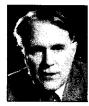
## Revising our technology policy

GORDON BELL



My bottom line for a better techpolicy: nology Stop trying to centralize every-Reduce thing. government

control and spending and distribute the responsibility for technology to industry groups.

The Executive Branch needs goals, plans with payback and accountability — not policies that enlarge an out-of-control bureaucracy. One only has to look at the High Performance Computing and Communications Initiative to see how big bucks and concentrated power can induce brain damage and wreak havoc.

In the 1970s and '80s, the Defense Advanced Research Projects Agency (DARPA) supported university research that formed products, companies and even industries. Now DARPA controls the supercomputer market with a massive development and procurement budget. creating more government-dependent companies while concentrating on massively parallel machines that may be minimally useful.

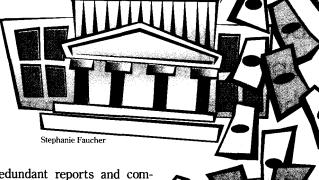
## Ready for action

I have some suggestions for increasing technology competence and reducing federal R&D spending that that can be executed immediately by the Executive Branch.

 Assign technology management responsibility to self-organized industry

with government groups partners. These industry groups will lead the planning to regain technology leadership, including the formation of consortia or laboratories. Their plans would be self-funding and include redirected government resources.

• Declare a moratorium on the production of reports and the formation of committees on technology and competitiveness. Revise reports every year, provided they track progress toward their specified recommendations and goals. Limit



redundant reports and committees to two or three.

• Take responsibility for driving technology out of the military and into the hands of a stronger, reorganized Commerce Department. Give the secretary of commerce equal power on the

established companies. Invest government funds that would otherwise go to agencies

Cabinet and reorganize the Com-

merce Department so that peo-

ple are responsible for industrial

segments, not policies. Commu-

nication with industry would re-

duce blunders such as tariffs for

the protection of dynamic ran-

dom-access memory and LCD

facturing.

Nurture

start-ups

displays that acceler-

ate offshore manu-

ventures in both

new

and

or labs in ordinary venture funds. stimulating technology transfer from government laboratory to commercial exploitation start-ups. Reward venture intrapreneurship at large and endangered companies through R&D tax credits that stimulate new ventures.

 Privatize federal labs and allow them to go into business. The World Bank has just completed a study showing that privatization does create wealth. Reduce the \$75 billion we spend on government R&D by requiring every lab to establish a timetable for privatization.

Immediately encourage labs to sell goods and services. Create external review boards to calibrate labs and aid transfer.

• Address manufacturing as our highest priority. Manufacturing engineers aren't even in the investment food chain the "research establishment" controls. This is an intellectual problem: Manufacturing is not considered academically respectable. The Japanese have it right. We have to change.

We also need to reward companies like Hewlett-Packard and IBM that are committed to manufacturing and discourage firms like Apple from becoming distributors for foreign products.

Output is the key, not budget control or policy. Applying any of these recommendations would move the U.S. in a positive direction, creating new models for growth.

Bell is a computer industry consultant at large, former head of R&D at Digital Equipment Corp., a member of various boards (including that of the Computer Museum) and winner of the 1991 National Medal of Technology.