Letters

Timbuktu Revisited

Champaign, Illinois

DR. and MRS. CLAUSER:

Last spring as I was winding up my Peace Corps work in Sierra Leone, I read about your Sahara crossing and glorious entrance into Tombouctou* ("To Timbuktu—the Hard Way"—E&S, March-April). I had already made plans to visit there, so I decided to find your friends.

My trip was a bit easier than yours. On August 3, I flew Air Mail up to Tombouctou. A Mali Tourism Office bus met the plane and carried me and a few other passengers into town. I was pleased to discover that I was sitting right next to the hotel director, who had come out to meet the plane. In my halting French, I launched into an interview with him. Yes, he remembered you (how could anyone forget?), and he was pleased to see the copy of E&S that I had brought along. Unfortunately, the hotel chauffeur who had met you was out of town.

I spent the day exploring, and in the evening walked out onto the desert and sat for a while watching the stars. When I came back, I headed for my room, but a man intercepted me with a lot of French too fast for my comprehension. Then I figured it out; he was the gung-ho chauffeur who had led your welcoming party. The rumor of my arrival reached him as soon as he got back into Tombouctou, and he was eager to see the pictures and the mention of his help in the E&S article.

The next morning I had to fly out, but I left my E&S there with your friends, who send you their greetings.

My congratulations on your successful Sahara crossing! I talked to others who had done it, and it sounds like a mighty tough expedition. Good luck on all your future adventures.

LAWRENCE SHIRLEY, '69

*For anyone who questions the difference in Larry's spelling of the name of the city and ours, we'd like to point out that our atlas gives both of them—plus "Timbuctoo." As far as we're concerned, it's dealer's choice.

In Memory of Milton Humason

Gumligen bei Bern Switzerland

EDITOR:

On June 18 of this year, Milton L. Humason (1891-1972), formerly of the Mt. Wilson and Palomar Observatories, departed forever to the hunting grounds of the world's great astronomers. There we imagine him happily comparing notes about the baffling intricacies of our universe with Aristarchus, Galileo, the Herschels, Bessel, Fraunhofer, and George Ellery Hale, his former chief and promoter. Although disregarded by the

mutual admiration societies and the windbags supposedly researching for the large national magazines, Humason has left his mark on astronomy for centuries to come, if the world survives that long.

Those of us who were lucky enough to be among his friends will always remember him for three most outstanding achievements.

First, as one of this century's great, if not its greatest, observer he enriched our knowledge enormously both through his discoveries and his penetrating observations of cosmic bodies and phenomena. These include comets, various features



Milton L. Humason

of the sun and the planets, the spectra of white dwarfs, remnants of novae and supernovae, the Humason-Zwicky stars, galaxies in general and their nuclei in particular, as well as clusters of galaxies to the remotest distances.

Humason never let himself be bluffed by those perennial high priests in astronomy who think they know it all. Although these moguls and their innumerable sycophants steadfastly claimed that the increasing redshifts observed by Humason in the spectra of ever fainter clusters of galaxies clearly meant that the universe is expanding, he never wrote about the velocities of recession of the respective galaxies but continued to call them apparent velocities of recession (and later, the symbolic velocities of recession).

When some colleagues denounced my search for faint blue stars near the north galactic pole as one of the "worst" jobs done in modern astronomy, Humason spent several years quietly observing their spectra and proved that each one of these stars (now called Humason-Zwicky stars) was unique and of a type not previously known. Likewise, when some of the so-called "greatest" insisted that intergalactic matter does not exist, or at least that it would never be observable, Humason most effectively collaborated with me to prove the contrary.

Upon his retirement from the Mt. Wilson Observatory, Humason joined me in my search for supernovae at the Palomar Mountain Observatory. During the five years of his work there, he discovered about 30 of these very rare objects, among them the first of a most important new type III.

Secondly, many who were originally outsiders to astronomy, and especially some of us lone wolves, could never have achieved what we did without Humason's continued support and help.

He saw to it that the Babylonians had to allow us "undesirables" the use of the giant telescopes of our two observatories. He also spent much time instructing us, so that we would be able to make optimum use of the available instruments.

Finally, and perhaps most important, Humason was the ideal of a scientist who knows that society has made it possible for him to pursue in peace the quests that interest him most, and that for this privilege he must in turn serve and repay society. He thus became one of the all-too small group of scientists who consider it their highest duty to bridge the ever widening gap between science and the general public. For this many men in all walks of life will remember him as their friend.

He always had the goal of a sound society and a beautiful world in his mind rather than the realization of any of the degenerate ambitions which motivate the actions of so many misguided scientists.

> FRITZ ZWICKY Professor of Astronomy Emeritus

Climb Our Mountain

Pasadena

EDITOR:

In January 1962, E&S published a letter from Richard Jali, '55, saying that a peak in the California Sierra had been named after Caltech. Jali, along with Jim Eder and Ted Matthes (also class of '55), had made an ascent of this peak on June 25, 1961, and they then proposed to the Board of Geographic Names of the Department of the Interior that the mountain be named Caltech Peak. The proposal was accepted, and the name appeared on topographic maps within a year or two afterward.

I passed through the area in 1965, thought it was nice that there was a Caltech Peak, and forgot about it until the summer of 1971 when I spent 10 days camped at an unnamed lake within sight of it. I took a picture of the mountain then, and hung an enlargement on the wall of my office when I got back to Pasadena.

There it attracted the attention of Jim Greenfield (at that time director of corporate relations in the Institute's development office). He had climbed the peak in 1970 in a party with Dick Mooney from the business services office. Greenfield urged me to make the climb when I returned to the area the next summer, so on August 20, 1972, my wife and I went to the top.

We started out at 7:40 a.m. from our camp some six miles distant and west of the ridge on which the peak is located. We weren't sure we could make the climb from that side, but it looked easy to get to a saddle on the ridge about a thousand feet below the summit. We thought we could scramble around from there to the eastern side and then walk up the comparatively easy eastern slope.

At 9:20 we were at Lake South America, directly west of the saddle, and we climbed the 900 feet to the saddle by 10:45. There we discovered that the ridge falls off very sharply to the east, but a chute leads upward on the western slope. We followed that up for another 100 feet, and it took us to an easy route on the eastern side. By 12 noon we were at the top—13,832 feet high.

A group of people who had climbed the peak on November 10, 1963, had left a register at the summit—a notebook placed in a tobacco can tucked under a rock cairn. We read the register carefully, and I tried to note all the Caltech people who had been there before us. One of the entries, dated August 16, 1964, consisted of four or five pages of history and glowing description of Caltech written by Thor Hansen, '64. It made me realize that I should probably have brought along a catalog—or at least a copy of Facts About Caltech—to leave at the top.

After that there was a five-year gap before Eric Jensen, '70, and Roger Jensen, ex '71, signed in on August 21, 1969. They were followed a couple of weeks later by Volker Vogt, '64. Vogt's party, camped at Milestone Basin, included Roger Hendrix, '65, and Alan Limpo, '64, but it does not appear that they climbed the peak.

Dale Dalrymple, '73, made the ascent on September 12, 1971, spent the night 30 feet below the summit, and headed along the ridge to Mt. Stanford the next day. My wife and I seem to be the only two Caltech people who climbed the peak in 1972.

We spent an hour at the top, looking around, taking a few pictures, and eating lunch, and started back to camp at 1:10. My notes say, "Arrived camp 4:05—a great day."

It was a great day; the views in all directions from Caltech Peak are sensational. To the south is the entire Kern River valley, and you can see the peaks in the area around Mt. Whitney on one side and the Kaweahs and the mountains to the north and south of them on the other side. To the east are Mt. Tyndall and Mt. Williamson (at 14,375 feet the second highest in the Sierra) and Diamond Mesa just across the John Muir Trail. Directly west the entire basin of the upper Kern River is laid out before your eyes. It was so beautiful we had a hard time tearing ourselves away.

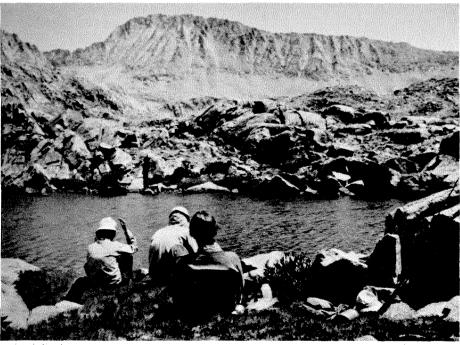
As Dick Jali indicated in his 1962 letter, the climb is long (26 miles) and arduous if you do the entire trip from Independence, over Shepherd Pass, and then up the mountain and back again. However, it is an easy day's hike from

any camp in the Upper Kern area or along the Muir Trail near Tyndall Creek.

The Climber's Guide to the High Sierra indicates that an eastern approach is Class 2—that is, it may require holding on with the hands occasionally, but in general it is possible to walk to the top. The western approach is Class 2 with a short 50-75 feet of Class 3 climbing where footholds and handholds are necessary. Whatever the class officially assigned to it, the climb is not really difficult or dangerous. It does require some agility in scrambling over rocks and keeping one's footing in steep, loose sand and rock.

The peak is not as high as Mt. Whitney, but the views are just as spectacular. One refreshing difference is in the number of people climbing the mountain on any summer day—two or three, possibly, rather than Whitney's several hundred. Climbing Caltech Peak is a grand experience, and I hope other students and faculty will want to make the effort—and enjoy the scenery and the special sense of "ownership" that we felt.

WILLIAM P. SCHAEFER Registrar



Caltech Peak

Statement of ownership, management and circulation (Act of August 12, 1970: Section 3685. Title 39. United States Code). 1. Title of publication: Engineering and Science. 2. Date of filing: September 27, 1972. 3. Frequency of issue: 7 times a year. 4. Location of known office of publication: 1201 E. California Blvd., Pasadena, Calif. 91109. 5. Location of the headquarters of general business offices of the publishers: 1201 E. California Blvd., Pasadena, Calif. 91109. 6. Names and addresses of publisher, editor, and managing editor: Publisher: California Institute of Technology Alumni Association. Editor: Edward Hutchings, Jr., Managing Editor: Jacquelyn Hershey, 1201 E. California Blvd., Pasadena, Calif. 91109. 7. Owner: California Blvd., Pasadena, Calif. 91109. 7. Owner: California Institute of Technology Alumni Association, 1201 E. California Blvd., Pasadena, Calif. 91109. 8. Known bondholders, mortgages, and other security holders owning or holding 1 percent or more of total amount of bonds, mortgages or other securities: none. 10. The purpose, function, and nonprofit status of this organization and the exempt status for Federal income tax purposes have not changed during preceding 12 months. 11. Extent and nature of circulation: A. Total no. copies printed: average during preceding 12 months. 11. Extent and nature of circulation: A. Total no. copies printed: average during preceding 12 months, 9207; actual number of latest issue, 9109. 2. mail subscriptions: average during last 12 months, 5920; actual number of latest issue, 6159. C. Total paid circulation: average during preceding 12 months, 5920; actual number of latest issue, 6179. D. Free distribution by mail, carrier or other means: 1. samples, complimentary, and other free copies: average during preceding 12 months, 9007; actual number of latest issue 2771. 2. copies distributed to news agents, but not sold: none.

E. Total distribution: average during preceding 1. months, 9007; actual number of latest issue 9850. F. Office use, left-over, unaccounted