NOAA ADVISORY COMMITTEE ON COMMERCIAL REMOTE SENSING (ACCRES) OPEN SESSION MEETING SUMMARY September 20, 2007

Open Session
The open session of the eleventh meeting of NOAA's Advisory Committee on Commercial Remote Sensing (ACCRES) was convened on September 20, 2007 at 1:10 pm in the Auditorium of the National Association of Home Builders, 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. William Gail, Microsoft (representing Dr. John C. Curlander)
Mr. J. Christian Kessler, Department of State
Mr. Kevin O'Connell, Innovative Analytics and Training, LLC
Ms. Jil Smith, DigitalGlobe
Mr. Matthew O'Connell, GeoEye
Mr. Duane Tibbetts, National Geospatial-Intelligence Agency (representing Mr. Douglas McGovern)
Mr. Joseph Fuller, Futron Corporation
Dr. Marguerite Madden, American Society for Photogrammetry and Remote Sensing
Dr. David J. Gorney, The Aerospace Corporation

Observers:

Dr. Rick Heidner, The Aerospace Corporation

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

Ms. Kay Weston, ACCRES Designated Federal Officer
Mr. Glenn Tallia, General Counsel

Opening Statements
Dr. James Lewis, Committee Chair, called the eleventh ACCRES meeting to order, welcoming attendees and introducing members and guests. He noted that during the morning's closed session there had been good discussion on the work of the Committee and possible future directions.

German Commercial Remote Sensing Data Policy
Wolfgang Schneider from the Federal Republic of Germany's Ministry of Economics and Technology presented a briefing on his country's draft Act to set up a national data security policy. Germany has traditionally been active in remote sensing, Mr. Schneider said, and approaches it as a complete system to include space technology as well as a regulatory framework. In late 2003, Germany started work on a national data security policy, an effort that required close cooperation among many ministries and government agencies as well as industry and international partners. The draft Act was approved by the Cabinet in January 2007 and the parliamentary process has almost been completed. It is expected that the Act will take effect in December 2007.
The main idea underlying the draft Act is, on the one hand, to cover only high-value or "high-grade" space-based earth remote sensing systems while, on the other hand, to establish a clearly defined and transparent procedure for distributing earth remote sensing data. The backbone of the draft Act is the establishment of a two-phase control procedure for the distribution of satellite data/images from such high-grade earth remote sensing systems. If the transaction is deemed sensitive, the government will then decide whether to grant or deny permission to distribute the data. The review process may also authorize delivery of data with conditions and obligations attached. Mr. Schneider listed several criteria that will be considered during the sensitivity review, including the data's content, target area, time lag between acquisition and delivery to customer, ground segments to which the data is to be transmitted and the customer.

In response to a question on sensitivity, Mr. Schneider said it would be hard to say at this point, although previous experience suggests that the vast majority of the customer's request will probably turn out to be non-sensitive. Replying to another questions, Mr. Schneider said the law allows for the primary data distributor and the satellite operator to be different, although usually they are the same. There can be a combined license or two separate licenses.

Mr. Schneider's presentation may be found on the NOAA website (www.licensing.noaa.gov).

InfoTerra Briefing on TerraSAR-X
Ms. Corinne Kaplan, Vice-President for Space, EADS North America, briefed on the TerraSAR-X program, a public-private partnership between EADS and the German Aerospace Center. TerraSAR-X1 was launched from Baikonur on June 15, 2007 and will be followed by future launches of TanDEM-X in late 2009 and TerraSAR-X2 in 2013. The images from TerraSAR-X1 are very impressive, Ms. Kaplan said, and have a wide range of applications. Ms. Kaplan illustrated TerraSAR-X1's capabilities with a series of images that, for example, showed the satellite's ability to penetrate cloud cover and to monitor traffic movement on land and sea. Other images suggested their value for oceanography and their potential for disaster management.

More of TerraSAR-X1's images may be seen at www.dir.de.

Ms. Kaplan's briefing may be found on the NOAA website (www.licensing.noaa.gov).

Canadian Commercial Remote Sensing Data Policy
Mr. Phillip Baines, Senior S&T Advisor in the Non-Proliferation and Disarmament Division of Canada's Department of Foreign Affairs and International Trade, opened his presentation by reviewing the background to Canada's Remote Sensing Space System Act. There have been significant advances in civil, private and military satellite remote sensing over the years. Specifically, the shift from government to the private sector, with the beginning of the RADARSAT-2 program in 1998, raised national security, defense and foreign policy concerns. This resulted in the announcement of Canada's Access Control Policy in the following year. In 2003, Canada decided to draft new legislation, which finally received Royal Assent in 2006 and entered into force in 2007.

Mr. Baines stated that the Act requires operators to obtain a license from the Minister of Foreign Affairs. The primary factors considered in granting a license include national security, defense of Canada, protection of Canadian Forces, and international relations and obligations. In addition applicants must make a commitment to eventually dispose of the satellite system, according to international norms.
After reviewing some of the specific provisions of the Remote Sensing Space Systems Act, Mr. Baines concluded by emphasizing that Canada is now implementing the Act and is on the eve of issuing its first operating license, for RADARSAT-2 which is scheduled to be launched in December.

In response to a question on whether a broader international policy might emerge that would follow the U.S., Canadian and German remote sensing security policies, Mr. Baines said that this would probably be the case over the long haul as standard rules are needed for investment decisions. The G-7 countries may take the lead. For example, the Missile Technology Control Regime (MTCR) started with a small group of G-7 countries and then expanded. Dr. Schneider noted that the number of the countries with high-grade systems is quite small and most have regulations (e.g. India and Japan). At the end of the day, the result of the regulations is about the same, as all aim to protect security and foreign policy interests. Mr. Kessler added that the U.S. talks about these issues with its international partners and that there is a good deal of common perspective.

Mr. Baines' briefing can be found on the NOAA website (www.licensing.noaa.gov).

**MDA Briefing on RADARSAT-2**

Mr. Bill Jefferies of MDA Geospatial Services opened his briefing by setting out the objectives for RADARSAT-2, which include providing SAR data continuity with RADARSAT-1 operating modes, meeting user needs for new applications, and maintaining Canada's progress in the development and commercialization of SAR. RADARSAT-2 is a public-private partnership with MDA owning and operating the satellite and selling and distributing its imagery worldwide, while the Canadian government will gain access to the SAR imagery.

Mr. Jefferies presented a series of slides offering details of the operational performance of the satellite and details such as comparisons between RADARSAT-2's different imaging modes (e.g. fine, multi-fine, ultra-fine, and spotlight). He also noted key improvements in areas such as maritime surveillance, ice monitoring, defense and agriculture. RADARSAT-2 will operate in an orbit identical to RADARSAT-1, with a 180 phase offset in time, Mr. Jefferies stated.

Mr. Jefferies presentation is available at the NOAA website (www.licensing.noaa.gov).

**Final Remarks**

Mr. Kessler expressed his thanks to the Canadian and German presenters, noting that the U.S. has had excellent bilateral discussions with both countries but that it is good to have their presentations made available to a wider audience. Dr. Lewis thanked the presenters on behalf of ACCRES, commenting that their briefing provided the Committee with a unique opportunity to gain better understanding of other national policies and systems.

**Public Comments**

Dr. Lewis asked for public comments or questions. There being none, the Open Session adjourned at 3:15 pm.