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FEDERAL
RESEARCH

NASA Should Better
Inform Researchers
about How to Appeal
Dissemination
Decisions



GAO

Accountability * Integrity * Reliability



Highlights of [GAO-10-200](#), a report to congressional committees

Why GAO Did This Study

National Aeronautics and Space Administration (NASA) researchers generally disseminate their agency-funded research results through publications, presentations, agency releases, and media interviews. In 2007, GAO reviewed dissemination policies at NASA and two other agencies and found that NASA's policies were generally clear, but GAO's survey of NASA researchers raised concerns that many of them did not understand some of the policies and were generally unaware of how to appeal dissemination decisions. Congress in 2008 directed GAO to determine whether NASA is implementing its policies in a clear and consistent manner. To meet that requirement, GAO determined (1) what changes have been made to NASA's policies since 2007, (2) the views of NASA researchers on whether the policies have been more effectively communicated since 2007, and (3) what changes have occurred since 2007 in NASA's processes for researchers to follow if they wish to appeal decisions about the dissemination of their research results. GAO conducted a Web-based survey of all 2,790 NASA researchers and had a 57.5 percent response rate.

What GAO Recommends

GAO recommends that NASA include in its efforts to increase researchers' awareness of its policies a focus on the processes researchers are to follow when they wish to appeal decisions. In commenting on a draft of this report, NASA concurred with our recommendation.

View [GAO-10-200](#) or [key components](#). For more information, contact Ms. Anu Mittal at (202) 512-3841 or mittala@gao.gov.

FEDERAL RESEARCH

NASA Should Better Inform Researchers about How to Appeal Dissemination Decisions

What GAO Found

Since May 2007, NASA has changed some of its policies on the dissemination of research results through publications and presentations, but has not changed its policy on dissemination through news releases and media interviews, although it has made a key leadership change in its main public affairs office. Regarding its policies for dissemination through publications and presentations, in 2007 and 2009, NASA clarified the roles and responsibilities of officials who participate in the review and approval process that is required before agency-funded research is released. The changes also required managers to notify researchers when their requests to release research results have been approved or denied, and they required researchers to refrain from releasing results until they received approval. In contrast, although NASA has not made any changes to its policy that guides the dissemination of research through the media, in May 2007, it converted a key management position in the Headquarters Office of Public Affairs from a political appointment to a career civil service position. This was done to address allegations that an official in this office had suppressed climate change science and denied media access to scientists during 2004 and 2005. The change resulted from a management review conducted in early 2006 by NASA's leadership looking into these allegations.

While the majority of researchers are familiar with the dissemination policies, GAO's survey indicates that in 2009, 87 percent of researchers were familiar with NASA's dissemination policies, compared with 92 percent in 2007, and slightly less were confident they understood the policies well enough to follow them for certain kinds of dissemination routes, such as publications, presentations, and agency releases. As in 2007, researchers continue to learn about the policies mainly through on-the-job training and e-mails from NASA officials. GAO's 2009 survey, like the 2007 survey, also indicates that researchers remain unclear about when they may discuss research results that have policy implications, including when they may discuss their own views, even though NASA has clarified its policy to allow researchers to do so as long as they do not attribute their views to the agency.

Since 2007, NASA has not adopted any new procedures for appealing dissemination decisions. As in 2007, in 2009 relatively few NASA researchers were aware of and familiar with the agency's appeals process. Specifically, GAO's survey found that about one-third of NASA researchers were aware that the agency has a process to appeal decisions related to dissemination, but only about 8 percent said they were familiar with it. Fewer researchers in 2009 than in 2007 said they had sought to disseminate their research in the past 5 years (83 percent compared with 91 percent), and more researchers had their requests denied for other than technical reasons (12 percent in 2009 compared with 7 percent in 2007). Nonetheless, 85 percent of researchers continue to believe that the agency generally supports the dissemination of research results and that the agency's efforts to inform them about policies for all dissemination routes are generally effective.

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Abbreviations

FPPS	Federal Personnel and Payroll System
NASA	National Aeronautics and Space Administration
NIST	National Institute of Standards and Technology
NOAA	National Oceanic and Atmospheric Administration
NPR	National Public Radio
OIG	Office of Inspector General

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United States Government Accountability Office
Washington, DC 20548

December 3, 2009

The Honorable John D. Rockefeller
Chairman
The Honorable Kay Bailey Hutchison
Ranking Member
Committee on Commerce, Science, and Transportation
United States Senate

The Honorable Bart Gordon
Chairman
The Honorable Ralph M. Hall
Ranking Member
Committee on Science and Technology
House of Representatives

The federal government supports a wide range of scientific and engineering research and development efforts to advance general knowledge, support science-related public policy, and enhance the nation's economic competitiveness, among other things. Much of federally funded research is designed to serve the goals and missions of over a dozen federal agencies, including the National Aeronautics and Space Administration (NASA). Open communication and the exchange of research results with the broader scientific community are critical to advancing the state of scientific understanding. While the results of some research cannot be shared for national security or intellectual property reasons, dissemination of most federally funded research helps to ensure a return on the public's investment in research. Federally sponsored research may be conducted by federally employed researchers or by university and other researchers who receive grants and contracts awarded by various federal agencies.

From its beginning, NASA has been responsible for the nation's aeronautical and space activities, including conducting and sponsoring research related to its four mission areas—aeronautics research, exploration systems, science, and space operations. The statute that established NASA in 1958 calls for the agency to “provide the widest practicable and appropriate dissemination” of the scientific and technical

information resulting from its research efforts.¹ Research results can be disseminated through a number of different routes to reach a variety of audiences. Some dissemination routes, such as publication through peer-reviewed journals and agency scientific and technical reports, share information with the scientific community. Similarly, researchers can present their findings to colleagues at scientific conferences, workshops, symposia, or professional society meetings. Other dissemination routes are intended to reach the public at large. For example, agency press releases or postings on agency Web sites can help target media or public attention to particular research findings and agency events, and media interviews can provide the general public with access to information about scientific activities and results.

In recent years, concerns arose that NASA researchers were prevented from sharing the results of their work, particularly with respect to the sensitive topic of climate change and the impact of global warming. In light of these concerns, in 2006 Congress requested that we review the dissemination policies and practices for federally funded research at three agencies—NASA, the National Oceanic and Atmospheric Administration, and the National Institute of Standards and Technology. In our May 2007 report, we found that NASA’s policies were generally clear and should help facilitate the dissemination of research results.² However, we raised a number of concerns, including that many NASA scientists did not understand their agency’s policies related specifically to media interviews or press releases and were generally unaware of NASA’s policy for appealing dissemination decisions.³ We also found that NASA generally did not offer formal training to its researchers on its dissemination policies.

Through the National Aeronautics and Space Administration Authorization Act of 2008, Congress stated that “NASA should not dilute, distort, suppress, or impede scientific research or the dissemination thereof” and directed us to determine whether NASA is implementing the regulations governing the dissemination of research results in a clear and consistent

¹The National Aeronautics and Space Act of 1958, as amended, Pub. L. No. 85-568, § 203, 72 Stat. 429 (1958).

²GAO, *Federal Research: Policies Guiding the Dissemination of Scientific Research from Selected Agencies Should Be Clarified and Better Communicated*, GAO-07-653 (Washington, D.C.: May 17, 2007).

³Throughout this report we use the phrase “agency releases” to include press releases, postings on NASA’s Web sites, or agency reports or fact sheets.

manner.⁴ In response to the mandate and as agreed with your offices, this report, which follows up on our 2007 report, discusses (1) what changes, if any, have been made since 2007 to the policies that guide the dissemination of federally funded research results at NASA; (2) the extent to which NASA researchers believe that the agency's dissemination policies have been more effectively communicated since 2007, and their experiences in using the process; and (3) what processes, if any, NASA has adopted since 2007 for researchers to follow if they have concerns about decisions regarding the dissemination of their research results, and how those concerns have been addressed.⁵

To identify and evaluate the changes that may have been made since 2007 to the policies that guide the dissemination of federally funded research results at NASA, we obtained, reviewed, and analyzed NASA's current research dissemination policies, and compared them with the prior policies. We contacted scientific managers and public affairs officials who are responsible for the dissemination of research results at NASA's headquarters and all 10 centers and used a standard set of questions to ensure that we obtained consistent information about each aspect of NASA's dissemination policies and practices.⁶ In addition, we obtained copies of the relevant dissemination policies and discussed with NASA officials how these policies were implemented and how they have changed, if at all, since 2007. To identify the extent to which NASA researchers believe that the agency's dissemination policies have been more effectively communicated since 2007, what their experiences have been in disseminating research, and how their concerns about dissemination decisions have been addressed, we sent a Web-based survey to all 2,790 researchers at NASA. We defined researchers to be included in our population as federally employed scientists, engineers, or other

⁴Pub. L. No. 110-422, § 1109(b)(1), 122 Stat. 4811 (2008).

⁵Throughout this report, we use the phrase "since 2007" to refer to changes made since the issuance of our report on policies for disseminating research at selected agencies. See [GAO-07-653](#).

⁶The NASA centers included in this review were the Ames Research Center, Dryden Flight Research Center, Glenn Research Center, Goddard Space Flight Center, Jet Propulsion Laboratory, Johnson Space Center, Kennedy Space Center, Langley Research Center, Marshall Space Flight Center, and Stennis Space Center. We subsequently excluded the Jet Propulsion Laboratory from our review because contract researchers primarily perform research at this center and NASA does not maintain a database with the names of individual contract researchers. In addition, contract researchers might charge NASA for costs related to participating in the survey.

researchers who are in a position to disseminate their research results to a wider audience. To identify these researchers, we obtained from center or program managers at NASA a list of researchers in their organization who would meet our defined criterion. Overall, we received a response rate of 57.5 percent to our survey, for a total of 1,605 respondents. We compared the respondents with nonrespondents on available administrative data, such as the center where they work, but did not find any significant differences on the available variables. Although our survey was intended to be a census, for the purposes of analyzing the results, we decided to treat our survey as a random sample. We used largely the same survey instrument that was the basis for our May 2007 report on dissemination policies at selected agencies.⁷ Through our survey, we sought the researchers' views on NASA's research dissemination policies, the level of agency support for dissemination, and their experiences with disseminating research results. Unless otherwise noted, point estimates we report for 2009 have a 95 percent level of confidence of plus or minus 4 percent. An expanded explanation of our scope and methodology can be found in appendix I. Appendix II contains selected results from our 2009 survey.

We conducted this performance audit from January 2009 to December 2009 in accordance with generally accepted government auditing standards. Those standards require that we plan and perform the audit to obtain sufficient, appropriate evidence to provide a reasonable basis for our findings and conclusions based on our audit objectives. We believe that the evidence obtained provides a reasonable basis for our findings and conclusions based on our audit objectives.

Background

NASA's work is performed at 10 research and flight centers across the United States. Each of these centers conducts a variety of research, engineering, construction, and support functions related to the agency's mission, and each has a separate management structure, including a Center Director, to guide its activities. Furthermore, each center has its own public affairs office responsible for managing its media contacts and communications. NASA's Washington, D.C., headquarters provides overall guidance for each of the mission areas and public affairs oversight of agencywide programs and activities to coordinate and maintain communication channels to the news media and public.

⁷[GAO-07-653](#).

Federally employed NASA researchers must adhere to both agencywide and center-specific policies and procedures when disseminating information outside of the agency. The requirements for dissemination depend on the type of information to be released, the method used for dissemination, and the intended audience. NASA has (1) policies for disseminating scientific and technical information through presentations and publications to the scientific community and also (2) a media policy that governs the release of information to the general public through media interviews and press releases. Scientific and technical information—defined as the results of basic and applied scientific, technical, and related engineering research and development—is typically disseminated through NASA publications, outside journals, presentations at meetings or workshops, and Web sites.⁸ NASA’s policies for the dissemination of such research results establish a series of reviews to determine whether the information is suitable for public release based on national security or intellectual property concerns, is technically accurate, and meets data quality standards. NASA’s media policy governs the release of information about the agency’s activities and results to the general public through such methods as interviews, press releases, media advisories, news features, and Web postings. This policy specifically defines the roles and responsibilities of managers, researchers, and public affairs officials in deciding what information can be released. For example, the policy directs public affairs officials at both NASA headquarters and the relevant center to ensure the timely release of public information by obtaining review and clearance by appropriate officials. It also includes an appeals process for researchers to use when they disagree with the agency’s decision regarding whether to release information.

In recent years, allegations have been made regarding interference with the efforts of NASA researchers to disseminate their research results to external audiences. A number of these concerns surrounded politically sensitive topics, such as climate change, where research was allegedly being suppressed. For example, in December 2005, the NASA Headquarters Office of Public Affairs denied a request from National Public Radio (NPR) to speak with a NASA scientist known for expertise on the subject of climate change. However, not long before NPR’s request for an interview, this scientist had delivered a presentation on climate change at a scientific conference, prompting concerns that the NASA

⁸Throughout this report we refer to scientific and technical information as research results. In addition, we refer to the authors or originators of such information as researchers.

Headquarters Office of Public Affairs had improperly denied NPR's interview request.

The concerns over NASA's alleged suppression of research resulted in reviews of the agency's dissemination practices by the NASA Office of Inspector General (OIG) in addition to our review in 2007. In June 2008, NASA's OIG issued two reports on the dissemination of research results at NASA. Specifically, the OIG evaluated NASA's process for reviewing, approving, and releasing research results and investigated allegations that NASA had suppressed the dissemination of climate change research and information through the media. In the first report, the OIG found that NASA's guidance adequately defined the roles and responsibilities for the review, approval, and release of NASA research results through publications and presentations but that the guidance had not been effectively implemented at the four centers it reviewed—Goddard Space Flight Center, Johnson Space Center, Langley Research Center, and Marshall Space Flight Center.⁹ The OIG determined that, among other things, researchers were not always notified when the review process had been completed, and center management had not adequately informed researchers about the process to follow when they wanted to disseminate their research results through publications or presentations. While the OIG did not identify instances in which research results had been inappropriately released, it noted that the absence of timely notice to researchers regarding dissemination decisions increases the risk of releasing research results that should be restricted for export control, national security, or other reasons.¹⁰ Finally, the OIG surveyed researchers who had sought to disseminate their research results and found no evidence that NASA purposefully used the review process to suppress scientific research at those four centers.

In its second report, the OIG found that during the fall of 2004 through early 2006, the NASA Headquarters Office of Public Affairs reduced, marginalized, or mischaracterized climate change science made available

⁹National Aeronautics and Space Administration, Office of Inspector General, *Actions Needed to Ensure Scientific and Technical Information Is Adequately Reviewed at Goddard Space Flight Center, Johnson Space Center, Langley Research Center, and Marshall Space Flight Center*, Report No. IG-08-017 (Washington, D.C.: June 2008).

¹⁰Export Administration Regulations and International Traffic in Arms Regulations control the export of, among other things, certain technology and technical data to foreign countries.

to the general public.¹¹ The OIG found that the suppression of climate change research was localized within the NASA Headquarters Office of Public Affairs and that senior NASA officials stated they were unaware of the situation until the allegations appeared in a national newspaper. According to the report, once NASA leadership was made aware of the suppression, it aggressively implemented corrective actions. For example, NASA revised its policy that governs dissemination of research results through the media and reaffirmed its policy that researchers may discuss their opinions on the implications of research results provided they attribute such views to themselves and not the agency. The OIG determined that the suppression had occurred, in part, because political appointees controlled key positions responsible for deciding which research results NASA would disseminate to the media.

NASA Has Made Some Changes to Improve Dissemination of Research Results

Since May 2007, NASA has changed some of its policies on the dissemination of research results through publications and presentations, and it has made a key leadership change in its main public affairs office to address allegations that an official in this office had played a key role in suppressing climate change science and media access to climate scientists in the past. Since 2007, NASA has made no changes to its policy on dissemination through news releases and media interviews.

NASA Has Clarified the Roles and Responsibilities of Reviewing Officials for Dissemination of Research Results through Publications and Presentations

In late 2007 and early 2009, NASA changed one of its policies on dissemination of research results through publications and presentations. Specifically, in contrast to the policy in place prior to December 2007, the revised policy holds researchers responsible for ensuring that the results they seek to disseminate have been properly reviewed and approved prior to releasing them. In addition, the revised policy directs reviewing officials in the centers to include training in their efforts to ensure that NASA researchers are aware of the requirements and procedures for the review, approval, and dissemination of research results.¹² In January 2009, in response to the OIG's review of dissemination practices at four centers,

¹¹National Aeronautics and Space Administration, Office of Inspector General, *Investigative Summary Regarding Allegations that NASA Suppressed Climate Change Science and Denied Media Access to Dr. James E. Hansen, a NASA Scientist* (Washington, D.C.: June 2008).

¹²NASA Policy Directive, "Management of NASA Scientific and Technical Information," NPD 2200.1A, December 6, 2007.

NASA further revised this policy to strengthen the earlier changes by including additional responsibilities for officials in the centers and in NASA headquarters.¹³ For example, the revised policy directed center managers to (1) establish plans to ensure that researchers are aware of the review requirements, and (2) notify researchers in a timely manner whether their research has been approved or rejected for release. The revised policy also directed NASA officials responsible for overseeing the dissemination of research results to annually review the compliance of NASA's centers with the updated policy, and evaluate the overall effectiveness of the agency's review and approval process.

As part of its efforts to ensure compliance by the centers with the revised policies, headquarters officials told us they have assessed compliance at the four centers reviewed by the OIG and, as of October 2009, are finalizing a report on their findings. These officials also said they will begin annual compliance reviews for all centers in 2010. In addition, NASA officials have taken steps to implement an automated system to enhance managers' and researchers' ability to monitor requests through the review and approval process. Specifically, during its review, the OIG found that managers who use paper-based systems were unable to readily determine when research may have been inappropriately released, whether requests had been denied, and how many requests were undergoing review. In fiscal year 2009, NASA approved funding to test an automated tracking system in two centers; the system is in operation at one of the centers, and is set to become operational at the other center early in fiscal year 2010.¹⁴ The use of such systems will be voluntary at other centers, since headquarters will provide only limited funding to maintain them. NASA officials told us that several centers have expressed interest in developing automated tracking systems but, as of October 2009, have not secured the necessary funding.

Officials at the four centers reviewed by the OIG have also taken a number of steps to implement the policy changes made in 2007 and 2009. For example, all four centers reviewed their center-specific policies and

¹³NASA Inspector General Report No. IG-08-017. See also NM 2200.71, January 2009. [The Interim Directive does not have a specific name or title.]

¹⁴Thus far, Ames Research Center has fully implemented an automated tracking system, referred to as the Electronic Document Availability Authorization. Dryden Flight Research Center has conducted orientation and training to prepare for implementation in early fiscal year 2010.

procedures—which generally reinforce or elaborate on NASA-wide policies—and two centers revised their policies.¹⁵ For example, one center revised a flow chart contained in its procedures to more accurately reflect the center’s review and approval process.

Centers have also taken steps toward establishing a process to ensure timely notification of researchers about dissemination decisions, according to NASA officials. Currently, some centers have electronic systems that provide notification automatically, while others provide notification through e-mails and telephone calls. NASA headquarters officials said that the automated tracking system, once implemented agencywide, would also help ensure that notification occurs in a timely manner at the conclusion of the review and approval process.

NASA Changed a Key Public Affairs Position to Help Ensure Dissemination of Research Results to the Public through the Media

Since 2007, NASA has not made any changes to its media policy,¹⁶ but in May 2007 it converted a key management position in the Headquarters Office of Public Affairs from a political appointment to a career civil service position. This change followed a management review—conducted in early 2006 by NASA’s leadership—of allegations that its Headquarters Office of Public Affairs had suppressed climate change science and denied media access to scientists in 2004 and 2005. In a June 2008 report on these concerns, the OIG concluded that inappropriate political posturing was the proximate cause of at least some of these actions and that a political appointee who was the Deputy Assistant Administrator for Public Affairs at the time of the alleged suppression was a central figure in the

¹⁵Center-specific policies, procedures, and guidance for dissemination of research through presentations and publications at seven of the nine centers we reviewed are consistent with agencywide policies. The two remaining centers rely solely on the agencywide guidance.

¹⁶NASA’s media policy also governs dissemination of research to the public through news features, media advisories, or news-related Web postings. Seven of the nine centers we reviewed also have center-specific policies, procedures, and guidance governing the dissemination of information to the media, all of which are consistent with NASA’s agencywide guidance. The remaining two centers rely solely on the agencywide policy. According to center officials, some center-specific policies and procedures are designed to expand on the roles and responsibilities of center public affairs staff and to establish guidance for situations not specifically addressed by the agencywide media policy. For example, one center’s policy outlines the steps to be taken when a media correspondent initiates a story and then seeks to make it an exclusive story with the center’s cooperation.

allegations of censorship and denial of media access.¹⁷ According to the OIG report, NASA intended that the conversion of the position to a career civil service position would facilitate communications within the Headquarters Office, where the suppression of information had been localized. NASA officials told us that the agency placed a career civil servant in the position after the incumbent political appointee, who had held the position during the time that climate science had been suppressed, left NASA. The career civil servant took over the position in May 2007.

Fewer Researchers Are Familiar with NASA's Dissemination Policies, but Most Believe the Policies Effectively Ensure Access to Research Results

Although NASA has taken some steps to increase researchers' awareness of its dissemination policies, our survey results in 2009 indicate that while most researchers are familiar with the dissemination policies, fewer researchers were familiar with them than in 2007, and slightly fewer were confident they understood the policies well enough to follow them. However, most researchers reaffirmed their belief that NASA's policies effectively ensure access to research results and that the agency's efforts to help them understand the various dissemination policies are generally effective.

NASA Has Undertaken Various Efforts to Increase Researchers' Awareness of Dissemination Policies

In response to a review by its OIG, NASA tasked headquarters officials responsible for oversight of dissemination of research results through publications and presentations with ensuring that NASA researchers are aware of the agency's review and approval requirements. However, as of October 2009, headquarters officials said they have relied on the centers to create and implement plans to increase awareness. Thus far, officials at some centers have taken actions to increase researchers' awareness of the requirements for review, such as sending a center-wide e-mail emphasizing the importance of completing the review process prior to releasing research results and increasing outreach to researchers who work in areas that produce significant amounts of research. According to NASA headquarters officials, they may take additional steps in the future to

¹⁷National Aeronautics and Space Administration, Office of Inspector General, *Investigative Summary Regarding Allegations that NASA Suppressed Climate Change Science and Denied Media Access to Dr. James E. Hansen, a NASA Scientist* (Washington, D.C.: June 2008).

increase awareness, such as having the centers include information on the review and approval process in their new employee orientation programs.

NASA has also taken steps since 2007 in response to our report to help raise awareness of its media policy. Specifically, in May 2007 we recommended that NASA provide formal training to inform, reinforce, and update managers, researchers, and public affairs staff on dissemination policies. As a result of our recommendations, NASA undertook a number of formal training activities with regard to its media policy. Specifically, a senior public affairs official conducted presentations at each of the centers regarding the media policy. As part of these meetings, officials presented an overview of the policy, answered questions from employees, and distributed copies of the policy to each public affairs officer and to senior managers. In December 2007, NASA distributed materials on the policy to public affairs staff and discussed the policy in meetings that included headquarters and center public affairs officials. Finally, a discussion of the media policy was incorporated into the orientation for new public affairs officers.

Results from both surveys, as well as agency officials we spoke with, indicated that most NASA researchers receive information about dissemination policies through means other than formal training, although fewer researchers said in 2009 that they learn about policies through e-mails from center and NASA managers and more said they had received formal training. Our 2009 survey results show that researchers get information through a variety of methods, most commonly through on-the-job training (about 70 percent) and e-mails or other correspondence from center managers to all center staff (68 percent). Additionally, more than half of researchers cited Administrator-level e-mails or correspondence sent to all NASA staff. Although e-mails from both center and Administrator-level management represent the second and third most common method of receiving information about NASA policies, about 10 percent fewer researchers cited these in 2009 than in 2007.¹⁸ Furthermore, roughly half of researchers in both surveys responded that they learned

¹⁸ According to our 2007 survey results, 78.5 percent (95 percent confidence interval 74.0-82.3) of researchers cited e-mails or other correspondence from center management as a means of learning about agency dissemination policies, and 62.5 percent (95 percent confidence interval 57.3-67.4) cited correspondence from Administrator-level offices. In our 2009 survey, the corresponding numbers were 68.5 percent (95 percent confidence interval 67.0-70.0) for center management and 53.7 percent (95 percent confidence interval 52.0-55.3) for Administrator-level offices.

about policies through notifications on intranet sites and staff or town hall meetings.¹⁹ Finally, in 2009 more researchers reported learning about dissemination policies through formal training—42 percent compared with 32 percent in 2007.²⁰ These results appear consistent with the fact that NASA headquarters and public affairs officials told us that the agency largely relies on methods other than formal training to inform staff about the media policy and appeals process.

Fewer Researchers Are Familiar with NASA's Dissemination Policies than in 2007, and Slightly Fewer Are Confident That They Understand the Policies

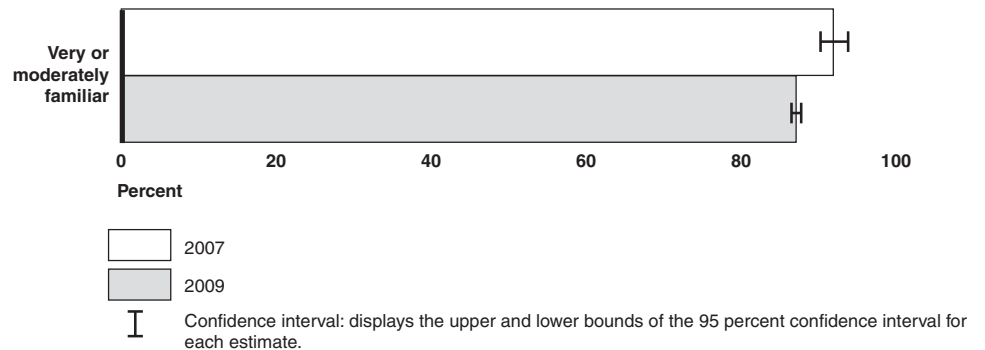
Although our surveys from 2007 and 2009 indicate that about 90 percent of researchers are familiar with NASA's dissemination policies, fewer researchers in 2009 compared with 2007 said they are very or moderately familiar with NASA's dissemination policies. Specifically, according to our 2009 survey results, 87 percent of researchers were very or moderately familiar with NASA's dissemination policies, compared with 92 percent in 2007.²¹ See figure 1.

¹⁹According to our 2007 survey results, 50.7 percent (95 percent confidence interval 45.3-56.0) of researchers cited notifications on intranet sites, and 48.2 percent (95 percent confidence interval 42.9-53.6) cited staff or town hall meetings as a means of learning about agency dissemination policies. In our 2009 survey, 46.5 percent (95 percent confidence interval 44.9-48.2) of researchers cited notifications on intranet sites and 46.4 percent (95 percent confidence interval 44.7-48.1) cited staff or town hall meetings as a means of learning about agency dissemination policies.

²⁰For 2007, the range for the 95 percent confidence interval was 27.3 to 37.2 percent. For 2009, the range for the 95 percent confidence interval was 40.4 to 43.7 percent.

²¹For 2007, the range for the 95 percent confidence interval was 88.4 to 94.3 percent. For 2009, the range for the 95 percent confidence interval was 86.1 to 88.2 percent.

Figure 1: Percentage of Researchers Who Are Familiar with NASA's Dissemination Policies, 2007 and 2009



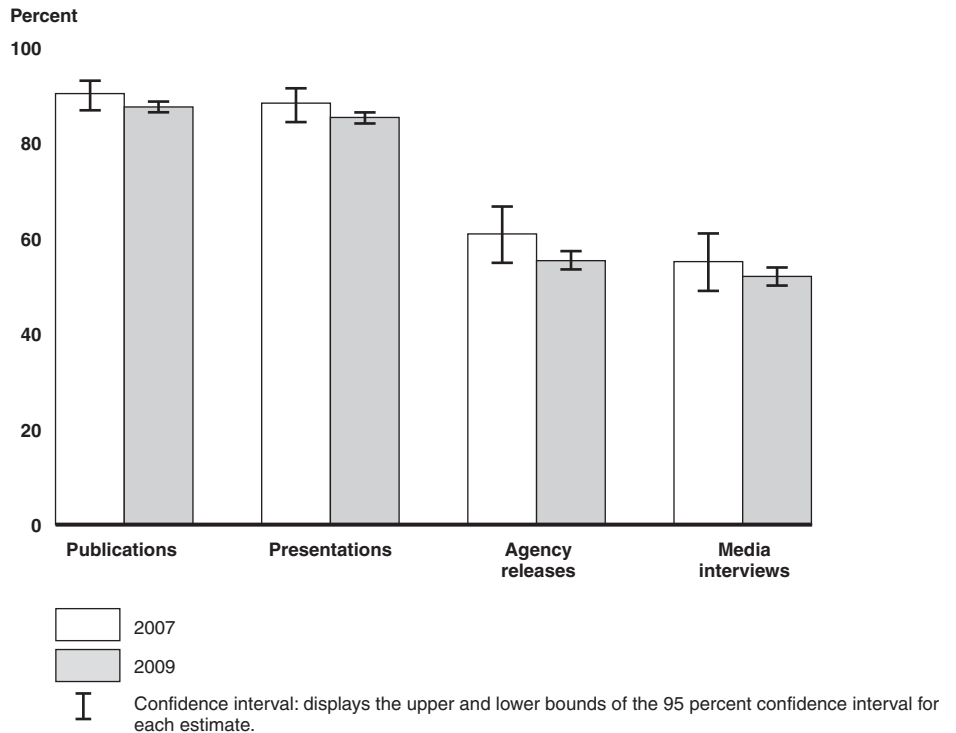
Source: GAO survey.

From 2007 to 2009, we also found a small decline in the percentage of researchers who said they were very or moderately confident that they understood the policies for dissemination of research results through publications and presentations well enough to follow them (about 85 percent in 2009 compared with about 90 percent in 2007).²² Similarly, a small decline occurred in the percentage of researchers who were very or moderately confident they understood the policies related to agency releases (55 percent in 2009 compared with 61 percent in 2007).²³ We found no change in the confidence researchers have about their understanding of the policies related to media interviews. See figure 2.

²²For publications in 2009, the range for the 95 percent confidence interval was 86.4 to 88.6 percent. For presentations in 2009, the range for the 95 percent confidence interval was 84.1 to 86.4 percent. For publications in 2007, the range for the 95 percent confidence interval was 86.8 to 93.0 percent. For presentations in 2007, the range for the 95 percent confidence interval was 84.4 to 91.4 percent.

²³For 2009 agency releases, the range for the 95 percent confidence interval was 53.4 to 57.2 percent. For 2007 agency releases, the range for the 95 percent confidence interval was 54.9 to 66.6 percent.

Figure 2: Percentage of Researchers Who Are Confident That They Understand Policies Well Enough to Follow Them, 2007 and 2009



Source: GAO survey.

As would be expected, those researchers who thought NASA’s efforts to educate them about dissemination policies were extremely to moderately effective were more likely to feel confident that they understood the policies than those who thought the agency’s efforts were less effective.²⁴ For example, 76 percent of researchers who reported being very to moderately confident that they understood the dissemination policies related to media interviews also responded that NASA’s efforts to educate them about these policies were extremely to moderately effective. In

²⁴According to our 2009 survey results, 93.7 percent of researchers were very to moderately confident they understood policies related to publications when they said NASA’s efforts to educate them were extremely to moderately effective (the 95 percent confidence interval was 92.8 to 94.6). The corresponding numbers were 92.3 percent (the 95 percent confidence interval was 91.3 to 93.3) for policies related to presentation, 76.1 percent (the 95 percent confidence interval was 74.0 to 78.2) for policies related to agency releases, and 76.0 percent (the 95 percent confidence interval was 73.8 to 78.2) for policies related to media interviews.

contrast, 17 percent of researchers who reported being very to moderately confident about how to apply the policies for dissemination through media interviews also responded that NASA's efforts to educate them about these policies were slightly to not at all effective. In addition, researchers who said they had tried to disseminate their results in the past 5 years were more likely than other researchers to be confident that they understood the policies related to the dissemination route they used. For example, 69 percent of researchers who sought to disseminate research results through agency releases in the past 5 years were very or moderately confident that they understand NASA's policies for dissemination through agency releases, whereas 55 percent of all researchers, regardless of whether they had sought to use agency releases, reported being very or moderately confident they understand dissemination policies related to agency releases.

Our 2007 and 2009 surveys also indicate that many researchers remain unclear about when they may discuss research results that have potential policy implications. Specifically, according to our 2009 survey, when research results are consistent with NASA's policy, 66 percent of researchers believe they are allowed to discuss the results, while 15 percent believe they may not, and 19 percent were uncertain.²⁵ However, fewer researchers believe they may discuss research results when the results differ from NASA's policy. Specifically, 43 percent believe they may discuss such results, 19 percent believe they may not, and 38 percent were uncertain. Additionally, just over half of researchers (54 percent) believe they may discuss their personal views related to research results that have potential policy implications, while 13 percent believe they may not and 34 percent were uncertain. This uncertainty about discussing research results and expressing personal views exists despite clear statements in NASA's revised media policy that employees may discuss their results and express personal views as long as they attribute such views to themselves and not the agency.

²⁵For researchers who answered they are allowed to discuss the results 65.8 (the range for the 95 percent confidence interval is 62.9 to 68.7) and 15.2 (the range for the confidence interval is 13.0 to 17.5) for those who believe they may not. Nineteen percent were uncertain (the range for the confidence interval is 16.5 to 21.4).

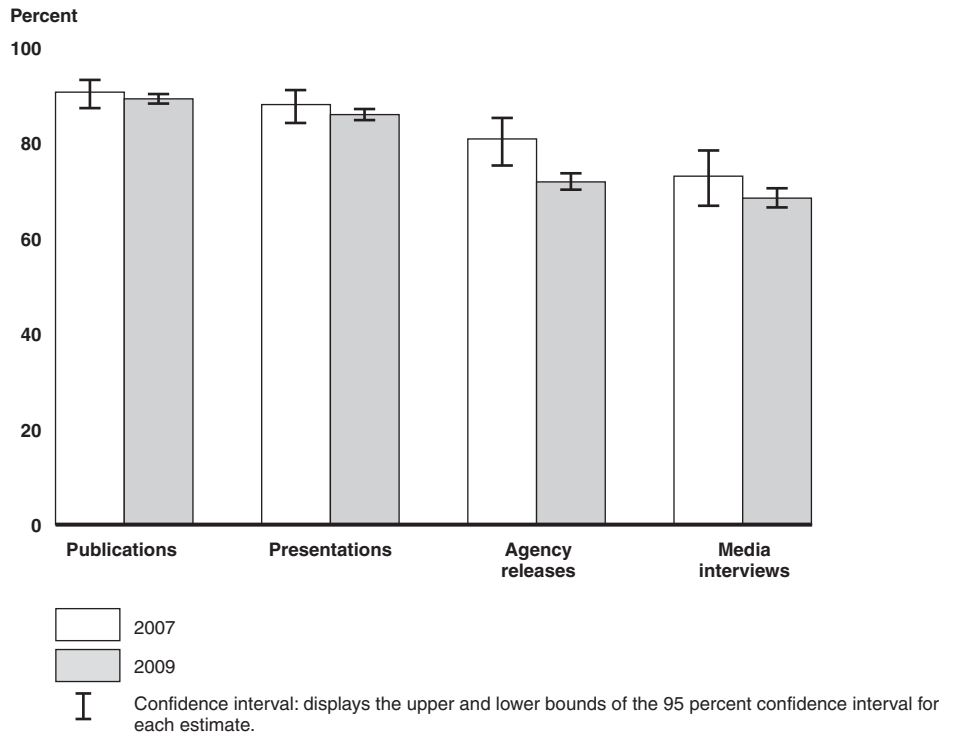
Most Researchers Believe NASA's Policies Ensure Access to Research Results

In our 2007 and 2009 surveys, almost 90 percent of researchers reported that overall the agency's policies are extremely to moderately effective in ensuring access to research results.²⁶ In addition, over 85 percent of researchers believed NASA's efforts to inform them about policies for dissemination through publications and presentations were extremely to moderately effective, and about 68 percent reported the same regarding media interviews. However, in 2009, fewer researchers believed that NASA's efforts to inform them about the policies for disseminating research through agency releases were extremely to moderately effective (72 percent said so in 2009 compared with 81 percent in 2007).²⁷ See figure 3.

²⁶For 2007, the range for the 95 percent confidence interval was 85.1 to 91.6 percent. For 2009, the range for the 95 percent confidence interval was 85.9 to 88.2 percent.

²⁷For 2007, the range for the 95 percent confidence interval was 75.4 to 85.2 percent. For 2009, the range for the 95 percent confidence interval was 70.1 to 73.6 percent.

Figure 3: Percentage of Researchers Who Believe NASA’s Efforts to Inform Them about Policies Are Effective by Dissemination Route, 2007 and 2009



Source: GAO survey.

Many Researchers Remain Unfamiliar with How to Appeal Decisions, and More Dissemination Requests Have Been Denied

NASA has not adopted any new processes or procedures since 2007 for researchers to use if they wish to appeal decisions regarding their requests to disseminate their research results. Nevertheless, we found in 2009, relatively few NASA researchers are aware of and familiar with the agency’s process to appeal dissemination decisions. In addition, fewer researchers said they had sought to disseminate their research results in the past 5 years, and more said their requests to disseminate research results had been denied. However, most NASA researchers continue to believe that the agency supports the dissemination of research results and that NASA and its centers apply policies for all routes of dissemination consistently.

NASA's Policy on Dissemination through the Media Includes an Appeals Process, but Many Researchers Remain Unfamiliar with It

NASA has not adopted any new processes or procedures since 2007 for researchers to use if they wish to appeal decisions regarding their requests to disseminate their research results. As in 2007, researchers may follow the appeals process outlined in NASA's media policy if they wish to appeal a decision about dissemination through press releases and interviews. For other types of dissemination, such as through publications and presentations, there is no formal appeals process, although officials told us that researchers may raise concerns through their supervisors or through other agency dispute resolution processes, such as those for personnel disputes. These officials also said they are not aware of any disputes regarding decisions to release research results to the media and thus have not used the appeals process described in the policy. For other types of dissemination, such as through publications and presentations, for which there is no appeals process, most NASA center managers told us that disputes over disseminating research results are rare, and some managers said they have never needed a formal process to resolve disputes.

Nonetheless, our 2009 survey shows that, as in 2007, about one-third of NASA researchers reported that they were aware of NASA's process to appeal decisions about dissemination of research results, but only 8 percent responded that they were familiar with the process. About 60 percent of the 8 percent of researchers who were both aware of and familiar with the appeals process reported that it was extremely to very effective.²⁸ In both 2007 and 2009, about 20 percent of researchers reported that they had appealed decisions when their requests to disseminate research results were denied.²⁹

²⁸The range for the 95 percent confidence interval was 54.4 to 65.5 percent.

²⁹For 2007, the range for the 95 percent confidence interval was 9.5 to 39.5 percent. For 2009, the range for the 95 percent confidence interval was 18.8 to 28.2 percent.

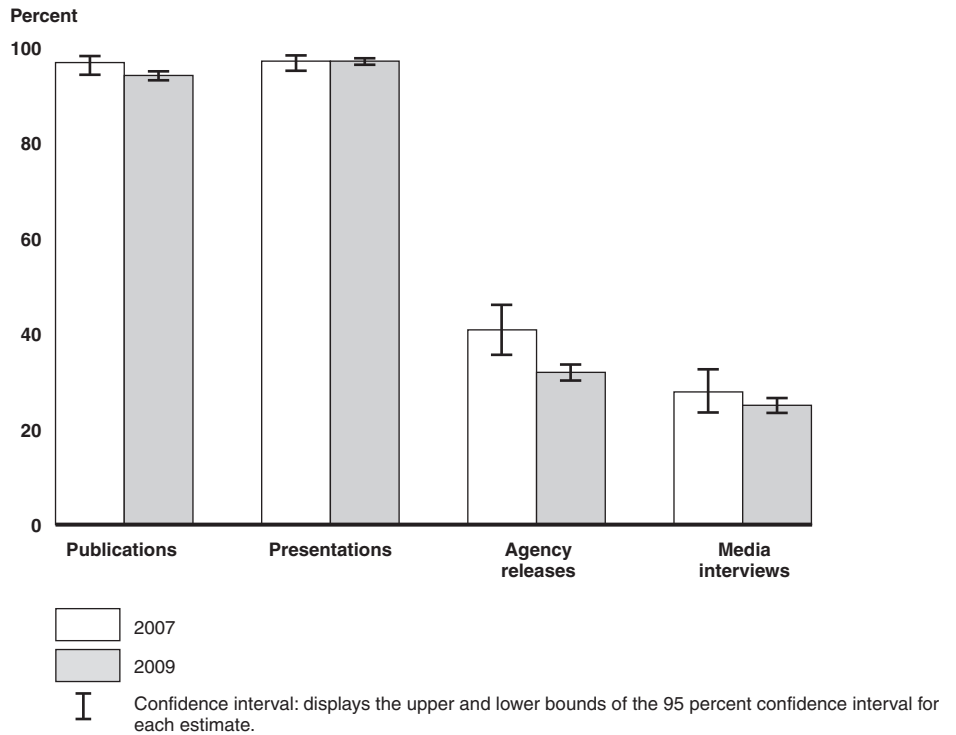
Fewer Researchers Sought to Disseminate Research Results, and More Have Had Their Dissemination Requests Denied since 2007

According to our 2009 survey, fewer researchers have tried to disseminate their research results than in 2007, and more researchers have had their requests to disseminate denied. Specifically, there was an 8 percentage point decline in the number of researchers who responded that they tried to disseminate their research results outside of NASA in the last 5 years (83 percent in 2009 compared with 91 percent in 2007).³⁰ Researchers in 2009 largely sought to disseminate their research results through the same routes—presentations, publications, agency releases, and media interviews—as did researchers in 2007. However, fewer sought to disseminate their results through agency releases.³¹ See figure 4.

³⁰According to our 2007 survey results, 90.6 percent (95 percent confidence interval 87.1 to 93.2) of researchers sought to disseminate their research results outside of NASA. In our 2009 survey, 82.6 percent (95 percent confidence interval 81.4 to 83.8) sought to disseminate research.

³¹According to our 2007 survey results, 40.8 percent (95 percent confidence interval 35.6 to 46.1) of researchers sought to disseminate their research results via agency releases. In our 2009 survey, 31.9 percent (95 percent confidence interval 30.2 to 33.5) sought to disseminate research via agency releases.

Figure 4: Percentage of Researchers Who Sought to Disseminate Their Research Results, by Route of Dissemination, 2007 and 2009



Source: GAO survey.

According to our survey results, more researchers in 2009 had their requests to disseminate research results denied for reasons other than those stemming from standard technical reviews (about 12 percent of researchers in 2009, compared with about 7 percent in 2007).³² Most researchers whose requests had been denied were seeking to disseminate research results through publications and presentations, as we found in 2007. Also, as in 2007, researchers took various actions in response to a denial. While more than half of researchers gave up on efforts to disseminate, many others successfully disseminated their research results by making revisions that led to approval or by using a different dissemination route.

³²For 2007, the range for the 95 percent confidence interval was 4.6 to 10.4 percent. For 2009, the range for the 95 percent confidence interval was 10.7 to 13.1 percent.

Researchers commented that they received a variety of reasons for the denials, although some indicated they were given no reason.³³ As in 2007, among the most common reasons reported for denials was that the research was restricted for national security or other reasons or that the topic or results were sensitive. Another commonly cited reason was the lack of funding to attend conferences. Some researchers specifically mentioned the restrictions on NASA's spending related to conferences—a key venue for presenting research results—contained in the NASA Authorization Act of 2008. The act authorized \$5 million for conference-related expenses in fiscal year 2009, a reduction of over two-thirds from the previous fiscal year. Subsequently, in March 2009, the Omnibus Appropriations Act of 2009 clarified that the restrictions did not apply to scientific or technical conferences and other conferences at which NASA science, technology, engineering, and mathematics are disseminated. According to NASA officials, the spending limitation prevented many researchers from disseminating their research results because decisions about conference attendance are typically made early in a fiscal year. One NASA official estimates that only one-third of NASA-funded research was presented to the scientific community in 2009.

Researchers Continue to Believe That NASA Supports Dissemination, and Most Believe NASA and Its Centers Consistently Apply Dissemination Policies

As in 2007, most researchers believe that NASA is very to moderately supportive of disseminating research results but that the agency is more supportive of some dissemination routes than others. We estimate that 85 percent of researchers in 2009, compared with 89 percent in 2007, believe that NASA either insists on or encourages the dissemination of research results.³⁴ When comparing 2007 and 2009 survey results for specific dissemination routes, we found that fewer researchers now believe that NASA is very to moderately supportive of dissemination through presentations—92 percent of researchers said this in 2007 compared with

³³While the number of denials can be generalized to the population, the reasons provided for the denials cannot be generalized to the population. The reasons for the denials represent the sentiments of individual respondents and not the population of NASA researchers. We received a total of 209 comments regarding the reasons that were given for denying requests to disseminate research results.

³⁴For 2007, the 95 percent confidence interval was 84.8 to 91.5 percent. For 2009, the 95 percent confidence interval was 84.1 to 86.4 percent.

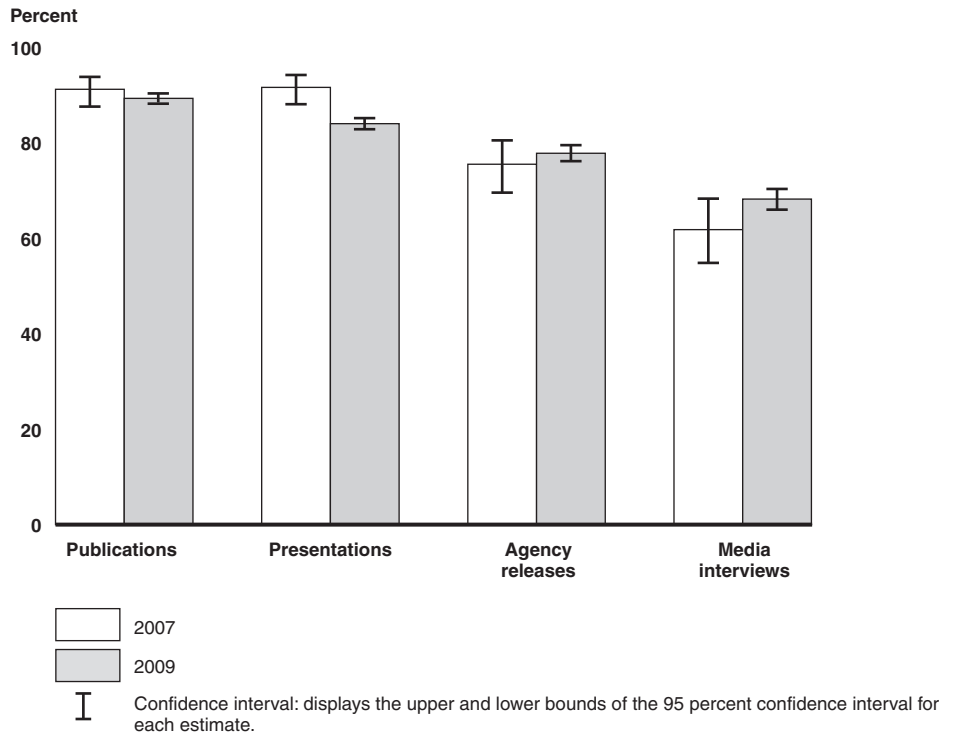
84 percent in 2009.³⁵ While we cannot be certain of the reasons for this decline, they may also be related to the limitation on conference attendance in 2009 mentioned earlier. We also found a slight increase in the percentage of researchers who believe NASA is very to moderately supportive of dissemination through media interviews. Specifically, we estimate that 68 percent of researchers in 2009 believe that NASA is supportive of dissemination through media interviews compared with 62 percent of researchers in 2007.³⁶ We also found a slight decrease in the percentage of researchers who believe NASA is very to moderately supportive of dissemination through publications—89 percent in 2009 compared with 91 percent 2007.³⁷ See figure 5.

³⁵According to our 2007 survey results, 91.6 percent (95 percent confidence interval 88.1 to 94.2) of researchers believed NASA was very or moderately supportive of dissemination through presentations. In our 2009 survey, 84.0 percent (95 percent confidence interval 82.8 to 85.2) believed NASA was very or moderately supportive of dissemination through presentations.

³⁶According to our 2007 survey results, 61.8 percent (95 percent confidence interval 54.8 to 68.3) of researchers believed NASA was very or moderately supportive of dissemination through media interviews. In our 2009 survey, 68.2 percent (95 percent confidence interval 66.0 to 70.3) believed NASA was very or moderately supportive of dissemination through media interviews.

³⁷According to our 2007 survey results, 91.2 percent (95 percent confidence interval 87.6 to 93.8) of researchers believed NASA was very or moderately supportive of dissemination through presentations. In our 2009 survey, 89.3 percent (95 percent confidence interval 88.2 to 90.3) believed NASA was very or moderately supportive of dissemination through publications.

Figure 5: Percentage of Researchers Who Believe That NASA Supports Dissemination, by Route of Dissemination, 2007 and 2009



Source: GAO survey.

In comparing the 2009 and 2007 survey results, we also found that, in general, researchers believe that both the centers and NASA as a whole apply dissemination policies very to somewhat consistently. However, a greater number of researchers now believe the centers more consistently apply policies for dissemination through agency releases (83 percent in 2009 compared with 71 percent in 2007) and media interviews (77 percent in 2009 compared with 62 percent in 2007).³⁸ In addition, more researchers in 2009 believe that NASA consistently applies policies for media interviews (68 percent compared with 57 percent).³⁹ We also found an

³⁸For 2007 agency releases, the range for the 95 percent confidence interval was 64.4 to 77.4 percent. For 2009 agency releases, the 95 percent confidence interval was 81.6 to 85.1 percent. For 2007 media interviews, the range for the 95 percent confidence interval was 54.9 to 69.1. For 2009 media interviews, the range for the 95 percent confidence interval was 74.8 to 78.9.

³⁹For 2007, the range for the 95 percent confidence interval was 49.5 to 64.4 percent. For 2009, the range for the 95 percent confidence interval was 66.1 to 70.9 percent.

increase that approaches statistical significance in the percentage of researchers in 2009 who believe NASA consistently applies policies for dissemination through agency releases (74 percent compared with 67 percent).⁴⁰

Our 2009 survey results indicate that researchers believe, across all dissemination routes, that the centers more consistently apply dissemination policies than NASA as a whole. Specifically, we estimate on the basis of the 2009 survey results that 88 percent of researchers believe their centers consistently apply policies related to publications and 81 percent believe their centers consistently apply policies related to presentations. In contrast, 79 and 73 percent of researchers believe NASA as a whole consistently applies publication and presentation policies, respectively. Further, 83 percent of researchers believe their centers consistently apply policies related to agency releases, and 77 percent believe their centers consistently apply policies related to media interviews, whereas fewer believe NASA as a whole consistently applies policies related to agency releases and media interviews—74 and 68 percent, respectively.

Conclusions

Scientific research is critical to the ability of NASA and other agencies to achieve their missions and is at the heart of many major policy decisions that agencies face. Open communication and exchanging of research results contribute to advances in the state of scientific knowledge and a well-informed public. In 2007, while we found that NASA's policies were generally clear, we also raised a number of concerns, including that many NASA researchers did not understand the full range of the agency's policies and were generally unaware of NASA's policy for appealing dissemination decisions. In response, NASA undertook various efforts to increase the awareness of researchers about its media policy. These efforts appear to have achieved some success because, as our survey indicates, more researchers now believe that NASA is supportive of dissemination through media interviews. In addition, more researchers today believe that NASA and the centers consistently apply policies for dissemination through agency releases and media interviews, and researchers generally rate NASA's efforts to help them understand the policies as effective. However, with regard to dissemination through

⁴⁰For 2007, the 95 percent confidence interval was 59.7 to 73.3 percent. For 2009, the 95 percent confidence interval was 72.0 to 76.4 percent.

publications and presentations, we found that fewer researchers are confident they understand the policies well enough to apply them, and fewer believe that NASA is supportive of using these routes to disseminate research results. Finally, now, as in 2007, very few researchers are familiar with how to appeal decisions made in regard to their requests to disseminate their research results, and about half of those who had their requests denied gave up trying to disseminate their results. We are concerned that this may inhibit the full range of scientific research from being shared with the scientific community and the public.

Recommendations for Executive Action

To strengthen NASA's efforts to better inform its researchers and ensure that the policies guiding researchers and public affairs officials in their efforts to disseminate research results to other scientists and the public are well understood, we recommend that the NASA Administrator direct officials responsible for dissemination of research results through all routes to include in their efforts to inform researchers a focus on the processes researchers are to follow when they wish to appeal decisions.

Agency Comments and Our Evaluation

We provided the NASA with a draft of this report for their review and comment. NASA concurred with our recommendation and stated that the NASA Administrator will direct the appropriate NASA officials, including the Assistant Administrator for Public Affairs, to work with the appropriate NASA entities to review the agency's dissemination policies and provide appropriate education and training for researchers to ensure they clearly understand the processes for appealing dissemination decisions. The comment letter from NASA is presented in appendix III.

We are sending copies of this report to the appropriate congressional committees, the Administrator of NASA, and other interested parties. The report also will be available at no charge on the GAO Web site at <http://www.gao.gov>. If you or your staff have any questions about this report, please contact me at (202) 512-3841 or mittala@gao.gov. Contact points for our Offices of Congressional Relations and Public Affairs may be found on the last page of this report. Key contributors to this report are listed in appendix IV.



Anu K. Mittal
Director, Natural Resources
and Environment

Appendix I: Objectives, Scope, and Methodology

The National Aeronautics and Space Administration (NASA) Authorization Act of 2008 directed GAO to determine whether NASA is implementing the regulations governing the dissemination of research in a clear and consistent manner. In response, this report discusses (1) what changes, if any, have been made since 2007 to the policies that guide the dissemination of federally funded research results at NASA; (2) the extent to which NASA researchers believe that the agency's dissemination policies have been more effectively communicated since 2007 and what their experiences have been in using the process; and (3) what processes, if any, NASA has adopted since 2007 for researchers to follow if they have concerns about decisions regarding the dissemination of their research results and how those concerns have been addressed.

To identify and evaluate what changes have been made since 2007 to NASA's policies that guide the dissemination of federally funded research results, we obtained, reviewed, and analyzed the agency's dissemination policies, and compared them to prior policies. In addition, we contacted managers and public affairs officials who are responsible for dissemination of research results at NASA headquarters and at each of 10 research, space, and space flight centers. We used a standard set of questions to ensure we obtained consistent information, confirmed that we had copies of the relevant dissemination policies, and discussed at length the ways in which these policies had changed since 2007 and how these policies were put into practice. We also included questions about what processes NASA has adopted since 2007 for researchers to follow if they have concerns about decisions regarding the dissemination of their research results.

To identify to what extent NASA researchers believe that the agency's dissemination policies have been more effectively communicated since 2007 and what their experiences have been in using the process for disseminating their research results and how their concerns about dissemination decisions have been addressed, we sent a Web-based survey to all 2,790 researchers at NASA. This survey instrument was in large part identical to the one used as the basis for GAO's May 2007 report on policies guiding dissemination of scientific research at NASA, the National Institute for Standards and Technology, and the National Oceanic and Atmospheric Administration. We sought the NASA researchers' views on their agency's research dissemination policies, the level of agency support for dissemination, and their experiences with dissemination. We defined researchers to be included in our population as federally employed scientists, engineers, or other researchers who are in a position to disseminate their research results to a wider audience. We included

researchers from 9 of the 10 NASA centers and excluded the Jet Propulsion Laboratory from our review because contract researchers primarily perform research at this center and NASA does not maintain a database that contains the names of individual contract researchers. In addition, contract researchers might charge NASA for costs related to participating in the survey. To identify researchers for our survey, we obtained from center or program managers at NASA a list of researchers in their organization who would meet our defined criterion. To mitigate the risk that NASA center and program managers may not have provided the complete universe of relevant researchers, we interviewed NASA public affairs and scientific officials to identify the key characteristics of individuals in a position to disseminate research. We then obtained from NASA's Office of Human Capital a list, broken out by center, of offices that employed researchers who met these key characteristics. NASA obtained this information from the Federal Personnel and Payroll System (FPPS) Datamart, which is the official data source for personnel and payroll information on NASA civil service employees. To assess the reliability of the information in this database for the purposes of our report, we submitted a set of questions to NASA related to how the data are managed and maintained. On the basis of NASA's responses to these questions, we determined that the data are adequate to identify offices within NASA that employ researchers who meet the key characteristics. After obtaining the list of offices from NASA, we asked officials at each center to verify that they had considered all the program offices on the list when they developed their original list of researchers and, if not, we asked them to contact those offices to determine if any researcher names should be added to our survey universe.

Information about accessing the survey was provided via e-mail for all survey participants. The survey was activated, and researchers were informed of its availability, on July 14, 2009; it was available through September 18, 2009. To ensure security and data integrity, we provided all participants with user names and personal passwords that allowed them to access and complete the survey. To reduce survey nonresponse, we sent out multiple e-mail reminder messages and conducted follow-up telephone calls to all nonrespondents to encourage them to complete the survey. From initial notification, we identified 379 individuals who were outside the target population. For example, some individuals had retired from the agency. In all, we received a 57.5 percent response rate.

We compared the respondents with nonrespondents on available administrative data, such as the center where they work, but did not find any significant differences on the available variables. Although our survey

was intended to be a census, for the purposes of analyzing the results, we decided to treat our survey as a random sample. Specifically, we took the response rate within each of the 9 NASA centers and used this to derive a statistical weight. We applied statistical weight to the respondents so that their answers would represent the population. This requires the assumption that the nonrespondents are missing at random.

All sample surveys are subject to sampling error—that is, the extent to which the survey results differ from what would have been obtained if the whole population had been observed. Measures of sampling error are defined by two elements, the width of the confidence intervals around the estimate (sometimes called the precision of the estimate) and the confidence level at which the intervals are computed. Because we treated our survey as a stratified random sample, we assumed our sample was only one of a large number that could have been drawn. Because each sample could have provided different estimates, we expressed our confidence in the precision of our particular sample's results as a 95 percent confidence interval. This is the interval that would contain the actual population value for 95 percent of the samples we could have drawn. As a result, we are 95 percent confident that each of the confidence intervals based on the survey includes the true values in the sample population. The 95 percent confidence intervals for numeric estimates are presented along with those estimates in the body of the report. Unless otherwise noted, any comparisons between point estimates for 2009 have a 95 percent level of confidence of plus or minus 4 percentage points.

In addition to sampling errors, the practical difficulties of conducting any survey may introduce errors, commonly referred to as nonsampling errors. For example, differences in how a particular question is interpreted, the information sources available to respondents, or the types of sample members who do not respond can introduce unwanted variability into the survey results. We assumed that the propensity to respond to our survey did not depend upon the questions we asked, and we assumed that the respondents were statistically similar to the nonrespondents. If characteristics of respondents are different from those of nonrespondents on key items, it could introduce a bias not accounted for in our analysis. We took extensive steps in questionnaire development, data collection, and the editing and analysis of the survey data to minimize nonsampling errors. This survey instrument was in large part identical to the one used as the basis for GAO'S May 2007 report on policies guiding dissemination of scientific research at three agencies, including NASA. The 2007 survey was developed by a GAO survey specialist in conjunction with subject matter experts, and then reviewed by a second independent survey

specialist. In addition, we pretested the survey by telephone with researchers from NASA. During these pretests, we asked the researchers to complete the survey as they would when they received it. We then interviewed the respondents to ensure that (1) the questions were clear and unambiguous, (2) the terms we used were precise, (3) the survey did not place an undue burden on the researchers completing it, and (4) the survey was independent and unbiased. On the basis of the feedback from the pretests, we revised the questions, as appropriate. In making minor revisions to the 2007 survey to make it acceptable for the 2009 survey, we also worked with survey specialists, who determined that the changes made would not require additional pretesting. The SAS and SUDAN programs that produced the 2009 survey estimates, including estimates of categories derived from content analysis, were reviewed by a second, independent programmer to ensure accuracy in the logic and syntax of the program.

Regarding the survey data on instances in which researchers were denied the opportunity to disseminate, the percentage of researchers reporting such instances can be generalized to the population. However, because the number of denials is small, the details concerning the reason for denial, the researcher's primary field of research, and the actions taken in response to the denial cannot be generalized. Because the issue of a researcher being denied is a salient piece of our analysis, we included this nongeneralizable information to provide context to this important issue. To analyze select, open-ended questions on our survey, including those given as the reason researchers said they were denied, we conducted a content analysis to develop our agreement statistics. Reviewers (two per question) collaboratively developed content categories based on survey responses, and then independently assessed and coded each survey response into those categories. Intercoder reliability (agreement) statistics were electronically generated in the coding process, and agreement statistics for all categories were 90 percent or above. Coding disagreements were resolved through reviewer discussion or a third-party arbiter.

We conducted this performance audit from January 2009 through December 2009 in accordance with generally accepted government auditing standards. Those standards require that we plan and perform the audit to obtain sufficient, appropriate evidence to provide a reasonable basis for our findings and conclusions based on our audit objectives. We believe that the evidence obtained provides a reasonable basis for our findings and conclusions based on our audit objectives.

Appendix II: Selected Results of the 2009 Survey of NASA Researchers

The following tables contain summary results of selected questions from our survey of researchers at NASA in 2009. For each question reported below, the estimated percentage is presented along with its 95 percent confidence interval. These tables do not include summary-level data for the demographic questions and do not include the results from any open-ended questions.

Q8. Overall how familiar or unfamiliar are you with the policies NASA has in place regarding the dissemination of research results outside of the agency?

Question choices	Percentage of respondents	95 percent confidence interval
Very or moderately familiar	87.1	86.1-88.2
Slightly or not at all familiar	12.9	11.8-13.9

Q9. Has NASA used any of the following means to help you understand how to comply with its policies regarding the dissemination of research results outside of the agency?

a. Formal training sessions

Question choices	Percentage of respondents	95 percent confidence interval
Yes	42.1	40.4-43.7
No	44.5	42.9-46.1
Not sure	13.5	12.3-14.6

Q9. Has NASA used any of the following means to help you understand how to comply with its policies regarding the dissemination of research results outside of the agency?

b. On-the-job training (including mentoring)

Question choices	Percentage of respondents	95 percent confidence interval
Yes	71.8	70.3-73.2
No	23.4	22.0-24.7
Not sure	4.9	4.2-5.6

**Appendix II: Selected Results of the 2009
Survey of NASA Researchers**

Q9. Has NASA used any of the following means to help you understand how to comply with its policies regarding the dissemination of research results outside of the agency?

c. Staff or town hall meetings

Question choices	Percentage of respondents	95 percent confidence interval
Yes	46.4	44.7-48.1
No	39.2	37.6-40.8
Not sure	14.4	13.2-15.6

Q9. Has NASA used any of the following means to help you understand how to comply with its policies regarding the dissemination of research results outside of the agency?

d. E-mails or other correspondence from Administrator-level offices sent to all staff

Question choices	Percentage of respondents	95 percent confidence interval
Yes	53.7	52.0-55.3
No	24.6	23.2-26.0
Not sure	21.7	20.4-23.1

Q9. Has NASA used any of the following means to help you understand how to comply with its policies regarding the dissemination of research results outside of the agency?

e. E-mails or other correspondence from center management sent to all center or office staff

Question choices	Percentage of respondents	95 percent confidence interval
Yes	68.5	67.0-70.0
No	16.1	14.9-17.2
Not sure	15.5	14.3-16.6

Q9. Has NASA used any of the following means to help you understand how to comply with its policies regarding the dissemination of research results outside of the agency?

f. Notification on intranet sites

Question choices	Percentage of respondents	95 percent confidence interval
Yes	46.6	44.9-48.2
No	22.1	20.8-23.5
Not sure	31.3	29.8-32.8

**Appendix II: Selected Results of the 2009
Survey of NASA Researchers**

Q9. Has NASA used any of the following means to help you understand how to comply with its policies regarding the dissemination of research results outside of the agency?

g. Other, please specify below

Question choices	Percentage of respondents	95 percent confidence interval
Yes	18.2	16.0-20.5
No	44.2	41.3-47.1
Not sure	37.6	34.8-40.4

Q10. Overall, how effective or ineffective have NASA's efforts been to help you understand how to comply with its policies regarding the dissemination of research results through each of the following routes?

a. Publications (such as peer-reviewed publications or non-peer-reviewed publications)

Question choices	Percentage of respondents	95 percent confidence interval
Extremely, very, or moderately effective	89.2	88.2-90.2
Slightly or not at all effective	10.8	9.8-11.8

Q10. Overall, how effective or ineffective have NASA's efforts been to help you understand how to comply with its policies regarding the dissemination of research results through each of the following routes?

b. Presentations (such as keynote addresses, conferences, workshops, symposia, professional society meetings, or congressional hearings)

Question choices	Percentage of respondents	95 percent confidence interval
Extremely, very, or moderately effective	85.9	84.7-87.0
Slightly or not at all effective	14.2	13.0-15.3

Q10. Overall, how effective or ineffective have NASA's efforts been to help you understand how to comply with its policies regarding the dissemination of research results through each of the following routes?

c. Agency releases (such as press releases, posting on an agency intranet site, or agency reports or fact sheets)

Question choices	Percentage of respondents	95 percent confidence interval
Extremely, very, or moderately effective	71.8	70.1-73.6
Slightly or not at all effective	28.2	26.4-29.9

**Appendix II: Selected Results of the 2009
Survey of NASA Researchers**

Q10. Overall, how effective or ineffective have NASA's efforts been to help you understand how to comply with its policies regarding the dissemination of research results through each of the following routes?

d. Media interviews

Question choices	Percentage of respondents	95 percent confidence interval
Extremely, very, or moderately effective	68.4	66.5-70.4
Slightly or not at all effective	31.6	29.6-33.5

Q10. Overall, how effective or ineffective have NASA's efforts been to help you understand how to comply with its policies regarding the dissemination of research results through each of the following routes?

e. Other, please specify below

Question choices	Percentage of respondents	95 percent confidence interval
Extremely, very, or moderately effective	54.5	45.9-63.1
Slightly or not at all effective	45.5	36.9-54.1

Q11. Regardless of how effective or ineffective NASA's efforts have been, how confident, if at all, are you that you understand the agency's policies regarding the dissemination of research results through each of the following routes well enough to follow them?

a. Publications

Question choices	Percentage of respondents	95 percent confidence interval
Very or moderately confident	87.5	86.4-88.6
Slightly or not at all confident	12.5	11.4-13.6

Q11. Regardless of how effective or ineffective NASA's efforts have been, how confident, if at all, are you that you understand the agency's policies regarding the dissemination of research results through each of the following routes well enough to follow them?

b. Presentations

Question choices	Percentage of respondents	95 percent confidence interval
Very or moderately confident	85.3	84.1-86.4
Slightly or not at all confident	14.7	13.6-15.9

**Appendix II: Selected Results of the 2009
Survey of NASA Researchers**

Q11. Regardless of how effective or ineffective NASA's efforts have been, how confident, if at all, are you that you understand the agency's policies regarding the dissemination of research results through each of the following routes well enough to follow them?

c. Agency releases

Question choices	Percentage of respondents	95 percent confidence interval
Very or moderately confident	55.3	53.4-57.2
Slightly or not at all confident	44.7	42.8-46.6

Q11. Regardless of how effective or ineffective NASA's efforts have been, how confident, if at all, are you that you understand the agency's policies regarding the dissemination of research results through each of the following routes well enough to follow them?

d. Media interviews

Question choices	Percentage of respondents	95 percent confidence interval
Very or moderately confident	52.0	50.1-53.9
Slightly or not at all confident	48.0	46.1-49.9

Q11. Regardless of how effective or ineffective NASA's efforts have been, how confident, if at all, are you that you understand the agency's policies regarding the dissemination of research results through each of the following routes well enough to follow them?

e. Other, please specify below

Question choices	Percentage of respondents	95 percent confidence interval
Very or moderately confident	51.5	43.5-59.5
Slightly or not at all confident	48.6	40.5-56.5

Q12. Overall, in your opinion, how consistently or inconsistently does your NASA Center apply its policies regarding the dissemination of research results through each of the following routes?

a. Publications

Question choices	Percentage of respondents	95 percent confidence interval
Very or somewhat consistently	87.6	86.4-88.7
Neither consistently or inconsistently	5.2	4.4-5.9
Somewhat or very inconsistently	7.3	6.4-8.2

**Appendix II: Selected Results of the 2009
Survey of NASA Researchers**

Q12. Overall, in your opinion, how consistently or inconsistently does your NASA Center apply its policies regarding the dissemination of research results through each of the following routes?

b. Presentations

Question choices	Percentage of respondents	95 percent confidence interval
Very or somewhat consistently	81.5	80.1-82.8
Neither consistently or inconsistently	9.2	8.2-10.2
Somewhat or very inconsistently	9.3	8.3-10.4

Q12. Overall, in your opinion, how consistently or inconsistently does your NASA Center apply its policies regarding the dissemination of research results through each of the following routes?

c. Agency releases

Question choices	Percentage of respondents	95 percent confidence interval
Very or somewhat consistently	83.4	81.6-85.1
Neither consistently or inconsistently	10.6	9.2-12.1
Somewhat or very inconsistently	6.0	4.9-7.2

Q12. Overall, in your opinion, how consistently or inconsistently does your NASA Center apply its policies regarding the dissemination of research results through each of the following routes?

d. Media interviews

Question choices	Percentage of respondents	95 percent confidence interval
Very or somewhat consistently	76.9	74.8-78.9
Neither consistently or inconsistently	14.8	13.1-16.6
Somewhat or very inconsistently	8.3	7.0-9.6

Q12. Overall, in your opinion, how consistently or inconsistently does your NASA Center apply its policies regarding the dissemination of research results through each of the following routes?

e. Other, please specify below

Question choices	Percentage of respondents	95 percent confidence interval
Very or somewhat consistently	43.0	32.1-53.9
Neither consistently or inconsistently	23.0	14.2-34.0
Somewhat or very inconsistently	34.0	23.7-44.3

**Appendix II: Selected Results of the 2009
Survey of NASA Researchers**

Q13. Overall, in your opinion, how consistently or inconsistently does NASA as a whole apply its policies regarding the dissemination of research results through each of the following routes?

a. Publications

Question choices	Percentage of respondents	95 percent confidence interval
Very or somewhat consistently	78.7	77.1-80.2
Neither consistently or inconsistently	8.1	7.1-9.2
Somewhat or very inconsistently	13.2	11.9-14.5

Q13. Overall, in your opinion, how consistently or inconsistently does NASA as a whole apply its policies regarding the dissemination of research results through each of the following routes?

b. Presentations

Question choices	Percentage of respondents	95 percent confidence interval
Very or somewhat consistently	73.1	71.4-74.8
Neither consistently or inconsistently	11.1	9.9-12.3
Somewhat or very inconsistently	15.8	14.4-17.2

Q13. Overall, in your opinion, how consistently or inconsistently does NASA as a whole apply its policies regarding the dissemination of research results through each of the following routes?

c. Agency releases

Question choices	Percentage of respondents	95 percent confidence interval
Very or somewhat consistently	74.2	72.0-76.4
Neither consistently or inconsistently	12.1	10.5-13.7
Somewhat or very inconsistently	13.7	11.9-15.4

Q13. Overall, in your opinion, how consistently or inconsistently does NASA as a whole apply its policies regarding the dissemination of research results through each of the following routes?

d. Media interviews

Question choices	Percentage of respondents	95 percent confidence interval
Very or somewhat consistently	68.5	66.1-70.9
Neither consistently or inconsistently	15.1	13.2-16.9
Somewhat or very inconsistently	16.5	14.5-18.4

**Appendix II: Selected Results of the 2009
Survey of NASA Researchers**

Q13. Overall, in your opinion, how consistently or inconsistently does NASA as a whole apply its policies regarding the dissemination of research results through each of the following routes?

e. Other, please specify below

Question choices	Percentage of respondents	95 percent confidence interval
Very or somewhat consistently	53.7	42.9-64.4
Neither consistently or inconsistently	19.7	11.5-30.3
Somewhat or very inconsistently	26.7	17.6-37.5

Q14. Overall, do you believe NASA's dissemination policies are effective or ineffective in ensuring access to the results of research conducted at the agency?

Question choices	Percentage of respondents	95 percent confidence interval
Extremely, very, or moderately effective	87.1	85.9-88.2
Slightly or not at all effective	12.9	11.8-14.1

Q15. How supportive, if at all, is NASA toward dissemination research results through each of the following routes?

a. Through publications, such as peer-reviewed journals or non-peer-reviewed journals

Question choices	Percentage of respondents	95 percent confidence interval
Very or moderately supportive	89.3	88.2-90.3
Slightly or not at all supportive	10.8	9.7-11.8

Q15. How supportive, if at all, is NASA toward dissemination research results through each of the following routes?

b. Through presentations, such as at conferences or at congressional hearings

Question choices	Percentage of respondents	95 percent confidence interval
Very or moderately supportive	84.0	82.8- 85.2
Slightly or not at all supportive	16.0	14.8-17.2

Q15. How supportive, if at all, is NASA toward dissemination research results through each of the following routes?

c. Through agency releases, such as press releases, posting on an agency intranet site, or agency reports or fact sheets

Question choices	Percentage of respondents	95 percent confidence interval
Very or moderately supportive	77.8	76.1-79.5
Slightly or not at all supportive	22.2	20.5-23.9

**Appendix II: Selected Results of the 2009
Survey of NASA Researchers**

Q15. How supportive, if at all, is NASA toward dissemination research results through each of the following routes?

d. Through interviews with media

Question choices	Percentage of respondents	95 percent confidence interval
Very or moderately supportive	68.2	66.0-70.3
Slightly or not at all supportive	31.9	29.7-34.0

Q16. Overall, which of the following statements best characterizes the extent to which NASA supports the dissemination of research results?

Question choices	Percentage of respondents	95 percent confidence interval
NASA insists or encourages dissemination	85.2	84.1-86.4
NASA neither insists or encourages dissemination	10.2	9.2-11.2
NASA discourages or does not allow dissemination	3.1	2.6-3.8
Not sure	1.5	1.1-1.9

Q17. Does your area of research have the potential to affect federal policy decisions?

Question choices	Percentage of respondents	95 percent confidence interval
Yes	27.9	26.4-29.3
No	45.4	43.7-47.0
Not sure	26.8	25.3-28.2

Q18. When disseminating research results that have potential federal policy implications, does each of the following statements correctly or not correctly represent NASA's position on discussing these research results?

a. I can discuss research results with potential policy implications when the results are consistent with the agency's policy or position statements.

Question choices	Percentage of respondents	95 percent confidence interval
Checked	65.8	62.9-68.7
Not checked	15.2	13.0-17.5
Not sure	19.0	16.5-21.4

**Appendix II: Selected Results of the 2009
Survey of NASA Researchers**

Q18. When disseminating research results that have potential federal policy implications, does each of the following statements correctly or not correctly represent NASA's position on discussing these research results?

b. I can discuss research results with potential policy implications when the results differ from the agency's policy or position statements.

Question choices	Percentage of respondents	95 percent confidence interval
Checked	43.4	40.3-46.5
Not checked	18.6	16.2-21.0
Not sure	38.0	35.0-41.0

Q18. When disseminating research results that have potential federal policy implications, does each of the following statements correctly or not correctly represent NASA's position on discussing these research results?

c. I can discuss research results with potential policy implications on issues for which the agency does not have a policy or position statement.

Question choices	Percentage of respondents	95 percent confidence interval
Checked	63.9	60.9-66.8
Not checked	9.5	7.7-11.3
Not sure	26.7	23.9-29.4

Q18. When disseminating research results that have potential federal policy implications, does each of the following statements correctly or not correctly represent NASA's position on discussing these research results?

d. I can discuss potential policy implications of research results provided that I state the policy implications as my personal views and not those of the agency.

Question choices	Percentage of respondents	95 percent confidence interval
Checked	53.7	50.6-56.7
Not checked	12.6	10.5-14.7
Not sure	33.7	30.8-36.6

Q18. When disseminating research results that have potential federal policy implications, does each of the following statements correctly or not correctly represent NASA's position on discussing these research results?

e. I am not allowed to discuss the potential policy implications of research results.

Question choices	Percentage of respondents	95 percent confidence interval
Checked	8.0	6.3-9.7
Not checked	60.6	57.6-63.7
Not sure	31.4	28.5-34.3

**Appendix II: Selected Results of the 2009
Survey of NASA Researchers**

Q19. In the past 5 years, have you sought to disseminate the results of your own scientific research outside of NASA?

Question choices	Percentage of respondents	95 percent confidence interval
Yes (skip to question 21)	82.6	81.4-83.8
No	17.4	16.2-18.6

Q20. Which of the following reasons describe why in the past 5 years you have not sought to disseminate the results of your scientific research outside of the agency?

1. I don't conduct research that requires dissemination.

(If Question 19 is No)

Question choices	Percentage of respondents	95 percent confidence interval
Checked	32.1	28.4-35.8
Not checked	67.9	64.2-71.6

Q20. Which of the following reasons describe why in the past 5 years you have not sought to disseminate the results of your scientific research outside of the agency?

2. I don't conduct my own research.

(If Question 19 is No)

Question choices	Percentage of respondents	95 percent confidence interval
Checked	37.6	33.7-41.4
Not checked	62.4	58.6-66.3

Q20. Which of the following reasons describe why in the past 5 years you have not sought to disseminate the results of your scientific research outside of the agency?

3. Someone else disseminates research results on my behalf.

(If Question 19 is No)

Question choices	Percentage of respondents	95 percent confidence interval
Checked	10.4	8.1-13.2
Not checked	89.6	86.8-92.0

**Appendix II: Selected Results of the 2009
Survey of NASA Researchers**

Q20. Which of the following reasons describe why in the past 5 years you have not sought to disseminate the results of your scientific research outside of the agency?

4. I sought to disseminate results in the past and was not allowed to.

(If Question 19 is No)

Question choices	Percentage of respondents	95 percent confidence interval
Checked	1.4	0.6-2.7
Not checked	98.6	97.3-99.4

Q20. Which of the following reasons describe why in the past 5 years you have not sought to disseminate the results of your scientific research outside of the agency?

5. My research is ongoing and is not ready to be released.

(If Question 19 is No)

Question choices	Percentage of respondents	95 percent confidence interval
Checked	16.4	13.5-19.4
Not checked	83.6	80.6-86.5

Q20. Which of the following reasons describe why in the past 5 years you have not sought to disseminate the results of your scientific research outside of the agency?

6. My research is not eligible for public dissemination.

(If Question 19 is No)

Question choices	Percentage of respondents	95 percent confidence interval
Checked	8.0	5.9-10.5
Not checked	92.0	89.5-94.1

Q20. Which of the following reasons describe why in the past 5 years you have not sought to disseminate the results of your scientific research outside of the agency?

7. Agency policies did not allow me to disseminate.

(If Question 19 is No)

Question choices	Percentage of respondents	95 percent confidence interval
Checked	1.9	0.9-3.4
Not checked	98.1	96.6-99.1

**Appendix II: Selected Results of the 2009
Survey of NASA Researchers**

Q20. Which of the following reasons describe why in the past 5 years you have not sought to disseminate the results of your scientific research outside of the agency?

8. Other, please specify below

(If Question 19 is No)

Question choices	Percentage of respondents	95 percent confidence interval
Checked	15.8	12.9-18.7
Not checked	84.2	81.3-87.1

Q21. Over the past 5 years, through which methods did you seek to disseminate your research results?

a. Publications (such as peer-reviewed publications or non-peer-reviewed publications)

(If Question 19 is Yes)

Question choices	Percentage of respondents	95 percent confidence interval
Yes	94.1	93.2-95.0
No	5.7	4.8-6.5
Not sure	0.2	0.1-0.5

Q21. Over the past 5 years, through which methods did you seek to disseminate your research results?

b. Presentations (such as keynote addresses, conferences, workshops, symposia, professional society meetings, or congressional hearings)

(If Question 19 is Yes)

Question choices	Percentage of respondents	95 percent confidence interval
Yes	97.1	96.4-97.7
No	2.6	2.0-3.2
Not sure	0.3	0.1-0.6

**Appendix II: Selected Results of the 2009
Survey of NASA Researchers**

Q21. Over the past 5 years, through which methods did you seek to disseminate your research results?

c. Agency releases (such as press releases, posting on an agency intranet site, or agency reports or fact sheets)

(If Question 19 is Yes)

Question choices	Percentage of respondents	95 percent confidence interval
Yes	31.9	30.2-33.5
No	58.5	56.7-60.2
Not sure	9.7	8.6-10.8

Q21. Over the past 5 years, through which methods did you seek to disseminate your research results?

d. Media interviews

(If Question 19 is Yes)

Question choices	Percentage of respondents	95 percent confidence interval
Yes	25.0	23.4-26.5
No	65.2	63.5-67.0
Not sure	9.8	8.7-10.9

Q21. Over the past 5 years, through which methods did you seek to disseminate your research results?

e. Other, please specify below

(If Question 19 is Yes)

Question choices	Percentage of respondents	95 percent confidence interval
Yes	16.4	13.9-18.8
No	60.5	57.2-63.8
Not sure	23.1	20.3-26.0

Q22. Other than for standard technical review reasons, over the past 5 years, have you ever encountered a situation when NASA did not allow you to disseminate your research results?

(If Question 19 is Yes)

Question choices	Percentage of respondents	95 percent confidence interval
Yes	11.9	10.7-13.0
No (skip to question 26)	88.1	87.0-89.3

**Appendix II: Selected Results of the 2009
Survey of NASA Researchers**

Q23. Through which method(s) were you seeking to disseminate your research results when you were denied agency approval?

a. Publications (such as peer-reviewed publications or non-peer-reviewed publications)

(If Question 19 is Yes and Question 22 is Yes)

Question choices	Percentage of respondents	95 percent confidence interval
Checked	39.9	35.0-44.8
Not checked	60.1	55.2-65.0

Q23. Through which method(s) were you seeking to disseminate your research results when you were denied agency approval?

b. Presentations (such as keynote addresses, conferences, workshops, symposia, professional society meetings, or congressional hearings)

(If Question 19 is Yes and Question 22 is Yes)

Question choices	Percentage of respondents	95 percent confidence interval
Checked	62.2	57.4-66.9
Not checked	37.8	33.1-42.6

Q23. Through which method(s) were you seeking to disseminate your research results when you were denied agency approval?

c. Agency releases (such as press releases, posting on an agency intranet site, or agency reports or fact sheets)

(If Question 19 is Yes and Question 22 is Yes)

Question choices	Percentage of respondents	95 percent confidence interval
Checked	11.6	8.7-15.0
Not checked	88.4	85.0-91.3

Q23. Through which method(s) were you seeking to disseminate your research results when you were denied agency approval?

d. Media interviews

(If Question 19 is Yes and Question 22 is Yes)

Question choices	Percentage of respondents	95 percent confidence interval
Checked	4.3	2.7-6.6
Not checked	95.7	93.4-97.3

**Appendix II: Selected Results of the 2009
Survey of NASA Researchers**

Q23. Through which method(s) were you seeking to disseminate your research results when you were denied agency approval?

e. Other, please specify below

(If Question 19 is Yes and Question 22 is Yes)

Question choices	Percentage of respondents	95 percent confidence interval
Checked	6.8	4.6-9.7
Not checked	93.2	90.3-95.4

Q25. Did you take any of the following actions when you did not receive approval to disseminate your research results?

a. Appealed the decisions using established procedures.

(If Question 19 is Yes and Question 22 is Yes)

Question choices	Percentage of respondents	95 percent confidence interval
Yes	23.5	18.8-28.2
No	76.5	71.8-81.2
Not sure	0.0	0.0-2.2

Q25. Did you take any of the following actions when you did not receive approval to disseminate your research results?

b. Disseminated the results anyway.

(If Question 19 is Yes and Question 22 is Yes)

Question choices	Percentage of respondents	95 percent confidence interval
Yes	6.9	4.5-10.0
No	92.4	89.1-94.9
Not sure	0.7	0.1-2.3

Q25. Did you take any of the following actions when you did not receive approval to disseminate your research results?

c. Disseminated the results through a different route.

(If Question 19 is Yes and Question 22 is Yes)

Question choices	Percentage of respondents	95 percent confidence interval
Yes	24.1	19.4-28.8
No	73.1	68.2-78.0
Not sure	2.8	1.4-5.1

**Appendix II: Selected Results of the 2009
Survey of NASA Researchers**

Q25. Did you take any of the following actions when you did not receive approval to disseminate your research results?

d. Added a disclaimer that the opinions expressed in the research results do not reflect the views of the agency.

(If Question 19 is Yes and Question 22 is Yes)

Question choices	Percentage of respondents	95 percent confidence interval
Yes	6.9	4.3-10.4
No	91.6	87.9-94.5
Not sure	1.5	0.5-3.4

Q25. Did you take any of the following actions when you did not receive approval to disseminate your research results?

e. Resubmitted the same or similar document.

(If Question 19 is Yes and Question 22 is Yes)

Question choices	Percentage of respondents	95 percent confidence interval
Yes	15.9	11.8-20.7
No	82.0	77.5-86.4
Not sure	2.2	0.9-4.3

Q25. Did you take any of the following actions when you did not receive approval to disseminate your research results?

f. Gave up trying.

(If Question 19 is Yes and Question 22 is Yes)

Question choices	Percentage of respondents	95 percent confidence interval
Yes	53.3	47.7-58.9
No	43.6	38.0-49.2
Not sure	3.1	1.4-5.8

**Appendix II: Selected Results of the 2009
Survey of NASA Researchers**

Q25. Did you take any of the following actions when you did not receive approval to disseminate your research results?

g. Received approval following other types of revisions.

(If Question 19 is Yes and Question 22 is Yes)

Question choices	Percentage of respondents	95 percent confidence interval
Yes	22.7	18.0-27.4
No	72.6	67.5-77.7
Not sure	4.7	2.5-7.8

Q25. Did you take any of the following actions when you did not receive approval to disseminate your research results?

h. Other, please specify below

(If Question 19 is Yes and Question 22 is Yes)

Question choices	Percentage of respondents	95 percent confidence interval
Yes	33.4	25.6-41.1
No	49.0	40.7-57.2
Not sure	17.7	11.7-25.0

Q26. To the best of your knowledge, does NASA have a process or procedure in place to appeal decisions made regarding the dissemination of research results?

Question choices	Percentage of respondents	95 percent confidence interval
Yes, I'm aware of a process or procedure and am familiar with it	8.2	7.3-9.0
Yes, I'm aware of a process or procedure but am not familiar with it	25.0	23.5-26.4
No (skip to question 28)	18.1	16.8-19.3
Not sure (skip to question 28)	48.8	47.2-50.4

27. In your opinion, how effective or ineffective is this appeals process or procedure in terms of its ability to resolve dissemination issues in a fair and reasonable manner?

Question choices	Percentage of respondents	95 percent confidence interval
Extremely, very, or moderately effective	81.5	77.5-85.6
Slightly to not at all effective	18.5	14.4-22.5

Appendix III: Comments from the National Aeronautics and Space Administration

National Aeronautics and Space Administration
Office of the Administrator
Washington, DC 20546-0001



November 24, 2009

Ms. Anu Mittal
Director
Natural Resources and Environment
United States Government Accountability Office
Washington, DC 20548

Dear Ms. Mittal:

NASA appreciates the opportunity to comment on the Government Accountability Office (GAO) draft report entitled, "Federal Research: NASA Should Better Inform Researchers About How to Appeal Dissemination Decisions" (GAO-10-200).

In the draft report, GAO makes one recommendation regarding the dissemination of scientific research, which is addressed to the NASA Administrator.

Recommendation: GAO recommends that the NASA Administrator direct officials responsible for dissemination of research results through all routes to include in their efforts to inform researchers a focus on the processes researchers are to follow when they wish to appeal decisions.

Response: NASA concurs with this recommendation. The NASA Administrator will direct the Officials in Charge including the Assistant Administrator for Public Affairs to work with the appropriate NASA entities to review the Agency's dissemination policies and provide appropriate education and training for researchers to ensure they clearly understand the processes for appealing dissemination decisions.

Thank you for the opportunity to review and comment on this draft report and for the critical insight it provides. If you have any questions, please contact Bob Jacobs on (202) 358-1760.

Sincerely,

A handwritten signature in cursive script that reads "Lori B. Garver".

Lori B. Garver
Deputy Administrator

Appendix IV: GAO Contact and Staff Acknowledgments

GAO Contact:

Ms. Anu Mittal, 202-512-3841 or mittala@gao.gov

Staff Acknowledgments:

In addition to the contact person named above, Cheryl Williams (Assistant Director), Carl Barden, Laura Erion, Richard Johnson, Amanda Miller, Ben N. Shouse, Lisa Turner, Fatema Wachob, and Elizabeth Wood made key contributions to this report.

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