Henry wasn't experienced enough in modern ice technique to go on a planned Kantega route, but Henry believed that he could have made the climb. At 59, he still wanted to go where no one had been before.

Climbing remained an important facet of Henry's productive, larger life. It was partially motivated by the photographic opportunities mountains provided. In the 1962 *Sierra Club Bulletin*, he wrote: "In one way... a camera is an essential piece of equipment because, beyond tenuous memory, photography is the only means by which the climber can relive and re-enjoy the qualities of an ascent."

Henry's commitment to service applied to the SAC and later the AAC, as well as to individuals. He was faculty advisor to the SAC for several years, contributed to the *Stanford Alpine Club Journal*, and joined the AAC in 1959. Appointed a councilor in 1966, he served as an AAC vice-president from 1968-'70.

Awarded the Nobel Prize for physics in 1990, Henry said, "I like to go where no human being has been before. I have done that in physics, done it a number of times with colleagues. We sometimes find things, and sometimes do not, but it is extraordinarily interesting.

"I like to go in the mountains to places where no one has been before. The world is an astonishingly beautiful place. It's beautiful at the deep level of physics, way down inside things. What we know of the universe that's visible to us is also of astonishing beauty, and I like to see that and explore it."

"A privilege and an inspiration" is how Frost characterized their shared experiences. "Henry always gave back more than he took."

JOHN RAWLINGS

CHARLES DAVIS HOLLISTER 1936-1999

Charley Hollister was an inexhaustibly cheerful and upbeat person with a Will Rogers-like wit, an adolescent's playfulness and an unassuming folksy manner that masked a keen and creative intellect, exceptional drive and purposefulness. Charley was by profession an earth scientist who loved the extremes—the tops of mountains and the bottoms of the oceans. He had a lifelong commitment to adventurous undertakings in research and education in marine geology and in expeditionary mountaineering. He died on August 23 of injuries sustained in a fall while scrambling during a family vacation in Wyoming. He was 63, still living life the way he drove his jeep as a teenager—pedal to the floor.

Charley's love of the out-of-doors grew from his boyhood adventures on his family's cattle ranch on the Santa Barbara, CA, coast. Charley was given free rein by the cowboys and ranch hands who ran the place. Consequently, by his early teens he was poaching deer on adjoining ranches, testing the limits of tractors, experimenting with dynamite and generally raising hell.

Charley's family enrolled him at Fountain Valley School in Colorado Springs. That's where I met him and first heard his Santa Barbara exploits. Even as a teenager, Charley was a good story teller.

Charley didn't stay at Fountain Valley. For a time it was uncertain whether he would finish high school at all. He did, of course, thanks to one of the older Santa Barbara ranch hands, who convinced him that conserving and building was preferable to wasting and breaking. After a stint in the Army, he entered Oregon State University. There, he fell under the spell

of two people who altered his life's course.

The first was Jalien Green, whom he married in 1957. Jalien encouraged him to aim high, and he did. He never chose a subsidiary peak when there was a bigger one in the neighborhood. The second was Willi Unsoeld, who encouraged him to acquire technical mountaineering skills, take up climbing seriously and join the mountain rescue group. He received his B.S. degree from Oregon State in 1960.

Oregon State stimulated Charley's interests in oceanography. Lionel Walford, then head of fisheries in Washington, D.C., recognized Charley's natural talents and recommended him to Maurice Ewing, then director of Lamont Geological Observatory at Columbia University and a world leader in oceanography. Ewing decided to take a chance on Charley and offered him a fellowship. Charley never looked back. He did an outstanding Ph.D. thesis, and his career was launched.

In the winter of 1962, Boyd Everett and I were planning an expedition to Denali's thenunclimbed southeast spur. I suggested inviting Charley. He accepted, and somehow convinced Bruce Heezen, his thesis advisor, that a trip to Alaska would do him good.

The route we had selected involved the most difficult ice climbing any of us had done. The weather didn't make it easier. It stormed nearly half the days we were on Denali. On one occasion, the wind blew so hard it shredded one of our two Logan tents. Had Charley not brought an extra two-man mountain tent, the expedition might have failed.

Despite these adversities, Charley never lost his composure. His optimism buoyed us all. Whenever I felt down about our prospects for success, Charley would cheer me up. "Now Sam," he'd say with a twinkle in his eye, a grin on his face and a waggle of his index finder, "let's examine this situation...." Charley helped you believe in yourself.

Charley wasn't an athlete whose spectacular physical abilities enabled him to climb effortlessly. But he was always there and ready when needed. On one occasion he probably saved four lives when Hank Abraons slipped, pulling Chris Wren off a ridge.

By any measure, Charley had an exceptional career. At the time of his death he was a senior scientist in the Department of Geology and Geophysics and vice president of the Corporation of Woods Hole Oceanographic Institution in Woods Hole, MA. That Charley would become one of the pillars of the Oceanographic Institution was by no means a certainty, given the way his career at Woods Hole started.

By 1964, Charley was completing the research on the effects of deep ocean currents on sediment deposition, which formed the core of his Ph.D. thesis and the focus of his future life work. Anticipating that he would soon graduate, he accepted a post-doctoral position with K.O. Emery at the Woods Hole Oceanographic Institution, to begin in the fall of 1965.

But first, he had to finish his thesis. And he and Bruce Heezen devoted much of their time to writing *The Face of the Deep*, the first book to describe the fauna, flora and sediments of the floor of the oceans. Finally, Charley left for an expedition to Antarctica, somewhat exasperating Emery.

Charley's handling of this situation characterized his approach to life: do those things that excite your imagination and fulfill your spirit. The rest will follow. The Antarctic expedition was a great success, in no small measure due to Charley. He was the expedition's chief humorist. He participated in four first ascents (the Vinson Massif, and Mts. Shinn, Gardner and Ostenso) and did some geology.

Charley's doctoral dissertation and the papers that resulted from it initiated a new sub-field of marine geology called sediment dynamics. He and collaborators identified the global effects on sediment texture and distribution of currents that run parallel to ocean ridges and



Charles Hollister.
Photo courtesy of Samuel C. Silverstein

continental margins as well as those that scour the deep ocean basins. He coined the term "contourite" to describe sediments transported by currents that parallel bathymetric contours and to distinguish them from previously described turbidites, sediments carried downhill by turbidity currents.

I recall in particular his proud and joyful smile when he told me of the cruise on which he and his colleagues obtained sediments that enabled them to identify the age of separation of the African and American continents, thereby establishing continuity between the Northern and Southern Atlantic Oceans.

"We have dated the big flush," he said.

Charley invented a device to sample ocean sediments that was almost seven times longer than existing instruments. The 100-foot-long "super straw" piston corer produced the single longest continuous record—65 million years—of ocean basin sedimentary history ever.

Charley's expertise in the dynamics of sediment transport made him among the first to recognize that large areas of the deep sea are swept by strong episodic currents known as "benthic storms." From 1979-1989, Charley was dean of the MIT-Woods Hole Oceanographic Institution's Ph.D. program. He was committed to creating opportunities for young people in oceanography.

Charley's leadership in graduate education has been recognized by the establishment at Woods Hole Oceanographic Institution of two permanent funds: a graduate student fellowship fund and the Endowed Fund for Support of Innovative Research, both in Charley's name.

In the 1980s, he made two trips to the Bhutan Himalaya, exploring the rarely visited Lunana Valley and making the first ascent of 20,000-foot Kang Tjito Ja with John Evans.

Charley became one of the Woods Hole Oceanographic Institution's most effective fund raisers. Together with his wife Jacqueline, he raised more than \$50 million in unrestricted funds.

Charley published more than 90 papers on marine geology, graduate education in oceanography and nuclear waste disposal. He co-authored one book and edited six more. He was a Fellow of the Geological Society of America and of the American Association for the Advancement of Science; an advisor to UNESCO, U.S. government agencies, the National Academy of Sciences, several national and international scientific societies, and major corporations; a Keystone Center trustee; and a director (1971-'74), vice president (1967 and 1971-'73), and briefly president (1973) of the AAC. He was a co-recipient of the John Oliver La Gorce Medal of the National Geographic Society for exploration in Antarctica, a Henry Bryant Bigelow Distinguished Lecturer at Harvard University in 1984, the Doherty Lecturer of the U.S. House of Representatives in 1997 and the posthumous recipient of a Lifetime Science Achievement Award from the International Oceanography Society in 2000. He was a member of the Union of Concerned Scientists, Bohemian Club, Explorers Club, Rancheros

Vistadores and an honorary deputy sheriff of Santa Barbara County.

He is deeply missed by those who survive him, and by his many friends and colleagues with whom he joyously shared his adventurous and productive life.

SAMUEL C. SILVERSTEIN, M.D.

ALEX LOWE 1958-1999

"The best climber in the world is the one having the most fun!"

—Alex Lowe

By the time of his sudden, tragic death beneath an avalanche on Tibet's forbidding Mount Shishapangma, Alex Lowe had become a mountain character larger than life. Many called him the greatest contemporary climber on earth (a title he personally eschewed), but he was far more than just a phenomenal mountaineer. He was an intellectual, a family man, a prankster, a communicator and an open-hearted soul who could make friends with almost anyone, from the president of the National Geographic Society to a barefoot Balti porter.

Alex touched the lives of almost everyone he met, and this was clearly demonstrated in the wake of his passing. Two of America's biggest national network news programs devoted long minutes to news of the accident—more than is often earned by prominent ambassadors or senators—and virtually every major newspaper and outdoor magazine eulogized him. Thousands of people wrote condolences to his family. The mere fact that a person as talented, experienced and powerful as Alex could perish in the mountains was a wake-up call to everyone.

Ironically, Alex never set out to become famous; he just loved to climb. He was the second son of James and Dorothea Lowe and grew up in Missoula, MT, where James was a professor at the University of Montana and Dorothea taught fourth and fifth grades. "I was a nerdy kid," Alex once told me. "I was usually the last kid chosen for basketball or baseball games."

But Alex loved the outdoors, and his parents encouraged him. He became an Eagle Scout and started climbing seriously while still in high school, pioneering many classic routes in the Bitteroot Mountains. In 1982, Alex married Jennifer Daly, a fellow climber who is now a renowned artist and the mother of his three sons, Max, Sam and Isaac. This was a devoted partnership that brought Alex great comfort, but also dismay at the ever-extended periods of time that climbing—soon to become his career —took him away from home.

At times, Alex did try to become a workaday guy. He earned a degree in engineering mechanics from Montana State University and worked briefly doing seismic surveys in Wyoming. He also looked after quality control for Black Diamond Equipment. But always the mountains lured him away.

To readers of this journal, there is little point in trying to list Alex's many mountaineering achievements. They've filled numerous pages of the AAJ. He climbed Mount Everest twice, put up some of the hardest mixed climbs ever achieved, forged the lead up some of earth's most remote big walls and set speed records everywhere he went. He guided for Exum in the Tetons, smiled from the pages of National Geographic and lectured to audiences all over the world. No one could keep up, and often no one could follow. When it came to raw talent and energy, he was in a league of his own.

Alex did have his foibles. Notably, he was addicted to exercise. He might have been one of the first climbers to understand that fitness has something to do with alpine performance.