

## Strategic Interagency Collaborations



### Hybrid container successfully delivered, will enhance global shipping security

Sandia supported the Department of Homeland Security's (DHS's) Science and Technology Directorate in delivery and successful demonstration of an operational Secure Hybrid Composite Container (SHCC) in Singapore. The DHS's Borders and Maritime Security Division collaborated with Singapore Ministry of Home Affairs in this program. Sandia provided technical support during development of the SHCC. The demonstration in Singapore marked the culmination of a multi-million-dollar project that began in 2005 and has involved Singapore since 2010. Sandia successfully demonstrated the system in Singapore to upper-level management at the Ministry of Home Affairs (rough equivalent to the Under Secretary at DHS) and to the commander of the Port of Singapore. Sandia has been working with DHS in the global effort to improve the security and robustness of shipping containers, which are a potential means for smuggling weapons, drugs, and other contraband items across national borders. Earlier this year, as a result of this project, Sandia and two of its collaborators received the Federal Laboratory Consortium's 2014 Interagency Partnership Award.

### Highlights and News

#### Energy Department awards \$7M to advance hydrogen storage systems.

On May 19th, the DOE announced \$7M for six projects (five in California plus PPG Industries in North Carolina) to develop lightweight, compact, and inexpensive advanced hydrogen storage systems that will enable longer driving ranges and help make fuel-cell systems competitive for different platforms and sizes of vehicles. These advances in hydrogen storage will be critical to the widespread hydrogen and fuel-cell technology commercialization. Sandia, California will receive \$1.2M to systematically screen low-cost alternative materials for use in hydrogen storage systems.

### Highlights and News (continued)

#### Renewables, other energy issues to be focus of enhanced Sandia, SINTEF collaboration

A decades-long partnership between Sandia and the Norwegian research organization SINTEF will now tackle energy challenges such as renewable-energy integration, grid modernization, gas technologies, and algae-based biofuels. SINTEF is the largest independent research organization in Scandinavia, with expertise in the natural sciences and technology, the environment, health, and social sciences. Its specific technical strengths include oil and gas, materials, maritime and bio marine technology, building research, and medical technology. The expanded agreement includes close alignment with the Norwegian University of Science and Technology in Trondheim. Sandia has primarily partnered with SINTEF in combustion science at the Combustion Research Facility. This collaboration led to publications reporting important insights into the consequences of replacing carbon-dioxide-emitting fuels with environmentally friendly fuel in power generation. Recently, research managers from SINTEF visited Sandia's California and New Mexico sites to plan the enhanced collaboration.

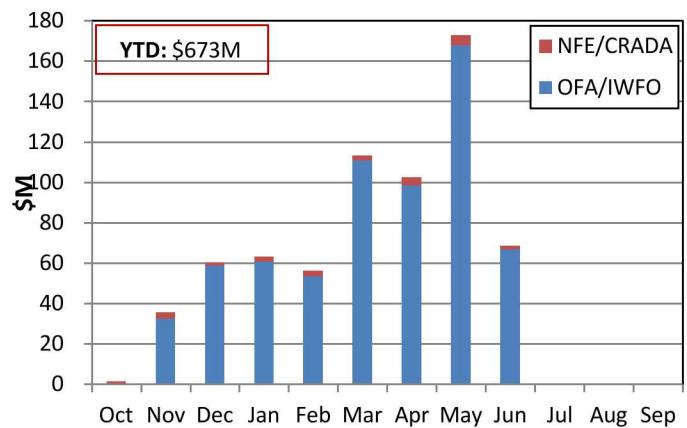
### Technical Issues and Path Forward

### Process Improvements

### Two Month Look Ahead

Sandia's National Security Speaker Series will host Jeff Bingaman on July 22. Jeff Bingaman is a former United States Senator from New Mexico. He served as the Senate Energy and Natural Resources Committee. His talk has been rescheduled from the original date of June 19. Also in July, the series will host General C. Robert Kehler (retired) former Commander of US Strategic Command. General Kehler is scheduled to speak to Sandia's workforce on July 15.

### FY14 Reimbursable Work Revenue



In \$ Million:	OFA	NFE	CRADA	Total
YTD Revenue	\$648	\$13	\$12	\$673
Approved Program Ceiling & Initial BA Request	\$970	\$19	\$14	\$1003