to the editor

Perspective needed

May I warmly applaud your editorial, Man on the Moon (SN: 7/26, p. 71). You have well stated and eloquently supported a sentiment which, let us hope, will be widely adopted, and which was expressed not long ago by an editorialist of the Manchester Guardian, commenting upon our space program, who deplored the fact that "such a triumph of the technological intelligence should represent such a tragic failure of reason." We are desperately in need of such perspective.

Phillip M. Allen, M.D. University of Virginia School of Medicine Charlottesville, Va.

The moon for \$343

You capsuled the thoughts of many people when you posed the questions about the raison d'etre of the Apollo program in the July 26th issue. Certainly, this program deserves thorough scrutiny in these times of multiple demands on our people and resources.

To satisfy my own mind about the program's actual cost, I examined it in the light of the annual dollar contribution made by each working American. During the last nine years, the average civilian labor force has been 70 million. Upon dividing this figure into \$24 billion, we find that each productive citizen has contributed \$343 toward its accomplishment, or \$38 per year. This amount is equal to the average annual premium on \$2,000 or \$3,000 of ordinary life insurance. It is equal to the cost of about three freshwater fishing trips to a country lake, or half a dozen seats at the old alma mater's football games.

Perhaps we can examine it, too, as an advertising and public relations campaign, with an expenditure during this time approximately equal to that of the three large automobile producers, and the tobacco manufacturers.

An important key point is your comment that the program "has built a dependence on Federal financing into a massive segment of the national economy." It would interest me to see a simplified study of income and outgo of this and other Government programs. Of the \$24 billion, how much was poured back into the economy in the form of wages and salaries, which, in turn, were spent for more ordinary goods and services? Naturally, there is some attrition of our economic productivity during the collection and utilization of tax dollars. It is somewhat less than it appears to be, however.

Also, we cannot easily relate the \$24 billion to 80 pounds of rock, an exciting adventure and a single volume of scientific results. Substantial research and development may have been accomplished during the preliminaries; now, this can be translated into more direct accomplishment.

Finally, this effort and its past and future accomplishments might justifiably be blended with the other major efforts of mankind. . . . Together, as well as separately, the trek of Moses, the adventures of Ericson and Columbus and the harnessing of nuclear energy have raised the sights of man. Perhaps, this seemingly expensive quest is just another small dot on the Divine's timeless and insistent challenge to us.

Isaac B. Armstrong Jr. Birmingham, Ala.

Frustrated and ashamed

Thank you very much for your editorial on the Man on the Moon. The sciences so desperately need help—with funds, talent, willing workers—to

surmount the problems of men on earth that the efforts poured into the space program seem to me almost treason on the part of the leaders of our country who guide such decisions.

The newscasters who "ooohed" and "aahed" over Armstrong's footfall on the moon noted such delusions as "all Americans are proud tonite!" Phooey, the dying cancer victim, the suicidal American Indian on the reservation, the starving Appallachian child, the hateridden ghetto youth, the drug abused middle-class college student and those who care about these victims—were NOT proud. We are frustrated and ashamed.

Janet Ackenheil Thomas Harrisburg, Pa.

Too many people

"From the Editor's Desk" in the July 26 issue of Science News is one more example of the shallow, narrow minded, head-in-the-clouds type of thinking that is responsible for the majority of the world's problems today, and which permeates the "intellectual" sphere.

Your implication that the United States has "chased a rocket trail to the moon" while we could have prevented the present world eruption is representative of very naive thinking, and a prime example of innocence beyond belief.

Until the world in general accepts the fact that the basic problem is overpopulation, and that the solution is a reduction of our numbers until the so-called social sciences can catch up, even a dozen United States could not stop the eruption.

Instead of straining our technology to the breaking point to provide bare existence for ever increasing numbers, we must limit our numbers to that which can be adequately cared for by existing methods. With a general commitment to birth control this could be accomplished in about 10 years.

Thomas R. Sear Pomona, Calif.

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Superb

Please convey to your aerospace department editor, Jonathan Eberhart, my congratulations for a superb job of writing, A Mote Upon Two Seeds (SN: 7/26, p. 75). His is not only a gift in English prose but a rare insight into the human mind as well. My sense of awe is on the way to restoration.

Wayne B. Alcorn Assistant Chief Park Naturalist Rocky Mountain National Park Estes Park, Colo.

(See p. 196)