

NOAA ADVISORY COMMITTEE FOR COMMERCIAL REMOTE SENSING (ACCRES)  
SUMMARY OF MEETING

September 30, 2002

The NOAA Advisory Committee for Commercial Remote Sensing (ACCRES) was convened for its first meeting at 1:00 P.M. on September 30, 2002, at the Ronald Reagan Building and International Trade Center Hemisphere A Room, Washington, DC.

In accordance with the provisions of Public Law 92-463, the meeting was open to the public.

The chairman, Robert Winokur, (Earth Satellite Corporation), thanked committee members for agreeing to serve on this important new advisory committee and welcomed members of the public. Mr. Winokur noted that the Advisory Committee had been established for a two-year period with an option to extend its work for a further two years. The goal for the first meeting of the Committee was to establish the issues to be considered, compile the Committee's agenda for the future, and to determine how to assemble the information necessary to move forward. The Chairman would work to build consensus on issues as far as possible.

Members of the Committee provided brief self-introductions and members of the public in attendance identified themselves by name and affiliation. (58 members of the public attended the meeting).

Committee members present:

Dr. Wanda Austin, Aerospace Corporation  
Lt. General James Clapper, National Imagery and Mapping Agency  
Mr. Richard Cooke, Research Systems, Incorporated  
Mr. John Copple, Space Imaging, LLC  
Mr. Martin Faga, MITRE  
Dr. Joanne Gabrynowicz, University of Mississippi  
Dr. Charles Groat, U.S. Geological Survey  
Dr. Terrence Keating, American Society for Photogrammetry and Remote Sensing  
Mr. Victor Leonard, Resource 21, LLC  
Mr. Kevin O'Connell, RAND (Committee Vice Chair)  
Mr. Frank Williams, on behalf of Mr. Michael Hewins, Astrovision, Incorporated  
Mr. Robert Winokur, Earth Satellite Corporation (Committee Chair)

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

Ms. Karen Dacres, Satellite Programs Counsel  
Mr. Timothy Stryker, Remote Sensing Licensing Coordinator, NOAA/NESDIS International and Interagency Affairs  
Mr. Gregory Withee, Assistant Administrator for Satellite and Information Services

## OPENING REMARKS

Mr. Withee thanked attendees noting that the purpose of this Advisory Committee is to provide valuable advice to the nation on existing and anticipated commercial remote sensing (CRS) issues specifically in relation to the responsibilities of the Department of Commerce set out in the Land Remote Sensing Policy Act of 1992. Commenting on the breadth of representation both on the Committee and among members of the public in attendance, Mr. Withee emphasized the need for a broad spectrum of input from government, industry and the non-profit sector on licensing issues in commercial remote sensing.

NOAA provided seven initial questions for consideration by the Committee:

- How can NOAA license U.S. systems to compete effectively with new, advanced foreign systems?
- How can NOAA, working with other USG agencies and foreign governments, help facilitate a better international business environment for U.S. commercial remote sensing firms?
- What licensing provisions might NOAA enact to enable USG purchase and use of commercial data, and its effective integration into civilian and military remote sensing programs?
- What risks and investment disincentives might NOAA inadvertently be placing on U.S. industry, and what can be done to address these issues?
- What does NOAA need to do, in coordination with other USG agencies, to develop more consistent and predictable regulatory process for U.S. industry?
- How should NOAA license new and increasingly advanced commercial dual use technologies (e.g. synthetic aperture radar, hyperspectral imaging, LIDAR), which have significant military and intelligence applications?
- What information or other resources would the Committee recommend for use in reviewing NOAA's licensing program and practices?

In closing, Mr. Withee noted that the Committee is empowered to request NOAA to undertake further research and gather information to assist the Committee in its deliberations.

## COMMITTEE ADMINISTRATIVE PROCEDURES

Karen Dacres outlined committee procedures. The Committee will function in accordance with the provisions of the Federal Advisory Committee Act. Timothy Stryker will be NOAA's Designated Federal Officer, responsible for Committee management and oversight. Appropriate notice of meetings will be given and minutes will be published. If a meeting or a portion of a meeting of the Committee needs to be closed notification of the meeting format will be published with appropriate advance notice in the Federal Register.

## NOAA LICENSING AND REGULATORY ACTIVITIES

Timothy Stryker provided an overview of licensing and regulatory activities at NOAA for commercial remote sensing. The primary goals of the NOAA licensing office are to protect U.S. national security concerns and foreign policy interests; to advance critical aerospace and information technologies to support the U.S. industrial base; and to promote job creation, economic growth, sustainable development, and improved living standards.

The NOAA licensing team conducts its program in accordance with U.S. laws, regulations, and U.N. Principles. Primarily, Mr. Stryker referred to the 1992 Land Remote Sensing Policy Act, which granted authority for licensing CRS satellite systems to the Department of Commerce; the 1994 Presidential Decision Directive 23 which set the stage for high resolution, advanced technology systems licensing; the February 2000 Interagency agreement which established timelines, practices and procedures for licensing; and, the June 2002 National Security Presidential Directive 15 which established an ongoing White House review of space policies.

Other government agencies and offices play a role in decisions concerning CRS activities, including the Departments of Defense, State, and Interior as well as the intelligence community, the White House and three additional bureaus within the Department of Commerce: the International Trade Administration (ITA), Technology Administration and the Bureau of Industrial Security. To date, 18 licenses have been granted for 41 satellites, representing approximately \$2 billion system investment and offering a range of capabilities including panchromatic, multispectral, synthetic aperture radar and hyperspectral data. The CRS industry represents many important overseas partnerships. Prevailing licensing conditions and monitoring and compliance issues were reviewed. Special projects currently in work for the NOAA Licensing Team include CRS risk analysis; a market study of CRS which projects a 10-year forecast for the industry including workforce issues and an assessment of the education and training that will be needed to carry the industry forward; a study of foreign government policy together with assembly of a database on commercial availability; and an international commercial space policy study.

In response to a question from Dr. Austin, Mr. Stryker indicated that license processing could be completed in close to 120-days (the mandated licensing period) if a similar system had been processed previously. The database on international CRS availability was discussed. Committee members emphasized the importance of compiling as complete a database as possible. Mr. Copple suggested that CRS companies and other interested parties be tapped for relevant data they had collected. Mr. Stryker stated that development had just commenced and he would interact with Committee members on database configuration. Dr. Gabrynowicz emphasized the difficulty involved in obtaining good information on foreign legal regimes. She will share information she has available with the Committee.

## WELCOME

Vice Admiral Conrad Lautenbacher, Under Secretary of Commerce for Oceans and Atmosphere conveyed the appreciation of the Secretary of Commerce to members of the Committee for their willingness to serve on ACCRES. He emphasized the importance of maximizing the dialogue between representatives of government and the people they serve, while recognizing the significant national and world security issues that are on the table.

Scott Gudes, Deputy Under Secretary of Commerce for Oceans and Atmosphere discussed the longstanding role of NOAA as both the licensor and enforcer of regulations concerning commercial remote sensing. He noted that all NOAA programs revolve around partnerships with the commercial and academic worlds. Advice is needed on dealing with numerous CRS licensing issues in an expanding, evolving, and complex industry.

## ANALYSIS OF RISKS IN THE U.S. COMMERCIAL REMOTE SENSING SATELLITE INDUSTRY

John Baker of the RAND Corporation presented a summary of the risk analysis undertaken by the Rand Corporation for NOAA and ITA, published in 2001. While technical issues can pose major problems for commercial remote sensing firms --the loss of a satellite, for example, presents a major challenge -- the analysis concluded that "market" remains the predominant risk.

In the regulatory and policy environment a better understanding of CRS issues and procedures is emerging but getting to this point has been tough. The exclusive contracting agreement under NIMA provided an unexpected outcome on shutter control but leaves an unclear message as to how shutter control will be handled in the future. However it is clear that force protection is a driver in current US policy.

The CRS industry needs to reach beyond highly specialized users to the broader marketplace. There is more competition than at any earlier time in the industry and most foreign firms receive government support. The U.S. commercial remote sensing industry is the only fully commercial industry in the field. The study reviewed geospatial market trends. The U.S. industry has focused on Earth Observing systems and needs to look to the next generation of imaging systems. Some interesting, innovative, and unusual international collaborations have evolved for a number of reasons; sometimes to obtain access to markets. U.S. policy has a real impact on access to markets and collaborations. The international regulatory arena is evolving as countries deal with issues and interests. In the future not only new technologies but new business models, new partnerships, and creative financial approaches will be needed.

The complete report can be accessed at [www.rand.org/publications/MR/MR1469/](http://www.rand.org/publications/MR/MR1469/).

In the opinion of Dr. Gabrynowicz a precedent had been established in regard to shutter control that presumes imagery will be made public at some point. Recent experience also suggests that companies will receive the market price for goods and services during periods of shutter control.

Dr. Austin queried whether there had been any effort to understand what products are in demand in the commercial remote sensing marketplace. The Rand analysis did not review trends in demand but the American Society for Photogrammetry and Remote Sensing (APRS) is working to determine specific data resolution demands. Mr. O'Connell observed that the priority amongst foreign competitors has been development of business models designed to outpace U.S. models rather than expansion of product capabilities.

The Chairman commented that this is a critical time in the evolution of the CRS industry and the Committee should consider what issues should be dealt with at the next meeting.

#### PUBLIC COMMENT

Charles Mondello (Pictometry) commented that ASPRS was working on a ten-year forecast study, and noted ASPRS's ability to provide a detailed briefing at the next Committee meeting..

Paul Blase (Transorbital Inc.) thanked NOAA for the straightforward processing of his company's license application.

In response to a question from Christopher Myers (Lockheed Martin Corporation) about the formation and function of Working Groups of the Committee the Chairman indicated that would be discussed later in the meeting.

The Committee will also accept written comments. They should be directed to Timothy. Stryker@noaa.gov.

## IDENTIFICATION OF ISSUES

To assist the discussion of future trends Mr. Mondello was asked to further elaborate on the ongoing ASPRS study, which is available at [www.asprs.org](http://www.asprs.org). The study is researching commercial, educational and government uses of CRS over the next ten years. The study addresses how end user requirements match needs within the industry. The effects of the September 11 attacks and resultant new user requirements are being assessed along with the balance between government and commercial interests. In considering issues for the future the Committee was urged to include additional technologies such as LIDAR and hyperspectral imaging in its deliberations

Coordinating input from the Committee to NOAA for the ongoing White House Review of Space Policy was identified as a priority because the White House Review is at an advanced stage. A closed OSTP briefing on the W.H. Review would be arranged for Committee members in the near future.

As the result of a wide-ranging discussion, the Committee agreed to include on the agenda for the next meeting:

### Briefings:

- A full briefing on the ASPRS Study
- Information on Current Foreign competition
- Licensing procedures
- Government policy on CRS in other government agencies  
(including their contributions to the interagency review process)
- OMB policy briefing
- Senate staff report on the Civil Agency use of CRS products and services in Civil Agencies study of
- Information on Critical technologies
- Overview of the Rumsfeld, National Reconnaissance Office, and NIMA studies

## COMMITTEE WORKPLAN AND SCHEDULE

Arrangements will be made in the immediate future for a briefing on the White House Space Policy Review.

Three Working Groups will be established to consider:

- Licensing and the Licensing process
- Competitiveness
- National Security

Terms of Reference will be devised for the Working Groups and Committee members will identify the Working Groups on which they wish to serve.

The second meeting of ACCRES will be a one day meeting to be held in the Washington, DC area, during early January, 2003. The specific date and location will be announced later.