PAUL F. CICCHINI, P.E.

Education

B.S., Geological Engineering, University of Arizona, 1979

Registration

Professional Engineer (Geological), Arizona

Affiliations

American Rock Mechanics Association
Association of Engineering Geologists
International Society of Rock Mechanics
Society for Mining, Metallurgy, and Exploration

Experience

2008 - present **President, Call & Nicholas, Inc.,** Tucson, Arizona.

1994 - 2008 **Vice President, Call & Nicholas, Inc.,** Tucson, Arizona.
International consultant on rock mechanics, slope stability evaluations, and underground rock mechanics for operating properties and feasibility-level studies. Specialties include the application of analytical and numerical methods to the analysis of geologic structure and rock strength for pit slope and underground mine design.

1987 – 1994 **Senior Engineer, Call & Nicholas, Inc.,** Tucson, Arizona.
Professional responsibilities include management, planning, and supervising all aspects of projects relating to the rock mechanics evaluation and development of underground mining reserves. Areas of specialization include evaluation of backfill stabilization in deep underground mines, design of artificial underground support systems, and development of analytical methods to optimize draw drift and draw point sizing in block caving operations. Principal projects have been in Indonesia, Asia, Mexico, South America, and the United States.

1980 – 1987 **Rock Mechanics Engineer, Call & Nicholas, Inc.,** Tucson, Arizona.
Project engineer responsible for management of underground projects. Areas of specialization included rock-mass characterization, numerical modeling of rock-mass response due to mining, and the *in situ* measurement of stress and rock-mass deformation, investigations simulating the dynamic effects of earthquakes on slope stability, and economic optimization modeling for strip mine coal recovery.

1978 – 1980 **Geological Engineer, Pincock, Allen & Holt, Inc.**, Tucson, Arizona.
Engineer responsible for the supervision of surface and subsurface structure and strength data collection and testing, analysis of strength and structure data, and design of open-pit and underground mining operations in hard and soft rock. Developed analytical model for simulation of *in situ* borehole mining of uranium sands.

1977 **Field Assistant, United States Geological Survey, Conservation Division, Engineering.** Carlsbad, New Mexico.
Performed mineral lease investigations ranging from land classification and reserves inventory to environmental impact statements and mine inspections.