

Highlights of [GAO-09-187](#), a report to the Chairman, Committee on Science and Technology, House of Representatives

Why GAO Did This Study

In 2010, the planned retirement of the space shuttle will require the National Aeronautics and Space Administration (NASA) to make disposal and reutilization decisions regarding over 1.2 million types of equipment. To facilitate these and other equipment management decisions, NASA recently invested \$29 million in a new program: the Plant, Property, and Equipment (PP&E) Module—a component of NASA's Integrated Enterprise Management Program. GAO was asked to assess the effectiveness of NASA's processes, systems, and controls for managing its PP&E. This report addresses whether NASA (1) effectively designed controls over steps NASA identified as key to its controlled equipment reutilization process, including sending equipment to disposal, and (2) implemented policies, controls, and processes to enhance equipment reutilization. To answer these questions, GAO reviewed NASA equipment reutilization policy and conducted on-site visits at five NASA centers.

What GAO Recommends

GAO is recommending five actions for improving the effectiveness of NASA's equipment reutilization efforts, including actions directed at obtaining accurate information on equipment descriptions, condition, and availability. NASA agreed with four recommendations, but disagreed with GAO's recommendation to improve equipment availability data. GAO continues to believe additional actions are warranted in this area.

To view the full product, including the scope and methodology, click on [GAO-09-187](#). For more information, contact Susan Ragland at (202) 512-9095 or raglands@gao.gov.

January 2009

PROPERTY MANAGEMENT

NASA's Goal of Increasing Equipment Reutilization May Fall Short without Further Efforts

What GAO Found

Inconsistent descriptions and inaccurate information on the condition of equipment hamper the PP&E Module's ability to produce equipment matches and enhance reutilization. Although descriptions of equipment items are crucial for the new module to succeed in identifying equipment for reutilization, NASA has not provided detailed guidance on what should be included in the description field, leading to widely varying descriptions. For example, the same type of computer server equipment was described as a "disk array," "disk drive unit," and "storage array unit." GAO's physical inspections at two centers found that 83 of the 84 equipment items inspected were incorrectly coded as new and unused in the PP&E Module. These problems may lead to reutilization opportunities being overlooked.

Further hampering equipment reutilization is the PP&E Module's lack of detailed equipment availability information. The module does not identify the extent to which each piece of equipment is in use, necessitating a potentially lengthy search process. For example, an end user searching for an oscilloscope could currently have to contact up to 1,700 other end users to determine the availability status of these equipment items.

These conditions contribute to inadequate end user utilization of the NASA Property Web interface (N-PROP), the PP&E Module's automated component. N-PROP allows end users to perform online equipment management functions, which NASA anticipated would generate cost savings by facilitating equipment reutilization and eliminating manual processes. However, 98 of the 121 end users who were responsible for equipment selected from a NASA-wide statistical sample stated that they had never used either N-PROP or the prior systems, limiting the potential savings from implementing the new PP&E Module.

NASA's existing policies and procedures regarding equipment screenings and annual walk-through inspections—both key controls in the equipment reutilization process—were carried out inconsistently, if at all, at the five centers GAO visited. Without specific guidance on how to implement NASA's equipment screening policy, centers failed to ensure that screenings occurred prior to purchasing new equipment, undermining the purpose of the screenings. Further, NASA does not require users to justify the need to purchase new equipment when a screening has identified equipment available for reutilization. In addition, required walk-through inspections intended to identify idle equipment were not conducted at one center and were ineffective at the other four. Equipment managers did not always follow up to ensure that the PP&E Module was updated and GAO's testing estimated that about 16 percent of NASA's controlled equipment (with a value of at least \$230 million) was improperly listed as being actively in use and had been overlooked during annual walk-through inspections.