agency Multifunctional Phased Array Radar Working Group within the office of the Federal Coordinator of Meteorological Services is charged with facilitating the development of next-generation radars based on advanced technologies, such as high efficiency radio frequency power amplifiers, highly efficient power management systems, more efficient radar transmit-receive modules, and improved processing systems and algorithms. This new generation of radar will have important applications for DHS missions and the related missions of other Federal agencies, including improvements in hazardous weather and flood forecasts; land-falling hurricane and tornado prediction and warning; rapid identification of chemical and biological contaminant plumes; wildfire management; airspace surveillance for non-cooperative aircraft incursions; and control of unmanned aerial systems. While the Committee applauds this multiagency initiative, it is concerned that the pace of current efforts may not be sufficient to achieve the Working Group's objectives. The Committee encourages DHS to remain actively involved in the activities of the Working Group and to contribute to the development of requirements and competitive critical demonstrations of key multi-function phased array radar technologies.

TEST, EVALUATION AND STANDARDS

The Committee recommends $28,674,000 for test, evaluation and standards, $4,000,000 above the budget request and $154,000 above the amount provided in fiscal year 2008. Within this amount, the Committee provides $5,000,000 to develop an operational test and evaluation program for first responder technologies so that there is a unified effort to objectively evaluate products against identified, minimum requirements.

TRANSITION

The Committee recommends $33,830,000 for transition, $2,000,000 above the budget request and $8,565,000 above the amount provided in fiscal year 2008. The Committee is aware of numerous challenges confronting industry in keeping up with the growing demand for critical homeland security equipment, and the fact that such challenges have contributed to expenditure delays in State and local first responder funding. Therefore, within the funds provided is $2,000,000 to establish a pilot program to identify and transition advanced technologies and manufacturing processes that would achieve significant productivity and efficiency gains in the homeland security industrial base.

UNIVERSITY PROGRAMS

The Committee recommends $51,270,000 for university programs, $7,500,000 above the amount requested and $1,973,000 above the amount provided in fiscal year 2008. Within this funding level, a total of $36,720,000 has been provided for the Centers of Excellence, $4,500,000 above the budget request. In addition, the Committee provides $2,000,000 to continue an ongoing memorandum of understanding with the Naval Postgraduate School. Finally, the Committee has provided sufficient funding to maintain the fellows program at the same level as provided in fiscal year 2008.

The Committee is concerned that the office of university programs does not request sufficient funding to support the research missions of its Centers of Excellence. The Committee notes that in each of the last two years, the budget either proposed reductions in funding for previously established Centers to establish new Centers and/or reductions to overall program funding. This seriously undermines the ability of the Centers to contribute to the research mission of the Department and the protection of the homeland.

Within the recommended level for university programs is $3,900,000 for minority serving institutions, as requested. S&T should explore ways to prepare minority youth for careers in homeland security by promoting skills and educational curricula in this field, and report back to the Committee by February 25, 2009, on these efforts.

In addition, the Committee encourages S&T to consider working with non-profit organizations that are focused on preparing minority youth for civil service careers and that may already be working with some of the participating institutions.

DEPARTMENT OF DEFENSE RESEARCH AND ENGINEERING PROJECTS

The Committee is aware of extensive efforts underway by the Department of Defense Research and Engineering (DDRE) Directorate that may have applications for homeland security missions, including research into tunnel detection and bioterrorism. S&T is directed to brief the Committee no later than November 3, 2008, on how it is collaborating with DDRE on the discovery of technical homeland security solutions.

UNOBLIGATED BALANCES

For the past few years, S&T has had high unexpended obligations in its Research, Development, Acquisition and Operations (RDA&O) account. The Committee understands that the Directorate has made efforts to reduce these balances and has initiated a quarterly review to identify unused funds for work that has yet to be performed and funds where S&T has not been billed but work has been completed. In the past, GAO has identified high undelivered order balances for work S&T has sponsored at the Department of Energy's national laboratories, which accounts for 30 to 40 percent of total RDA&O funding. Although it is unclear how much of the unexpended obligations may be in excess of program needs, it is possible that some funding may be identified and returned to the S&T account from which it was originally derived. The Committee directs S&T to report the results of its quarterly validation and verification reviews, the amount available to deobligate, and identify how S&T plans to use these funds. In addition, S&T shall submit, with its 2010 budget justification, a report on its unexpended obligated balances and justify instances where high undelivered order balances occur.