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NASA's In the Cold, Cold Ground

Undoubtedly this title represents wishful thinking; if NASA is not in the ground, it is certainly in the doghouse, and rightly so. Many of us are aware of the incredible waste of money due to this instrumentality of government, but the American people seem peculiarly insensitive to this sort of mismanagement. Other forms of mismanagement are beginning to be recognized, however.

Far and away the most ghastly is the loss of the three astronauts, one of whom at least was so well known and well loved that the loss of his life seems a personal tragedy to many people. When it is realized that the loss of these lives (and two others as well) was due to faulty judgment in using pure oxygen in the Apollo I, the loss seems almost unbearable. No chemical engineer with any experience of oxygen (no high school chemistry student, for that matter) would recommend pure oxygen for such purposes particularly in a region from which escape was impossible. But NASA is committed largely to a certain kind of scientist many of whom are profoundly ignorant of anything practical such as safety. With responsible engineers safety is never forgotten. The attempt by NASA to put the blame on subcontractors is distinctly unfair. Any experienced person must expect a failure such as an electrical breakdown somewhere sometime. The rational thing to do is to make such a failure harmless. The use

of oxygen made such a failure disastrous, and the blame for this decision rests squarely on NASA.

NASA's too great concern with speed is inexcusable. It is horrifying to have to admit that the area in which the Russians, who do not use pure oxygen, are ahead of us is in elemental human values. The thoughtful person remembers at whose knee some of these rocket experts learned their lessons.

"Incompetence and Negligence" says the *New York Times* in heading an editorial on the subject. This is true enough, although some adjectives, such as gross, are missing. It is time that this monumental boondoggle, manned space exploration, be abandoned. It consumes the national wealth and contributes almost nothing of long-range value in return; probably no such program has ever yielded less "fall-out" per dollar spent to the civilian economy. [See "The Rise and Fall of the Space Age," Edwin Diamond, Doubleday and Co., New York (1964)]. Manned space exploration can teach us very little worth knowing which instrumental exploration cannot teach us, and the cost of it can break the back of the taxpayer, whose funds would be much better spent on improving the civilian economy, or trying to solve the problems of poverty and of war, or even on himself.

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