

of missing a June 2007 deadline for certification of the technology by Chertoff, the GAO charged.

George Thompson, chair of the independent review team, told the House Committee on Homeland Security on 5 March that while the testing procedures “were not ideal,” the review team “did not find any evidence that the test results were thereby biased or manipulated.” The team’s report proposed that an alternative to the ASP might be to upgrade the software on the hand-held radioisotopic identification devices used to check cargo containers that have triggered an alarm when passing through one of the more than 1000 monitors at US ports. Existing monitors employ polyvinyl toluene plastic scintillator technology which cannot distinguish plutonium, highly enriched uranium, or other threat materials from naturally occurring radioactive materials such as ceramic tile or kitty litter. It can take up to an hour for Customs and Border Protection inspectors to scan an individual container with the hand-held device with the same degree of consistency as the ASP can do in 15 seconds, Oxford said. In some cases today, further analysis must be performed with help from a CBP laboratory, adding hours more delay to commerce.

Most cargo scanned

Since 8 February, CBP has been scanning for nuclear or radiological materials 100% of cargo entering the country from the Mexican border, 98% of cargo arriving at seaports, and 91% entering from Canada, Oxford said.

The GAO had first raised concerns with the testing program in 2006, which prompted Congress early last year to mandate certification of the technology by Chertoff prior to actual procurement of ASP monitors. The DNDO dutifully conducted three test campaigns and field evaluations at eight sites, while Chertoff ordered the independent review of the test procedures and results.

Representative James Langevin (D-RI), chairman of the emerging threats, cybersecurity, and science and technology subcommittee of the House Committee on Homeland Security, said the larger issue that was raised both by the GAO and the independent review is that the DNDO should not be responsible for testing its development programs. “This lack of a rigorous and independent testing program can easily lead to the development and even the deployment of ineffective equipment,” Langevin warned. Both reports are “extremely nuanced and do not seem to give clear, strong in-

dications of whether this project is achieving its stated goals,” he said. While stressing that he didn’t want the ASP program to fail, Langevin said the tests to date “have not unequivocally demonstrated in an operational setting that the ASP represents a significant improvement over current technologies.”

Oxford said he now expects Chertoff’s decision by August. Some 45 systems have already been built by vendors and could be fielded immediately after receiving the go-ahead. Others could be delivered in four to six months. Although \$1.2 billion has been authorized for the procurement, Oxford said the DNDO expects to purchase \$350 million worth of the ASPs. **David Kramer**

news notes

Third physicist in Congress. Millionaire physicist Bill Foster may be the only candidate for congressional office to have a section of his campaign website devoted to particle accelerators and superconducting magnets. More remarkably, the Democrat just won 53% to 47% in a Republican stronghold.

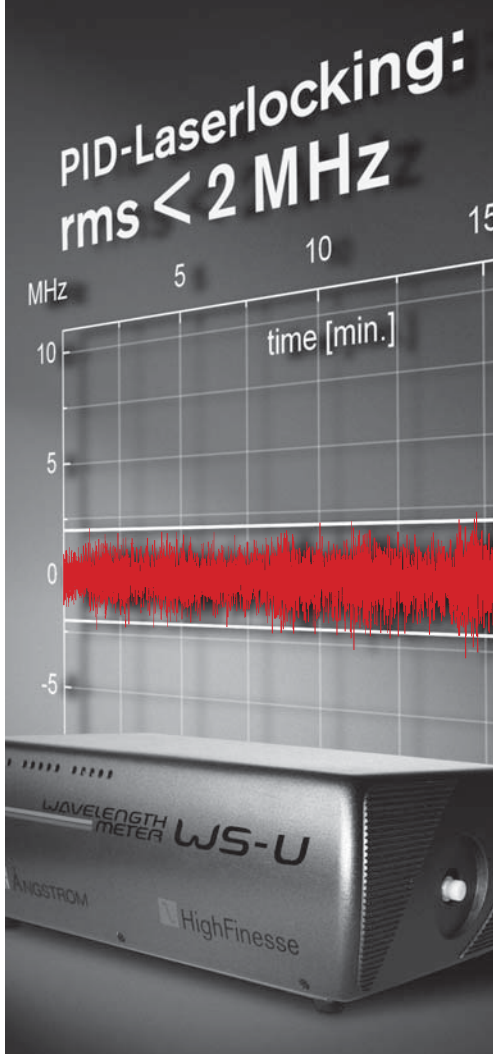
In early March, Foster defeated businessman and dairy magnate Jim Oberweis in a special election in Illinois to replace Republican representative and former Speaker of the House Dennis Hastert, who announced his retirement late last year.

“Back in the laboratory, we’d say that this was a pretty successful experiment,” Foster said in a victory speech at a banquet hall in Aurora. “We sent a clear message to everyone in Washington. You demanded change, and you are demanding it now.”

Foster founded a successful national theater lighting company, then had a 22-year career at Fermilab as a high-energy physicist. He worked on the collider detector that discovered the top quark and is the co-inventor of Fermilab’s antiproton recycler ring. Fermilab, which in recent months has had to lay off 10% of its staff, is near the heart of his congressional district.

Foster won’t have much time to become established in Washington political circles because his seat is up for grabs in November. **PKG**

Future astro missions. To prepare for the upcoming astronomy and astrophysical decadal survey, in which researchers and the National Research Council set future directions for those fields, NASA announced in February that it will fund development of 19 concepts for major new observatories. The awards total



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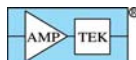
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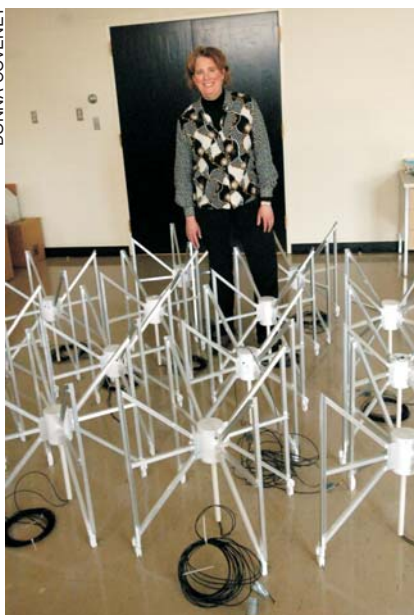
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A radio telescope array that would probe the early universe from the far side of the Moon is one of 19 missions NASA has selected for further study. A prototype is shown with the project's leader, MIT's Jacqueline Hewitt.

about \$12 million over two years.

The observatories include space telescopes to study organic molecules, take a census of black holes, test theories of inflationary expansion, and explore the origins of cosmic rays. Awards will also go to develop, among other things, several methods to search for and characterize exoplanets, telescopes that would observe filaments of intergalactic hy-

drogen gas (the cosmic-web gas), telescopes for studying star formation, next-generation optics for x-ray and optical astronomy, laser beacons on Mars to test general relativity, and an array of radio telescopes on the Moon to map clouds of hydrogen gas that formed in the infancy of our universe. **TF**

Free e-journals. Through 2008, journals published online by the American Institute of Physics and the American Physical Society will be available at no cost to HBCUs (historically black colleges and universities) and other US minority-serving institutions with physics programs. Officers from the National Society of Black Physicists and the National Society of Hispanic Physicists initiated the agreement, which also includes discounted rates on electronic subscriptions to the journals in 2009.

"Many of the physics programs at HBCUs are at institutions with very limited library budgets that will not accommodate subscriptions to AIP or APS journals," says Quinton Williams, chair of the physics department at Jackson State University and immediate past president of the NSBP. "This initiative with AIP and APS will open an otherwise closed door to the latest results in physics research to both faculty and student researchers."

According to AIP's Statistical Research Center, more than 60% of African Americans with physics bachelor's degrees graduate from HBCUs, even though HBCUs account for only 4.5% of the institutions that award the degree. **JNAM ■**

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The *New Journal of Physics* was one of the first online-only physics journals. Published by the UK's Institute of Physics, *NJP* is now in its 10th year. To celebrate that milestone, the journal's editors and staff have compiled a selection of notable papers, along with nonspecialist summaries and brief interviews with the papers' authors.

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