Presentation, December 2007.

Scarpato, David, Rock Slope Design – The Industry Dictates the Approach, Oral Presentation and published in Proceedings, Highway Geology Symposium, October 2007.

Scarpato, David, The Determination of Optimal Lift Thicknesses for the Construction of a Rockfill Tailings Dam at an Open Pit Gold Mine in the Western United States, Presentation at Association of Environmental and Engineering Geologists (AEG), Annual Meeting, Boston, MA. November 2006.

Scarpato, David, The Determination of Optimal Lift Thicknesses for the Construction of a Rockfill Tailings Dam at an Open Pit Gold Mine in the Western United States, Master's Degree Defense and Presentation (unpublished), University of Nevada - Reno, Reno, NV. December 2005.

Scarpato, David, Geostatistical Analysis of Hydraulic Properties of Cape Hatteras Sediments, Master's Degree Defense and Presentation (unpublished), Radford University, Radford, VA. April 2002.

Scarpato, D., Sexton, J., Anderson, W. (2001), Barrier Island Aquifer Heterogeneities, Hatteras Island, North Carolina, USA. Poster presented/defended at Geological Society of America (GSA) 2001 Regional Conference, Lexington, KY.