letters

"amendment," which says, "Your investigation must be made critically and in detail; take nothing for granted, believe no general statements, and above all, avoid brainwashing by university administrators and business managers." I would add though: Don't believe the conventional wisdom on this subject. Resist the temptation to blame the people who are closest to you for things you don't understand. Consider the possibility that the reimbursement system is faulty and no person or groups of persons (university administrators) are to blame. Entertain the notion, just as a hypothesis, that the universities are reducing their science faculties because they can not afford to subsidize their research programs.

D. H. DOUGLASS
University of Rochester

5/23/80

Failure of ex-physicist

A major goal of physics education is the training of generalists. Beyond the technical details we try to teach our students to look at problems from a common-sense point of view. The impressive computer output must be tested against the order-of-magnitude estimate.

I am reminded of all this by the recent spectacular failure of an ex-physicist (see June 1966, page 45) now in a position of great power. Following his computer output, he directed a disastrous adventure in Iran, which anyone with common sense should have known was absurd. I do not know whether this failure was due to the deficiency of his education or to a subsequent deterioration. In any case, it serves to remind us that we do our profession and our nation a disservice if we train pure technicians who lack a balanced perspective and a good leavening of common sense.

LINCOLN WOLFENSTEIN
Carnegie-Mellon University
Pittsburgh, Pennsylvania

5/1/80

THE DEPARTMENT OF DEFENSE COMMENTS: The planning that went into the rescue attempt was thorough, the intelligence supporting it detailed, extensive and accurate. Training was exhaustive and painstaking, involving trials under conditions almost identical to those that would be actually encountered, and including tested provisions for a myriad of contingencies. It is certainly regrettable that a set of unfortunate and unforeseeable events combined to prevent a successful outcome, but it is grossly inaccurate to ascribe the failure of the mission to a lack of "common sense."

Far from being an "absurd" attempt, it was a carefully planned and operationally feasible effort to free a group of Americans who have been wrongly deprived of their freedom since November 1979. All concerned in the planning of the mission, or in the training for it—from the President and the Secretary of Defense to the commanders, pilots and crews—felt that it had a good chance of success.

THOMAS B. ROSS
Assistant Secretary of Defense
Washington, D.C.

High-risk proposals

I am the chairman of a task group established by the Advisory Council of the National Science Foundation to look into the adequacy of the process for funding research proposals that are highly innovative but also have a relatively high risk of failure. There seems to be a perception in some parts of the scientific community that highly imaginative proposals for research which are "off the beaten track" sometimes have difficulty in obtaining funding because scientific reviewers and agency officials are unduly conservative and tend to "play it safe."

We would very much appreciate having comments and views of the scientific community, including any knowledge of significant creative proposals for research that experienced difficulty in receiving funding from federal agencies, as well as suggestions for improving the mechanism for handling such proposals. We are also concerned about the possibility that some worthy proposals may experience difficulty because they fall between different disciplines or divisions of a discipline.

The task group is in no sense an appeal mechanism, nor does it have any possibility of determining the merits of individual proposals, but is involved in suggesting ways in which the procedures and policies of the National Science Foundation can be most effective in fostering highly creative science in our laboratories and universities.

HALSEY ROYDEN
Department of Mathematics
Stanford University
Stanford, California

5/27/80

Views of science

The report (April, page 42) of Lewis Branscomb's review of "Physics and the APS in 1979" may have conveyed the impression that we were not in full agreement in our view of science. There was no such suggestion in the text itself, but by some mischance the figures on page 47 acquired captions that implied a contrast between "Ziman's view" and "Branscomb's view." To

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