

**The Future of Landsat Remote Sensing**  
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Statement by

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for the

Committee on Commerce, Science, and Transportation  
U.S. Senate

Mr. Chairman and members of the Committee:

Thank you for the opportunity to share with this committee the Department of Commerce's views on the future of Landsat remote sensing. As you know, as part of the Office of the Deputy Secretary of Commerce, the Office of Space Commerce has been responsible for representing the Department at National Space Council deliberations on the future of Landsat. These deliberations have resulted in the recent Landsat policy which reaffirms the Administration's support for and importance of Landsat-type multi-spectral imaging and provides a plan for maintaining continuity of data from Landsat coverage beyond 1998.

Multi-spectral images from Landsat satellites support U.S. national security needs, governmental research requirements (including global climate change), and provide commercial opportunities to the private sector. Consequently, the President's new Landsat Policy Directive assigns the Department of Defense (DOD) and NASA with the responsibility of funding and managing the next Landsat satellite (Landsat 7). The Directive instructs NASA and DOD to develop and operate a Landsat 7 satellite of at least equivalent performance to Landsat 6.

In coordination with other agencies, including Commerce, DOD and NASA have prepared a plan detailing the funding and management responsibilities, data handling, and commercial considerations associated with the Landsat 7 program. This plan is complete and has been fully reviewed by the National Space Council. Prior to the deployment of Landsat 7, the Department of Commerce, through the National Oceanic and Atmospheric Administration (NOAA) is committed to the completion and launch of Landsat 6 and, in coordination with the Office of Management and Budget, will arrange for continued operation of Landsats 4 and 5 until Landsat 6 is operational.

One of the goals of the Administration's Landsat policy remains the promotion of private sector commercial opportunities in Landsat-type remote sensing. Existing U.S. government activities can be improved to further commercial interests while insuring that essential Government

needs are met. We are encouraging the private sector in three ways -- by seeking to remove unnecessary legal and regulatory barriers, by fostering the development of new technologies to reduce the cost and increase the performance of future systems, and by developing a balanced pricing and dissemination policy for public remote sensing data.

First, the new Landsat policy calls for limiting U.S. government regulations affecting private sector remote sensing activities to only those required in the interest of national security, foreign policy, and public safety. In the past, when a U.S. oil company and a major news organization asked DOC about getting licenses for operating private remote sensing satellites, they were told that current law and regulations would require them to sell their data to anyone who asked at the same price -- even their competitors. This was certainly a deterrent to those potential private investments and is an example of the sort of restriction which needs to be changed.

Recently, major aerospace companies like Lockheed and Orbital Sciences Corporation; smaller firms like WorldView Imaging Corporation and EarthVision Systems, Inc.; and the prominent International Small Satellite Organization have written to the Department of Commerce requesting that restrictive pricing practices for private remote sensing firms be eliminated. We believe that the law and implementing regulations should be revised to establish a distinction between publicly and privately financed satellite systems that allows private systems to operate in accordance with market conditions. Hopefully, this change will encourage firms to offer new sources of data which can contribute to economic growth as well as a greater understanding of the Earth's environment.

Second, the Administration is encouraging the development new satellite remote sensing technologies which can serve future commercial as well as government needs. Satellite technologies developed within DOE's National Laboratories hold the promise of reducing remote sensing costs and enhancing capabilities for future Landsat-type systems. Their development by DOE has been made possible through a \$2 billion government investment over the last three years in defense research associated with creating

smaller satellite components. Many of the existing and space tested components developed by the DOE are much smaller than current Landsat satellite components.

Due to these and other developments since the National Space Council's 1989 review, the President's Landsat Policy directs DOE, DOD, NASA and other appropriate agencies, to work together to prepare a coordinated technology plan with the goal of improving the performance and reducing the cost of future Landsat-type remote sensing systems. Mr. Chairman, plans to improve our remote sensing capabilities recognize in principle the importance that new technologies will play in the future, and helps further U.S. leadership in Landsat-type remote sensing.

Third, we are developing a balanced and consistent pricing and dissemination policy for remote sensing data from public systems such as Landsat 7. During the development of the Landsat Policy we found that there are a number of data pricing and dissemination alternatives; that the issues affecting the different user communities are very complex; and, that there is value in maintaining a flexibility to adjust our policies as circumstances change and attractive alternatives present themselves in the future. This is particularly true in the area of data policy. We believe that the policy for Landsat data should be consistent with policies applied to other forms of public data. In addition, it would be premature to set in legislation data pricing practices for a satellite that may not fly till the end of this decade. The approach outlined by my NASA colleague reflects an appropriate process for distributing data from civil government satellites.

The Administration is committed to maintaining the continuity of Landsat-type data for uses such as national security and global climate change research. The President's new Landsat Policy strikes a balance in assuring a continued stream of remote sensing data to meet vital government requirements, while at the same time strengthening U.S. remote sensing capabilities by eliminating legal and regulatory barriers affecting the private sector and fostering the development and application of new satellite technologies. Mr. Chairman, we share your desire to see a program developed which furthers U.S. leadership in remote sensing. We

look forward to working with you and this committee in fostering commercial opportunities in remote sensing and providing U.S. Landsat-type systems, both public and private, with a bright future.

Thank you for your kind attention and the opportunity to speak to you today. I would be happy to answer any questions that may have.