

# The American Society for Photogrammetry and Remote Sensing

## RESOLUTION

### on the Nation's Landsat Program

November 12, 2003

**WHEREAS:** The American Society for Photogrammetry and Remote Sensing (ASPRS), founded in 1934, is a scientific and educational organization of more than 6,000 geospatial information specialists and 150 sustaining corporate members, operating both nationally and internationally.

**WHEREAS:** The ASPRS is devoted to advancing knowledge and improving understanding of the imaging and mapping sciences to promote responsible applications of photogrammetry, aircraft and satellite remote sensing, geographic information systems, and supporting technologies.

**WHEREAS:** ASPRS constituents are among the major participants in, and benefactors of, the nation's Landsat Program.

**WHEREAS:** Since the United States launched its first Earth Resources Technology Satellite (later renamed Landsat 1) in 1972, land planners, resource managers and environmental scientists have made excellent use of the continuous flow of moderate resolution (15 m to 100 m), multispectral images of the Earth's land masses.

**WHEREAS:** Landsat images are used to monitor global crop status and predict yields, map environmental conditions for defense-intelligence purposes, assess rates of deforestation and reforestation, map vegetation types, monitor land cover changes and urban growth, plot wildfire boundaries and assess post-fire burn severity, monitor glacier movement, map coral reef decline, and for other applications that are too numerous to name in this resolution.

**WHEREAS:** The 31-year series of Landsat satellites (1-5 & 7) has unquestionably been the most successful long-term civilian land remote sensing satellite system (which includes data collection, transmission, processing, archiving, access, and distribution) deployed by the U.S., or any other space-faring nation.

**WHEREAS:** The U.S. Government first proposed the satellite series in the 1960's as an operational program, redefined it as an experimental program in the 1970's, unsuccessfully tried to commercialize it in the 1980's, continued it as a government owned-operated system in the 1990's, and (starting in 1999) has tried to commercialize it with the proposed Landsat Data Continuity Mission (LDCM).

**WHEREAS:** On May 31, 2003 unusual artifacts began to appear within the image data collected by the Enhanced Thematic Mapper Plus (ETM+) instrument on-board the Landsat 7 spacecraft, and the U.S. Government has since determined that the sensor malfunction cannot be fixed.

**WHEREAS:** On September 16, 2003 the U.S. Government rejected the only bid it received for the LDCM in a competition designed to commercialize the Landsat Program whereby government users would purchase data products from a private sector data provider.

**WHEREAS:** The U.S. Government announced on October 28, 2003 at the ASPRS Fall Specialty Conference held in Charleston, South Carolina that the requirement remains to continue providing Landsat-quality data beyond Landsat 7, as stated in the Land Remote Sensing Policy Act of 1992 (Public Law 102-555), and that the National Aeronautics and Space Administration and the U.S. Department of the Interior are currently having discussions within the Administration and the Congress, and hope to make an announcement soon about the next steps.

It is hereby **RESOLVED** by a majority vote of the ASPRS Board of Directors that:

- 1) Since moderate-resolution, multispectral remote sensing satellites are designed to acquire global coverage of the Earth's land masses on a continuous basis and are critical to the environmental integrity of the Earth, we request that the U.S. Government immediately provide support and funding for the continuation of the nation's Landsat Program.
- 2) With an understanding and acknowledgment of Public Law 102-555 and the new U.S. Commercial Remote Sensing Policy, authorized by the President on April 25, 2003, that is directed primarily at high-resolution (10 m or less) land remote sensing capabilities, we request that the U.S. Government not try to commercialize the Landsat program, since moderate-resolution, multispectral remote sensing satellite systems are demonstrably not commercially viable.
- 3) With the support and engagement of U.S. private industry, we request that the National Aeronautics and Space Administration and the U.S. Department of the Interior join forces with the U.S. Department of Defense, U.S. Department of Agriculture, and other major federal government user agencies and move forward with urgency to build and launch (within the next 24 to 36 months), using established federal procurement procedures, a government owned-operated Landsat, or Landsat-like, follow-on system, which will minimize the gap in high-quality data continuity occurring since May 31 of this year. We also request that these government agencies join forces to implement an operational follow-on system, consistent with the previous systems but at the lowest possible cost, and ask for emergency funding from the Congress to cover the cost of this system.
- 4) In the spirit of the recent Earth Observation Summit, hosted by the U.S. Department of State in Washington, D.C. on July 31, 2003, we request that the U.S. Government pursue international cooperation as a long-term approach for supporting, managing and sustaining moderate-resolution, multispectral land observation systems. This approach would ensure data continuity and frequent global coverage, continuation of "open skies" and nondiscriminatory data distribution, affordable data prices, evaluation and verification of other remote sensing systems, reduced redundancy among similar systems, enhanced roles for nongovernmental organizations, increased opportunities for joint programs with developing countries, new private markets for data analyses and derivative information products, economic benefit through cost sharing, and increased opportunities for global environmental security and stability.