



A stylized, handwritten signature in black ink, consisting of several fluid, connected strokes.

MILTON H. WARD

1932–2011

Elected in 1994

“For leadership in developing, building, and operating major mineral production facilities in remote and challenging environments.”

BY JEFF WARD AND TERRY MCNULTY

MILTON “MILT” HAWKINS WARD, a prominent mining engineer and corporate leader, died on October 13, 2011, at age 79.

Dad came from a very poor family. We have photos of him in school with no shoes. As a child, he was often cold; therefore, our home and his offices were always warm. Scouting had the single most important impact on Dad’s early life. At 14 my father left scouting and started working full time at a service station, changing tires, working on cars, and driving a tow truck. In college he worked for a mining professor, who became a mentor, and at a chemical company.

Dad enjoyed tennis and, later in life, golf, but his passion was running a large mining organization. He loved the challenge of implementing management systems and the process of solving operational problems.

Dad believed that the best preparation for a mining executive was to work up through operations: from miner to foreman to superintendent to vice president of operations to president and finally to chief executive officer and chairman. This path provided Dad with a profound understanding of a wide range of technical and managerial issues ranging from initiating a block cave to keeping a mine union-free to financing some of the largest mines in the world.

Dad believed that problems had to be solved in the field, not in a corporate office. Continuously, he was visiting mines. His jets often had the highest flight hours per year in their class. These hours were not logged en route to Vail or Aspen but rather to the likes of Magadan or Arequipa. This philosophy of solving a problem by intimately involving yourself with the mine was drilled into me and is much of the reason for my success.

In addition, Dad was a big believer in facing up to problems. He would tell me that there were times when he would pray for a heart attack and he would hear the word of God saying, "Get off your ass and get out there and work through the problem." I never heard those words from God, but I got pretty close by hearing them from my dad.

Dad was an extremely hard worker. He slept only three hours a night and was always working. The greatest thing for us, as a family, was that he totally integrated us into his work. At the age of 6, I started going underground with him and together we visited mines around the world. He never hesitated to take us along. Dad understood family. I remember him negotiating with tribal chiefs in Irian Jaya. He was sympathetic to their wishes, knowing that they wanted what we all want: food, a home, and a better life for our children.

Finally, Dad was an ethical businessman. He believed in honoring his word. The Golden Rule—*treat others as you wish to be treated*—truly was golden to him.

Milt earned a B.Sc. in mining engineering and an M.Sc. in general engineering from the University of Alabama and, later in life, an M.B.A from the University of New Mexico. In 1994 he was awarded an honorary doctorate of engineering from the Colorado School of Mines. He was a true scholar and was extraordinarily knowledgeable about all aspects of mineral production. His extensive library contained texts dealing with not only mining methods, mining engineering, and rock mechanics but also geology, geophysics, mineral processing, hydrometallurgy and smelting, marketing, and mineral economics. Those who worked for Milt always expected to be asked tough questions in their own disciplines and to be grilled

about the accuracy of their responses. He was an innovator and was willing to take risks, but only after he had ensured that all risks were clearly identified and that mitigating measures were fully understood and capable of implementation. As a manager he was dedicated to cost control, performance improvements, the safety of his employees, and helping subordinates grow in their work. He led by example and made tough jobs easier because of his quick wit, fine sense of humor, and endless supply of jokes and stories.

Milt's first employer in the mining industry was the San Manuel Copper Corporation in southern Arizona, where he worked as underground miner, shift boss, engineer, and supervisor. He then joined Kerr-McGee Corporation and was general superintendent of mines for the uranium division. Remaining involved with the Grants, New Mexico, uranium district, he went on to become general manager of the United Nuclear-Homestake Partners mining and milling operation and then vice president of operations for Ranchers Exploration & Development Corporation. He worked with industry giants, including Maxie Anderson, Dean McGee, and "Jim Bob" Moffett; like them, he was a visionary.

In 1974 he joined Freeport Minerals Company as corporate vice president. He quickly rose to become president and chief executive officer, director, and member of the Office of the Chairman of Freeport McMoRan, Inc. During his 18 years with Freeport, he led the establishment of important expansions and diversifications and is best known for direction of exploration, discovery, and development of the Grasberg ore deposit in a remote part of Papua, Indonesia. Under his leadership, Grasberg became the world's largest copper and gold mine in terms of reserves. Besides being a huge copper producer, Grasberg's flotation concentrates usually contain enough gold, typically over 2 million ounces annually, to cover all operating costs. During his tenure as chairman and CEO of P. T. Freeport Indonesia, Milt led a dedicated and highly skilled organization that developed a mine on a 12,000-foot mountaintop, built a concentrator and peripheral facilities in a rain forest, and constructed a 60-mile-long slurry pipeline over tricky terrain to

a coastal shipping terminal. This was done despite incredible challenges presented by geography, weather, and a rebellious Indonesian workforce.

Milt joined Cyprus Minerals Company in 1992 as chairman, president, CEO, and director. He presided over a merger with Amax, Inc., forming Cyprus Amax Minerals Company, and engineered spin-offs of noncore businesses, including aluminum and iron ore. He led acquisitions and/or grassroots development of many copper- or gold-producing operations in South America and the former Soviet Union. He encouraged the adoption of improved exploration and mine planning tools and new technologies for the treatment of ores and concentrates. He retired in 1999 with a legacy of many globally competitive mineral enterprises.

During his career, Milt was an active member and director of many mining industry organizations, including the American Mining Congress, American Institute of Mining Engineers (AIME), Mining and Metallurgical Society of America, Canadian Institute of Mining and Metallurgy, International Council on Metals and the Environment, and Advisory Council on International Investments. AIME awarded him the Saunders Gold Medal, its highest honor for mining executives and mine developers. In 1993 he was inducted into the American Mining Hall of Fame by the Mining Foundation of the Southwest.

Milt was also intensely involved in and dedicated to education and the arts. He served on the Board of Administrators (Trustees) of Tulane University and was president and trustee of the New Orleans Museum of Art, besides being active in the guidance of many civic institutions, museums, and hospitals. An Eagle Scout as a young man, Milt served as national president of the Boy Scouts of America.

Milt Ward was a dominant figure in the global mining industry, a fine human being, and a credit to his profession. He will be long remembered and missed by many.

