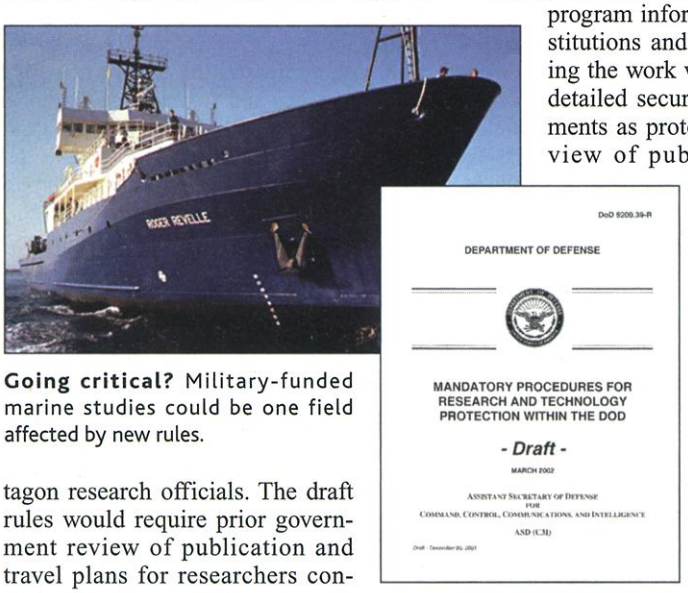
ever, to extend a linkage to the overlying stratosphere just yet. "You certainly can't rule out a role for ozone" in climate change, says meteorologist James Hurrell of the National Center for Atmospheric Research in Boulder. "But I think other things may be contributing." He and Hoerling have shown that, in climate models, the recent warming of the tropical ocean drives the AO into its positive phase (*Science*, 27 April 2001, p. 660). Now the big riddle about the patchwork of Antarctic climate change seems to have shifted from "What is the culprit?" to "What could be pushing the AAO to such an extreme?"

–RICHARD A. KERR

NATIONAL SECURITY

Pentagon Proposal Worries Researchers

A proposal to impose new controls on U.S. scientists who do basic research for the military is drawing fire from universities, members of Congress, and even some top Pentagon research officials. The draft rules would require prior government review of publication and travel plans for researchers conducting nonclassified research deemed "critical" to national security. Critics say the new rules are largely redundant, and they warn that the added paperwork could scare away top scientists from working with the Department of Defense (DOD).



Going critical? Military-funded marine studies could be one field affected by new rules.

The draft rules "are a valid effort to reassess security, but they don't appear to be very well thought out," says Jacques Gansler, a former top Pentagon research administrator in the Clinton Administration and now head of the Center for Public Policy and Private Enterprise at the University of Maryland, College Park. In an internal analysis obtained by *Science*, Don DeYoung, executive assistant to the director of research at the U.S. Naval Research Laboratory in Washington, D.C., argues that the rules "can be expected to have a chilling effect" on defense research.

The Pentagon will spend about $1.4 billion on basic research this year, with more than half going to universities for fundamental work in areas such as computer science, mathematics, and engineering. Although academic researchers have traditionally faced few restrictions, universities have reported sporadic Pentagon efforts to restrict the flow of unclassified information since the 11 September terrorist attacks (*Science*, 22 February, p. 1438).

Last week, those whispers took shape in the form of a leaked 120-page draft regulation entitled *Mandatory Procedures for Research and Technology Protection Within the DOD*. The internal document, dated 25 March and first reported last week by the *Chronicle of Higher Education*, describes a multilayered plan for protecting sensitive information. The first step would have Pentagon program managers decide if DOD-funded studies at universities, companies, or military laboratories involve "critical research technologies" or "critical program information." If so, the institutions and researchers conducting the work would have to prepare detailed security plans, label documents as protected, obtain prior review of publication and travel plans, and decide whether to place restrictions on any foreign scientists involved in the project. The Pentagon would also create a centralized database to track the work it has funded.

The plan is deeply flawed, says DeYoung, who responded to a memo from senior DOD officials asking for comment. In a brisk seven-page analysis, he argues that the draft rules overstate potential threats, ignore a 16-year-old presidential order against restrictions on military-funded basic research, and duplicate existing government efforts to protect critical technologies. He also argues that the rules will lead to a counterproductive, ever-expanding definition of critical research. "In a competitive budget environment," he writes, "there will be a strong propensity for managers to designate their projects as critical."

Such fears are being echoed in Congress. "This could become another endless bureaucracy," says one Senate aide. Adds Senator Jeff Bingaman (D–NM), who sits on the Armed Services Committee, "they are trying to wall off researchers." Despite such concerns, however, lawmakers plan to wait for the Pentagon to come up with a final plan before reacting. "There isn't much appetite right now to micromanage [the military]," says a House aide. University and industry lobbyists are also keeping their powder dry in hopes that the Pentagon will modify its current proposal. DOD has been asked to extend the comment period, which was supposed to end this week.

Gansler laments the fact that the proposal comes "just as world-class researchers and companies were showing a little greater interest in doing defense research." He fears that any additional rules may cement the Pentagon's reputation as a funding source that's more trouble than it's worth.

–DAVID MALAKOFF

RESEARCH FUNDING

Europe Begins Work on Modest New Agency

STOCKHOLM—You know scientists are desperate when they clamor for new bureaucratic paws on the R&D purse strings. But rampant dissatisfaction with Europe's basic research strategy—or lack thereof—has sparked calls for a new grantmaking body to fill the void. At a meeting here last week, the continent's top science managers started to flesh out a proposal for a European Research Council (ERC). It may not be what many scientists were hoping to see, but it does reflect budgetary constraints and the reality of the European Union's byzantine politics.

The council's proponents invoke some disturbing numbers in arguing their case. European governments spend, on average, 2% of their budgets on R&D, compared with 4.2% in the United States, and the gap has widened significantly since 1995. "We have to do something, and we have to do it now," says Dan Brändström, executive director of the Bank of Sweden Tercentenary Foundation and chair of a Swedish committee on the future of research in the European Union.

Most research funding in Europe—roughly 96%—comes from national agencies. Nearly all the rest comes from a $4-billion-a-year pot known as the Framework program, administered by the E.U. But Framework targets mainly R&D that is likely to benefit industry in the near term, and industry currently favors hot fields such as genomics and nanotechnology.

That has left many disciplines out in the cold, including some that are starved for support from the national agencies. Frank Gannon, executive director of the European

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