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## American Inventiveness Smothered

POR at least five years, scientists and industrial leaders have been warning that America is losing momentum in research and development.

Political participation in scientific innovation has been increasing, and industrialists claim government regulations and high taxes are major factors in stifling inventiveness.

The number of patents issued is declining and a growing proportion of U.S. patents are being obtained by foreign inventors.

"Ours is a rich and resourceful country, but its spirit of adventure and invention may be drying up," said Sen. Adlai E. Stevenson, D-Ill, "Nations fail when that happens."

Similar ideas have been expressed by others, and a number of companies are utilizing institutional advertising to disseminate their concern about the decline in results of American ingenuity.

Advocates of larger government roles in research point to spinoffs from the space program as evidence that it is feasible to rely upon bureaucracy for needed or desirable technological advancement.

It was not until Russia's Sputnik spurred the United States to competitive action that this program began. In the process of proving this nation's capabilities in orbit, secondary benefits were developed, especially in computers, electronics, weather and insulation.

Critics point out that most new ideas and products now being put on the market, including those related to the space program, are applications of science that's 10 or 15 years old.

Critics also blame government regulations for slowing down private investments in research and development. Numerous application forms are required, long delays often occur, and the possibility exists that after a product has been approved by one agency, it might be banned by another bureau. High costs might never be recovered.

A pipeline of federal and private foundation funds have generated numerous questionable projects and outright boondoggling.

"While sitting on foundation committees, I have seen people asking for grants as high as \$50,000 for doing work that I would regard almost as footnotes to what has already been done," said Dr. Loren C. Eiseley, noted authority on the history of science.

Many business executives think that instead of government datbling in research directly, it should create incentives that would enable private enterprise to expand rather than shrink research.

These incentives might include flexible depreciation for facilities and equipment, as well as for patents developed or purchased, and greater tax-deductible incentives for research expenditures.

"Government officials keep asking us, 'Where are the golden eggs?' while the other part of their apparatus is beating hell out of the goose that lays them," said Sam W. Tinsley, director of corporate technology for Union Carbide Corp.