

Statement of the
American Congress on Surveying and Mapping
and the
American Society for Photogrammetry and Remote Sensing
Tuesday, March 7, 1989 hearing
on the
Proposed Termination of Landsat 4 and 5

Subcommittee on Natural Resources, Agriculture, Research and
Environment
Committee on Science, Space and Technology
United State House of Representatives

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The American Congress on Surveying and Mapping (ACSM) and the American Society for Photogrammetry and Remote Sensing (ASPRS) appreciate this opportunity to present our views regarding the future of the Landsat Program.

The ACSM and ASPRS are national professional and technical societies with a combined membership of more than 18,000 individuals in surveying, mapping, remote sensing and land information science.

The societies are vitally concerned about the future of the Landsat Program. We strongly urge you to assure continued operation of Landsat 4 and 5 and to return the Landsat Program to its rightful place on the national agenda. The societies have already expressed our views to the President in a letter dated January 27, 1989 (see attached).

The ACSM and ASPRS believe that the Landsat Program has been one of this country's truly successful space programs. Landsat is the only spacecraft which is capable of producing systematic coverage of the Earth on a timely basis with

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essential spectral wave bands. The data base which it supplies is desperately needed for global environmental monitoring, economic intelligence, and national security. It will become even more important as a support for the exotic sensors which NASA is planning as part of the Earth Observing System (EOS) component of the Space Station -- which will not be available until the late 1990's.

Although Landsats 4 and 5 are still functioning well in orbit, the satellites are scheduled to be turned off at the end of March -- not because they have exceeded their contract lifetime, or because their data is degraded, but simply for lack of approximately \$10 million required to keep them operating through the end of this fiscal year (September 30, 1989). Once shut down, even though the program will eventually be restarted, the gap in the data will severely limit its applications to such issues as global climatic effects.

The societies believe that three actions are essential to assure the continuity of the Landsat program and thus the consistence of the global data base:

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1. Provide Operating Funds for Landsats 4 and 5.

The National Oceanic and Atmospheric Administration (NOAA) within the Department of Commerce has functional responsibility for the Landsat Program. Housed within NOAA, the U.S. civil remote sensing program is not receiving a high priority status and must compete with the agency's ocean and atmosphere programs for the limited budgetary funding available.

While other agencies use Landsat data extensively such as the Departments of Defense, Interior and Agriculture, similar problems exist within their budgetary structures. In order to provide funding for Landsat 4 and 5, these agencies would have to take funding away from their ongoing mandated programs. The agencies may be reluctant to do this.

Since a congressional request to fund the operations of Landsat 4 and 5 is unlikely from the Department of Commerce and the other agencies which use

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Landsat data, the societies suggest that an alternative approach be strenuously pursued. Such approach would be for NASA to request the funding since it has responsibilities for certain aspects of Landsat. Additionally, NASA will need the Landsat data to provide a continuous data base for the future EOS program as previously discussed.

2. Provide Necessary Funding for Landsat 6.

The societies urge Congress to provide funding to assure the completion, launch and operation of Landsat 6. Funding for the development of Landsat 6 is secured only through FY '89. Although the configuration of Landsat 6 is based on 25-year old technology and can never be cost-effective, it is the only system which the U.S. can build and launch by mid-1991 to assure continuity after the demise of Landsats 4 and 5. The annual battle to obtain funds for EOSAT to bring this system to completion has caused users worldwide to lose confidence in the U.S. commitment to provide continuity. They are rapidly converting to French, Japanese, and Russian sources.

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3. Provide Firm Commitment for Development of Landsat 7.

The Landsat Commercialization Act of 1984 required, and the NOAA contract with EOSAT specified, the development of Landsat 6 and 7. FY '88 funding for Landsat 7 was reduced to three contractor studies for an Advanced Civil Earth Resources Satellite. Though these studies were completed in August 1988, they are only now being released to the public. All three studies conclude that a fully commercialized system is not feasible at this time, and that the government must assume responsibility for at least the space segment. This is important so that data can be made available at reasonable cost and be widely applied. Currently, such data is restricted to a few affluent customers.

The recently released studies pay limited attention to the sensor configuration for Landsat 7, despite the U.S. Geological Survey's (U.S.G.S.) formal proposal for a system which would provide high resolution (10m or better) multispectral data in stereo suitable for 1:50,000-scale global mapping with 20m contour interval. The ASDRS and the International Society for Photogrammetry and Remote Sensing endorsed the system

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proposed by U.S.G.S. Additionally, some features of this system have been adopted by Japan for their Earth Resources Satellite ERS-1 scheduled for launch in 1992. The U.S. desperately needs a firm multi-year commitment to build such a system which could be operational by 1994-95 and provide data into the next century. If this country can make multi-billion dollar commitments for the Space Station, surely a commitment should be made for the Landsat Program which will provide vital information needed for the preservation of our fragile planet at a cost which appears miniscule by comparison. The societies believe that it isn't a matter of money but a matter of priorities.

ACSM and ASPRS respectfully urge Congress and the Administration to take the appropriate steps to implement the above-mentioned actions to assure a viable and competitive Landsat Program. The societies stand ready and willing to assist in providing technical assistance.

ACSM - ASPRS

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January 27, 1989

The President
The White House
Washington, D.C. 20500

Dear Mr. President:

On behalf of the 18,000 combined members of the American Society for Photogrammetry and Remote Sensing and the American Congress on Surveying and Mapping, we wish to extend our congratulations and best wishes for success in your Administration.

We also wish to bring to your attention an important national space satellite program which is in immediate danger of termination due to lack of funding. This is the Landsat satellite program which the National Oceanic and Atmospheric Administration (NOAA) recently disclosed will be forced to suspend operations of Landsat satellites 4 and 5 on March 31, 1989.

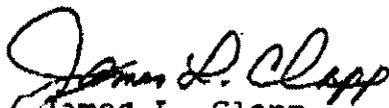
The Landsat Program offers mankind a truly systematic and repetitive view of the Earth at moderate resolution. While NASA has several related programs scheduled for the next decade, they are not responsive to our immediate needs. Continued availability of Landsat data is critical to ever-increasing numbers of data users throughout the commercial, governmental and scientific sectors -- not only in the U.S., but literally across the globe.

We strongly urge your Administration to work with Congress to restore the Landsat program to its proper position in the national agenda.

Recent issues of National Geographic and Time magazine indicate that the entire world is becoming acutely aware of our environmental problems and the Earth's fragility. The U.S. Congress has historically supported Landsat and we believe they will do so again but it requires the immediate support of your Administration.

We respectfully request your assistance on this matter.

Sincerely yours,


James L. Clapp
President, ACSM


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