former director of Lawrence Berkeley National Laboratory, is a member of the panel. "Although safety might have been lacking in some areas at SLAC," says Shank, "Dorfan is well known among lab directors for his strong commitment to safety."

The Stanford panel is asked to ensure that appropriate systems and procedures are in place for safe resumption of the SLAC experimental program. The panel is expected to report to Hennessy by 1 March. Final approval for restarting the accelerators and storage rings on the SLAC site, including the Stanford Synchrotron Radiation Laboratory's standalone SPEAR ring, must come from DOE. **Bertram Schwarzschild**

Publishing Restrictions Eased, but Not Rescinded

US publishers may conduct normal publishing activities with private citizens in Cuba, Iran, and Sudan, countries under US economic embargo, according to a 15 December 2004 ruling by the Treasury Department's Office of Foreign Assets Control. The ruling overrides prohibitions that had led to self-censorship, fears of fines and jail time, and lawsuits against OFAC by authors and publishers.

In a press release, Stuart Levey, an under secretary for the Treasury's Office of Terrorism and Financial Intelligence, said, "OFAC's previous guidance was interpreted by some as discouraging the publication of dissident speech from within [the] oppressive regimes [of the embargoed countries]. That is the opposite of what we want."

For publishers and lawmakers, the ruling is an improvement, but it's not what they really want: no governmental regulation of publishing. Before this latest ruling, OFAC "had insisted that activities assisting 'works in progress' such as co-authorship and 'artistic or significant enhancement' were prohibited," says Marc Brodsky, executive director of the American Institute of Physics and chairman of the Association of American Publishers professional and scholarly publishing division, a party to a lawsuit filed last year against OFAC (see PHYSICS TODAY, November 2004, page 33). The new ruling "removes for a while the sword hanging over the heads of authors and publishers," says Brodsky. But, he adds, it excludes many governmental entities. "I don't know what the implications are." As an example, he asks how publications from government organizations similar to National Institutes of Health in the embargoed countries will be handled.

Moreover, says Brodsky, "publishers worry that OFAC might again arbitrarily and capriciously change its regulations, and we think they have no right to even issue regulations on publishing." In response to the new ruling, Representative Howard Berman (D-CA), author of the 1988 amendment that exempts "information" and "informational materials" from government regulation, released a statement saying, "OFAC is still acting like they have the authority to grant permission and that interferes with our fundamental right to freedom of expression."

"The plaintiffs are still considering whether to continue the lawsuit," Brodsky says. Besides the principle of free speech, he adds, "we'd like to recover our [legal] costs. It's been hundreds of thousands of dollars." **Toni Feder**

Countries Race to Launch Moon Missions

When James B. Garvin, NASA's newly appointed chief scientist, first spoke to PHYSICS TODAY last month about President Bush's space vision of returning humans to the Moon, he was caught in afternoon rush-hour traffic around Washington, DC. The Beltway traffic seemed like an apt metaphor for the surge of interest in lunar scientific and human exploration. After the initial rush of US and Soviet lunar programs in the 1960s and early 1970s, exploration was reduced to a few flybys by spacecraft on their way to the outer planets.

That changed in 1994 when a low-cost Defense Department spacecraft called *Clementine* reached lunar orbit and mapped the Moon. The craft measured the Moon's shape and aspects of its mineralogy, and conducted radar observations that appeared to suggest tantalizing deposits of water ice in permanently shadowed polar craters. *Lunar Prospector*, a NASA spacecraft launched four years later, made detailed measurements of the Moon's near-side gravitational field, discovered indications of hydrogen—potentially related to water ice—in the polar regions, and found indications of new crustal magnetic signatures.

Now, a new wave of research is beginning with more than seven spacecraft prepped, planned, or arriving in lunar orbit from the US, Japan, Europe, India, and China. "*Clementine* and *Lunar Prospector* were the catalysts for lunar exploration that is long overdue," says lunar researcher Carlé Pieters of Brown University.

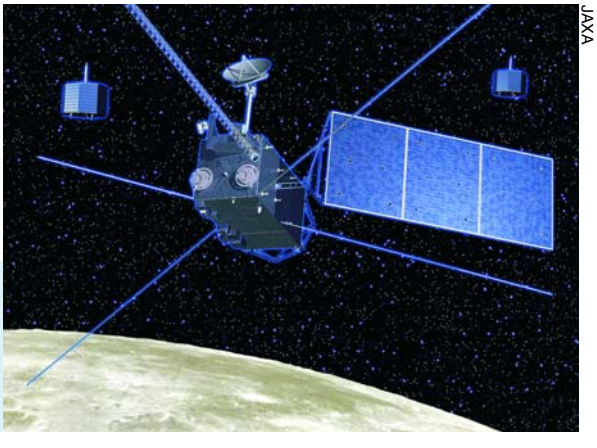
Why the Moon?

The global interest in the Moon can be summarized in three main points. First, "the Moon is the scientific gateway to understanding the formation and evolution of the inner solar system and the early crusts of Earth and Mars," says NASA's Garvin. Second, the Moon serves as a good destination for humans leaving low-Earth orbit to practice techniques that could eventually be used on Mars. Third, the Moon is also "relatively easy to get to for a nation just beginning a robotic exploration program," says Mark Robinson of Northwestern University.

The first of the new spacecraft, Europe's *SMART-1*, arrived in lunar orbit last November. It will be followed by two Japanese spacecraft, *Lunar-A* and *Selene*. In 2007, India will launch *Chandrayaan-1*, which will be closely followed by China's *CHANG'E-1*. In 2008, the US will send the *Lunar Reconnaissance Orbiter* (*LRO*) to help scout locations for human exploration. If NASA gives the go-ahead this summer, the $700 million *Moonrise* mission to the South-Pole Aitken (SPA) Basin will launch in the 2009–2010 time frame and return a lunar sample to Earth.

Lunar gold rush

Although the European Space Agency has talked about lunar missions for decades, the launch of *SMART-1* was more associated with the results from *Clementine* than with any long-term lunar program. The ESA craft also acts



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Japan's lunar probe *Selene* will pick spots for firing *Lunar-A*'s penetrators into the Moon.