neers, in whose hands in large measure lies the national security. The extraordinary emphasis in the U.S.S.R. on training technicians to apply available information is well known. The emphasis which is given by the U.S.S.R. to technical information at the State Council of Ministers' level is also well known (even if it is not so well known that the centralized information structure is performing erratically). The United States was founded to give the individual room for maximum development, and its educational system is based on giving each person an opportunity to develop his or her talents to the maximum extent possible. The United States might well make a large national effort to discover and apply new and better techniques for training individuals in the most effective use of information, and then to devise an information system which can serve these better-developed citizens.

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Style Manual for Biological Journals: Approval of Manuscripts

Researchers ordinarily submit manuscripts to their professional journals without prior approval by administrative officers of their institutions; at least this is true in universities. Do editors consider this an undesirable practice and one to be combatted?

The Committee on Form and Style of the Conference of Biological Editors has issued a little book entitled *Style Manual for Biological Journals*. Chapter 3 of this begins, "The author should obtain approval from the responsible official within his institution before submitting a manuscript, to safeguard the interests of all staff members against erroneous or premature publication."

It is true that erroneous and premature publication harms the author and makes his institution ridiculous, but that is a small matter compared with the good effects our present editorial system has on science in general. As a rule, the journals will consider a manuscript regardless of who the author is and will see that it is reviewed by experts. If these men think it is good, it will be published. If they think it is bad, and the author isn't convinced, he can get the manuscript back and try a different journal. It is surprising that editors should undervalue their own role in the scientific process and should seek to legitimize a veto power by presidents, deans, and department heads.

Where administrative censorship is

practiced it usually exists in combination with an authoritarian constitution under which the department chairman is appointed for life and already holds a veto over pay raises and promotions. If he alone also controls the department budget, makes assignments of office and laboratory space, and decides on teaching assignments, it is understandable that his remarks on manuscripts carry a lot of weight. Under these circumstances I have known of instances in which a department head (i) insisted on changing the title and thus minimized the article's legitimate claim to consideration; (ii) sat on the article; (iii) penciled his name on the title page and thus became co-author.

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Radiation from Solar Flares

We have read with some interest the article in *Science* [**133**, 312 (3 Feb. 1961)] entitled, "Limitations on space flights due to cosmic radiations," by Howard J. Curtis. The work discussed reported on the effect of concentrated doses, and the results represent an important finding, for they completely remove any doubt which may have remained about the ability of the galactic cosmic rays to cause radiation problems in space.

However, we are somewhat disturbed that an article on an important topic which is in a journal widely read by biologists should have omitted a discussion of the potentially most troublesome source of radiation. We refer to the frequent storms of solar cosmic rays originating in large flares.

These storms have been widely discussed at meetings of the American Physical Society and the American Geophysical Union. The literature abounds with papers on the subject, many of which point out the very serious radiation hazard to space flight outside the earth's magnetic field or in the polar regions. We are quite certain that every technical group considering space flight is well aware of this problem and has gone to considerable effort to examine the difficult problem of shielding against the solar cosmic rays. We have in our files many reports on the subject of shielding, as well as records of conferences with the space agency, the Radiation Research Society, the Air Force medical groups, and other organizations. All of the authors quoted in Curtis's article, we are sure, are also familiar with the solar cosmic rays and their potentially dangerous effect from the standpoint of radiation.