NOAA ADVISORY COMMITTEE ON COMMERCIAL REMOTE SENSING (ACCRES)
OPEN SESSION MEETING SUMMARY
October 8, 2009

Open Session

The open session of the fifteenth meeting of NOAA's Advisory Committee on Commercial Remote Sensing (ACCRES) was convened on October 8, 2008 at 2:00 pm in the Polaris Suite of the Ronald Reagan Conference Center, Washington, D.C. In accordance with the provisions of Public Law 92-463, the meeting was open to the public.

Committee members present:

Dr. James A. Lewis, Chair, Center for Strategic and International Studies
Dr. David J. Gorney, Vice-Chair, The Aerospace Corporation
Mr. Matthew O'Connell, GeoEye
Mr. Frederick Doyle, Ball Aerospace & Technologies Corporation (representing Mr. David Taylor)
Mr. Joseph Fuller, Futron Corporation

Observers:

Dr. Rick Heidner, The Aerospace Corporation

Presiding Staff of the National Oceanic and Atmospheric Administration (NOAA):

Mr. Charles Baker, Satellite and Information Service
Ms. Jane D'Aguanno, ACCRES Designated Federal Officer
Mr. Glenn Tallia, General Counsel

Opening Remarks

Dr James Lewis, Committee Chair, called the fifteenth ACCRES meeting to order, welcoming attendees and guests. He summarized the discussions at the closed morning session, when the Committee received a briefing from Dr. Patricia Wrightson of the National Academies on why the export control system does not work and the relationship to remote sensing. A presentation by the National Geospatial-Intelligence Agency (NGA) reviewed the agency's growing use of commercial imagery and its plans for the future. Dr. Raymond Heidner of the Aerospace Corporation delivered two presentations, one on international capabilities and another on industry's response to NOAA's Request for Information (RFI), issued in the past summer.

NOAA Update and Recap of NOAA Request for Information

Ms. Jane D'Aguanno announced that NOAA and the United States Geospatial Intelligence Foundation (USGIF) will sponsor the "2010 International Remote Sensing Symposium" on March 3-5, 2010, at the Ronald Reagan Building in Washington, DC.

This summer, Ms. D'Aguanno said, NOAA issued a license for the operation of a synthetic aperture radar (SAR) satellite capable of producing 1-meter imagery for commercial sale. The new conditions for licensing SAR systems are the result of a

change in national security requirements. She concluded by noting that NOAA issued an RFI in June, asking four questions, and has received a number of thoughtful responses.

Mr. O'Connell said it was great that NOAA is sponsoring an international commercial remote sensing symposium again. He suggested that some thought be given to adding education to the agenda.

U.S. Government Use of Satellite Data

Mr. Charles Baker, NOAA's Deputy Assistant Administrator for Satellite and Information Services, briefed on NOAA's current operations and future directions. He noted that during NOAA's forty-nine and a half years in the satellite business, its initial concentration on weather had broadened out to include an environmental focus. Current programs include geostationary satellites (GOES), polar-orbiting satellites (POES), the Defense Meteorological satellite program (DMSP – operated for the U.S. Air Force), and a collaborative program, the Jason-2 altimetry satellite. Future programs include the National Polar-orbiting Operational Environmental Satellite System (NPOESS), a new generation of geostationary satellites (GOES-R), and the Jason-3 altimetry satellite. NOAA issues near real time data from its Satellite Operations Facility and long time series data from three national data centers.

Mr. Baker pointed to three recent satellite launches: Jason-2 in June 2008, NOAA-19 on February 6, 2009 and OES-14 on June 27, 2009. Reviewing instruments on current NOAA satellites, Mr. Baker listed: imagers and sounders (atmospheric measurements that support environmental monitoring applications); space weather instruments; search and rescue instruments that can receive emergency beacon signals; and data collection instruments that receive and re-send signals to scientists from remote systems such as ocean buoys, rain gauges and animal monitors. NOAA's satellite data is used for monitoring global sea surface temperatures, volcanic ash, and ocean acidification as well as for forecasting hurricanes.

Mr. Baker stated that NOAA is a strong advocate for free, open, and timely sharing of earth observing data across international boundaries. International partnerships are important for NOAA because its budget is not sufficient for all its satellite needs and partnerships avoid costly duplication of satellite investments. NOAA has current international partnerships on polar meteorological satellites (EUTMETSAT flies the METOP satellite in morning orbit, with NOAA flying POES in afternoon), radar altimetry (cost-sharing of Jason-2), and GPS radio occulations (sharing the cost of COSMIC). Partnerships are pending with Taiwan, Japan, India and China.

Without its own research budget, NOAA depends heavily on NASA research satellites to improve weather forecasting, climate monitoring and other operations. While this system works well, NASA does not promise continuity of its observations. NOAA is therefore working to incorporate NASA technologies into its own satellites.

NOAA's satellite continuity strategy, Mr. Baker stated, is to: (1) use NOAA satellites for core capabilities; (2) augment with data from international partnerships; (3) use data from

NASA research satellites; and (4) purchase data from commercial satellite operators to fill critical gaps.

Discussing the role of the private sector, Mr. Baker said business opportunities could be found in both the traditional model of building satellites and instruments for delivery to the government and in the commercial model of selling data to the government from privately-owned satellites. At the January 2008 NOAA Industry Day, NOAA provided examples of its requirements that could be met through commercial solutions. Since then, NOAA has issued three sets of requests for quotations.

In conclusion, Mr. Baker said NOAA will continue to: own and operate its primary satellites; make increasing use of international partnerships; take advantage of NASA research satellite data; and make increasing use of data from privately-owned satellites when the business case makes sense.

Mr. O'Connell noted that about ten percent of NOAA's spending is on commercial remote sensing data. Ms. D'Aguanno said the total is about $4 million and that the U.S. Department of Agriculture and NGA are the largest buyers. Mr. Doyle asked if there might be a commercial solution to helping NOAA with weather. Mr. Baker replied that NOAA would need an increase in its budget and wants to keep its expenses low. The NextView model used by NGA is less attractive to NOAA, he added. NOAA finds it highly attractive just to buy the data.

Mr. Baker's briefing will be available at the NOAA website (www.licensing.noaa.gov).

Public Comments

In response to Dr. Lewis' request for any public comments or questions, Mr. Paul Kilbourn addressed the Committee, stating that he had developed an unmanned ocean vehicle (UOV) that has potential use for persistent surveillance of oceans, including hurricane monitoring. He emphasized: (1) robotic systems are maturing; (2) ocean sensing is becoming much more important; and (3) there is a growing synergy between ocean surface sensing and satellites, with satellites able to talk directly to surface robots. Mr. Kilbourn said that to forecast hurricanes it is necessary to know conditions ten feet below and ten feet above the ocean surface. In a hurricane scenario, an energy scavenging and survivable UOV could be deployed in the hurricane's likely path and could sail directly into the hurricane to collect data. Mr. Kilbourn left copies of a factsheet on UOVs for Committee members and guests.

The Open Session adjourned at 3:10 pm.