

Strategic Interagency Collaborations

CTBTO Executive visits Sandia

NNSA's annual Monitoring Research Review (MRR) held in Albuquerque September 2012 included participants from the national labs, industry partners and academia. Several representatives from the Comprehensive Nuclear Test Ban Treaty Organization (CTBTO) in Vienna, Austria were in attendance, emphasizing the importance of this event for the international community. During the review, Ms. Vorian Maryssael, Director of the CTBTO's International Monitoring System (IMS) toured Sandia's Facility for Acceptance, Calibration and Testing (FACT) site, where Sandia evaluates the performance of monitoring systems and components. Ms. Maryssael expressed her gratitude to the staff at FACT for their support of the IMSteam.



September Launch of the Altitude Prediction, Reporting, and Accuracy experiment conducted by Sandia in partnership with Aerospace Corporation for the Air Force Space and Missiles Systems Center.

Highlights and News

Successful Flight Test of the APRA experiment

On September 22, 2012, the Altitude Prediction, Reporting, and Accuracy (APRA) experiment was successfully flight tested on a NASA three-stage sounding rocket launched from Wallops Flight Facility, Virginia. The APRA experiment provided data that enabled Air Force Space and Missile Systems Center to evaluate a conventional prompt global strike navigation, guidance, and control assembly for meeting altitude prediction and navigation accuracy requirements. In less than five months, Sandia provided and fielded a high accuracy navigation system that included flight software, a Roll-Stable-Raptor inertial measurement unit/flight computer and a NavStrike™ GPS receiver. Sandia personnel worked closely with the Aerospace Corporation and integrated their APRA algorithm into the flight software, and Sandia simulation capabilities provided a platform to perform software testing and verification of the APRA flight software prior to flight.

BioRAM Software Updated to Help Communities Worldwide

The Department of State Biosecurity Engagement Program tasked Sandia to enhance the Biorisk Assessment Methodology (BioRAM) software package to allow for multiple language capacity which would then give users greater flexibility for international work and greater worldwide access. Sandia delivered the BioRAM engine with increased language capacity and it has now been translated into Arabic, Spanish, French, and Urdu. Also possible are translations into Chinese, Japanese, Indonesian, and many more languages, increasing this software's potential to help even more countries conduct biosecurity risk assessments in their communities.

Sandia and Boeing Strengthen Partnership

In November, Sandia and Boeing added a new project to the umbrella CRADA on thin film rechargeable battery seal technology. In addition, new work was added in fracture and failure analysis in composites, and in predictive thermal and electrical modeling sectors.

Technical Issues and Path Forward

- Approval for the \$21M JIEDDO program has been approved by DoD/ATL. NNSA and DoD are continuing to develop a streamlined process for additional program approvals under the limited waiver

Process Improvements

- None reported.

Two Month Look Ahead

- Holger Mey, Vice President of Advanced Concepts at Cassidian, will visit Sandia on December 4th as part of the National Security Speaker Series. Professor Mey will provide a lecture on European perspectives on deterrence and missile defense.
- National Counter Intelligence Executive Frank Montoya will visit Sandia as part of the National Security speaker Series in January.

Budget Report (to be updated)

FY13 projections: OFA WFO \$866M, NFE/CRADA \$31M

