G&B. On 16 March a letter signed by Levy was released by Michael Klepper Associates in which Levy said the information from the questionnaire was not to further the G&B suit, but was "only being used for statistical analysis for our panel." Problems arose, he added, because "someone at Gordon & Breach prematurely mailed the questionnaire before final authorization had been received from the [foundation's] board."

Even if the panel is a completely independent, neutral body, some people think G&B's litigious activities have already cast a pall over public discussion of rising journal prices. Charles A. Hamaker, librarian at Louisiana State University, said: "I'm skeptical that anything Gordon & Breach does at this stage will take care of the damage that's already been created."

Hamaker argues that a "chilling effect" is already apparent. He cited a recent journal price study published in the *Journal of Academic Librarians* that played things safe by categorizing journals by subject area—making no mention of publishers' names. And at a conference last November, Hamaker says one librarian disguised a discussion of G&B in a parable about "B&G" wine importers.

Although discussion may have been dampened, some observers think G&B may be doing more to hurt itself than to its critics. Says Jaco of the AMS: "What they are doing with this is much more attention-causing and damaging than the price survey could have ever been."

■ CONSTANCE HOLDEN

How the United States Stacks Up in Key Technologies

SUMMARY OF FOREIGN TECHNOLOGICAL CAPABILITIES

Critical Technologies	USSR	NATO Allies	Japan
SEMICONDUCTOR MATERIALS AND MICROELECTRONIC CIRCUITS	●	○○	○○○○
SOFTWARE PRODUCIBILITY	●	○○	○○
PARALLEL COMPUTER ARCHITECTURES	●	○○	○○
MACHINE INTELLIGENCE AND ROBOTICS	●	○○○	○○○○
SIMULATION AND MODELING	●	○○○	○○○
PHOTONICS	●●	○○	○○○○
SENSITIVE RADARS	●	○○	○○
PASSIVE SENSORS	●●	○○	○○
SIGNAL PROCESSING	●●	○○	○○
SIGNATURE CONTROL	●●	○○	○○
WEAPON SYSTEM ENVIRONMENT	●●●	○○○	○○
DATA FUSION	●●	○○	○○
COMPUTATIONAL FLUID DYNAMICS	●	○○	○○
AIR-BREATHING PROPULSION	●●	○○○	○○
PULSED POWER	●●●●	○○	○○
HYPERVELOCITY PROJECTILES	●●●	○○	○○
HIGH ENERGY DENSITY MATERIALS	●●●	○○○	○○○
COMPOSITE MATERIALS	●●	○○○	○○○
SUPERCONDUCTIVITY	●●	○○	○○○○
BIOTECHNOLOGY MATERIALS AND PROCESSES	●●	○○○	○○○○

Position of USSR relative to the United States		Capability of others to contribute to the technology	
●●●●	Significant leads in some niches of technology	○○○○	Significantly ahead in some niches of technology
●●●	Generally on a par with the United States	○○○	Capable of making major contributions
●●	Generally lagging except in some areas	○○	Capable of making some contributions
●	Lagging in all important aspects	○	Unlikely to make any immediate contribution

The Department of Defense has concluded that the United States leads the Soviet Union in 16 of 20 nonnuclear technologies deemed critical to military systems.* In only one area—the generation of pulses of high-power microwaves—is the Soviet Union considered ahead. No surprises there.

More worrisome: Japan is considered to be either on a par with the United States or significantly ahead in 8 of the same 20 technologies. And the areas where Japan is strongest are mostly those with primarily civilian applications. In microelectronics, for example, Japan is reckoned to be ahead of the United States in every area except for radiation hardening of semiconductors—not exactly a technique with extensive commercial applications. And though NATO allies are currently lagging in most microelectronic technologies, the report states that "this situation could drastically change in the near term" if the capabilities of individual European countries are integrated.

The Pentagon's analysis was performed at the behest of Congress. It is perhaps the most ambitious attempt yet made to evaluate how the United States stacks up against its international competitors in critical areas of technology. (The summary chart to the left explicitly compares the United States with the Soviet Union in each technology, but gives only the potential "contributions" of Japan and NATO allies relative to those of the United States. The difference is largely semantic; in each case, national technological capabilities are being compared.)

The Department of Commerce is now working on a similar assessment of U.S. capabilities in technologies deemed critical to international competitiveness. (There will clearly be some overlap.) The Office of Science and Technology Policy will eventually take both the Defense and Commerce reports and put them together into a single assessment of U.S. technological strength, which is due to go to President Bush by 30 October.

In the near term, the Department of Defense study is expected to provide ammunition for members of Congress to resist proposed reductions in spending on some of the technologies identified in the report. For example, the Administration's fiscal year 1991 budget contains no funds for an x-ray lithography project that the Defense Advanced Research Projects Agency is currently funding to the tune of $30 million a year.

Senator Jeff Bingaman (D–NM), the prime mover behind legislation directing the Administration to produce these reports, says he's trying "to get a national consensus on areas of concern." The next, and more difficult, step is presumably to get a national consensus on what to do about the concerns.

■ COLIN NORMAN

Critical Technologies Plan, Department of Defense, March 1990.