

AUGUST 9, 2012

AUDIT REPORT

OFFICE OF AUDITS

NASA'S INFRASTRUCTURE AND FACILITIES:
AN ASSESSMENT OF THE AGENCY'S
REAL PROPERTY LEASING PRACTICES

OFFICE OF INSPECTOR GENERAL



National Aeronautics and
Space Administration

Final report released by:



Paul K. Martin
Inspector General

Acronyms

BW	Business Warehouse
C.F.R.	Code of Federal Regulations
EUL	Enhanced Use Lease
FY	Fiscal Year
GAO	Government Accountability Office
GSA	General Services Administration
NAII	NASA Advisory Implementing Instruction
NPD	NASA Policy Directive
NPR	NASA Procedural Requirements
OIG	Office of Inspector General
OMB	Office of Management and Budget
OPF3	Orbiter Processing Facility 3
RFP	Request for Proposal
RPMS	Real Property Management System
SAAM	Space Act Agreement Maker
U.S.C.	United States Code

OVERVIEW

NASA'S INFRASTRUCTURE AND FACILITIES: AN ASSESSMENT OF THE AGENCY'S REAL PROPERTY LEASING PRACTICES

The Issue

For the past several years, the Government Accountability Office (GAO) and Congress have identified real property management as a high-risk area in agencies across the Federal Government. NASA is no exception. The Agency's real property inventory consists of more than 100,000 acres, including more than 44 million square feet within approximately 5,000 buildings and other structures. Over 80 percent of these facilities are 40 or more years old, and NASA faces a backlog of deferred maintenance totaling \$2.5 billion.¹ Moreover, the NASA Authorization Act of 2010 called for a reduction in NASA's real property to fit current and future missions and expected funding levels. Against this backdrop, NASA is undergoing changes in mission focus and operating under constrained budgets. Given these challenges, NASA managers must balance reducing the Agency's real property footprint with ensuring that the Agency retains and maintains currently underutilized facilities that it may later need to support future missions.

Real Property Agreements. NASA has several options when it identifies real property as underutilized, including retaining the property in its present state, demolition, transferring the property to the General Services Administration (GSA) for sale or transfer to another entity, or making the property available for lease. In this audit, we focused on NASA's leasing program.

Leasing underutilized real property has several benefits. First, leases may generate revenue the Agency can use to help reduce overhead expenses and defray the costs of maintaining and improving aging infrastructure. Second, leasing enables NASA to keep in its inventory facilities that although currently underutilized may be needed for future missions.

However, NASA must be careful to ensure that leasing does not replace its responsibility to dispose of property that is truly no longer required to meet current or future mission

¹ NASA defines deferred maintenance as the essential but unfunded work necessary to bring its Centers up to required standards.

needs.² Furthermore, poor implementation and execution of its leasing program could result in NASA not realizing the program's full benefits or lead to financial losses to the Agency.

As of September 2011, NASA had 430 leasing agreements of various types with outside entities at 9 of its 10 Centers.³ The agreements included reimbursable and nonreimbursable agreements, concessionaire agreements, easements, and Enhanced Use Leases (EULs), and their scope varied from a single office in a facility to a lease for more than 75 acres of land.⁴ For purposes of this report, we are using the term "lease" to refer to any type of real property agreement, (also referred to as an "out-grant" in NPR 8800.15B), including easements, concessionaire agreements, nonreimbursable agreements, reimbursable agreements, or EULs, that allows others to use NASA real property. A description of the different types of leasing agreements follows:

- *Easements.* NASA grants an entity a temporary or permanent right to use real property for a specific purpose. For example, NASA granted an easement to the Southeast Louisiana Flood Protection Authority for a flood protection levee at its Michoud Assembly Facility.
- *Concessionaire Agreements.* A private business, such as a gift shop or food service vendor, operating at a NASA Center.
- *Nonreimbursable Agreements.* NASA and one or more agreement partners are involved in a mutually beneficial activity that furthers the Agency's mission, with each party bearing its own costs and no exchange of funds between the parties. For example, NASA has a nonreimbursable agreement with the Ames Child Care Center.
- *Reimbursable Agreements.* NASA makes land or facilities available to a third party and the third party pays NASA for the right to use the property. For example, NASA has multiple agreements with the Navy for the use of buildings and land at Stennis Space Center (Stennis). Unless the agreements are enhanced use leases (discussed below), NASA must remit any revenues it receives from non-Federal entities in excess of its costs to the U.S. Treasury.

² Title 40, United States Code (U.S.C.), Section 524, requires that each Executive agency maintain adequate inventory controls and accountability systems for property under its control, continuously survey property under its control to identify excess property, and promptly report excess property to the Administrator of General Services. NASA Procedural Requirements 8800.15B, "NASA Real Property Management," June 21, 2010, further requires NASA Centers to identify property that does not meet a current or future mission need and take actions to dispose of unneeded real property.

³ Dryden Flight Research Center was the only Center that had no lease agreements at the time of our audit fieldwork.

⁴ NASA's reimbursable and nonreimbursable agreements are primarily entered into under the authority of the National Aeronautics and Space Act. However, NASA can also enter into agreements under other authorities, such as the National Historical Preservation Act.

- *Enhanced Use Leases (EULs)*. Agreements that allow NASA to retain proceeds in excess of its costs rather than remitting them to the Treasury.

Evolution of Enhanced Use Leases. NASA first received EUL authority as part of the Consolidated Appropriations Resolution of 2003, which enabled it to lease underutilized real property at Ames Research Center (Ames) and Kennedy Space Center (Kennedy) to private entities for cash or in-kind consideration and retain the proceeds.⁵ In 2008, NASA received EUL authority for all its Centers; however, the legislation only permitted the Agency to accept cash payments and not in-kind consideration.⁶ In November 2011, the law was amended again to allow NASA to accept in-kind consideration, but only as it relates to the development of renewable energy production facilities.⁷

The decision of whether to retain and lease or dispose of a particular piece of real property involves a difficult balancing act for NASA. On one hand, leasing can generate revenue to offset facilities operations and maintenance costs and potentially reduce a portion of the Agency's deferred maintenance liability. On the other hand, entering into lease agreements for property that has no identified mission use cuts against the Agency's efforts to reduce its real property footprint and diverts attention and resources away from its core space, aeronautics, and science missions. In addition, because leasing is not a long-established NASA function, the Agency's guidance and the experience of its personnel in this area are still evolving.

In this audit, we examined NASA's leasing program and reviewed leasing operations at selected Centers and component facilities: Ames; Glenn Research Center (Glenn) and its Plum Brook Station; Kennedy; Michoud Assembly Facility (Michoud) (a component of Marshall Space Flight Center); and Stennis. Specifically, we assessed whether NASA effectively (1) identified space available for lease to other entities, (2) marketed available space to potential Federal and non-Federal tenants, (3) established internal controls to ensure that lease agreements provide the best value to the Government and are fair to potential tenants, and (4) accounted for in-kind consideration received from EULs. Details of the audit's scope and methodology are in Appendix A.

Results

Although NASA has made improvements to its leasing program in recent years, the Agency still faces significant challenges to ensure that it has effective controls in place to maximize the benefits of its leasing program. Specifically, we found that NASA did not

⁵ Public Law 108-7, "Consolidated Appropriations Resolution, 2003," February 20, 2003. The in-kind consideration could come in the form of maintenance, construction, modification, or improvement of facilities on real property under the jurisdiction of the Administrator, or the provision of services to NASA including use by NASA of facilities built by the tenant on the property.

⁶ Public Law 110-161, "Consolidated Appropriations Act, 2008," December 26, 2007.

⁷ Public Law 112-55, "Consolidated and Further Continuing Appropriations Act, 2012," November 18, 2011.

have clear guidance to ensure that property identified for leasing was not excess to the Agency's needs.⁸ We also determined that NASA lacked a complete inventory of space available for lease as well as an effective marketing program to attract potential tenants. Further, we found various internal control weaknesses that limit NASA's ability to ensure that leases provide the best value to the Agency and are fair to its partners and potential partners. Finally, we found that while NASA's reporting of in-kind consideration in its financial statements is improving, the Agency's existing guidance does not ensure that the types of in-kind consideration NASA accepts actually benefit the Agency. Absent better controls and improved guidance, NASA will be hard-pressed to maximize the potential of its leasing program to help reduce the cost of maintaining underutilized facilities while meeting its obligation to ensure that leasing does not become a substitute for disposing of excess property.

NASA Guidance for Identifying Property for Lease Is Unclear and Ineffective

Although NASA has made improvements to its leasing guidance, the Agency faces significant challenges in identifying real property that is appropriate for leasing. For example, we found that the NASA Centers have few incentives to declare underutilized property excess to their needs so that it may be removed from NASA's inventory. We also found that NASA lacks clear guidance for assisting Agency personnel in determining whether property is necessary to meet the Agency's current or future mission needs. While NASA revised its leasing policy in June 2010 in an attempt to ensure that real property considered for leasing has a current or future use, the 2010 policy does not adequately describe the criteria the Centers should use to make this determination.

NASA Lacks Comprehensive Inventory of Property Available for Lease

NASA does not have a complete inventory of property available to lease, which hinders its ability to advertise to potential tenants or provide effective oversight of its leasing efforts. Managers at Ames, Kennedy, and Stennis had only partial inventories of buildings or land available for lease while managers at Glenn and Michoud could not provide us with any formal inventory of their available properties. Without compiling a complete inventory of available space, NASA cannot maximize its potential leasing opportunities.

Centers Did Not Adequately Market Their Properties for Leasing

The Centers we visited generally relied on informal "word-of-mouth" efforts to attract potential tenants. However, NASA is not taking other steps that could help the Agency better market its leasing opportunities to both Federal and non-Federal entities. For example, NASA has not coordinated with the GSA Office of Client Solutions to identify potential Federal tenants. Indeed, we found that most of the Center personnel we spoke with were not aware they could coordinate with GSA about this issue. In addition, when

⁸ Excess property means property under the control of a Federal agency that the head of the agency determines is no longer required to meet the agency's needs.

seeking non-Federal tenants, the Centers had not consistently publicized leasing opportunities to the broadest possible audience. Accordingly, NASA may not be fully realizing the potential of its leasing program to defray the costs of maintaining its aging infrastructure or help consolidate Government-wide real property inventories.

Internal Controls Need Strengthening to Ensure the Best Value to the Government and Fairness to Partners

At the five Centers we visited, we found a variety of internal control weaknesses that hinder NASA's ability to ensure that real property leases provide the best value to the Government and are fair to all parties.⁹ Specifically, we found that (1) the Centers did not consistently use competition for agreements with non-Federal entities, (2) three of the Centers did not conduct a required market analysis or used the analysis inappropriately when developing pricing, and (3) three of the Centers entered into lease agreements signed by unauthorized personnel.

These conditions occurred due to inadequate internal controls, including a lack of training, guidance, and documentation. As a result, personnel were unsure about how and when to use competition, when to use market analysis to develop pricing, and who has proper signature authority. Without stronger internal controls, it will be difficult for NASA to ensure that the Agency is receiving the highest return from its real property agreements and that the agreements are legally binding.

NASA's Reporting of In-Kind Consideration Is Improving but In-Kind Benefits Were Not Consistently Realized

NASA is improving its reporting of in-kind consideration in its financial records, and the Centers have achieved some in-kind benefits through EUL agreements. However, out of the eight in-kind agreements we reviewed, NASA did not receive any benefit from one agreement and received only limited benefit from five others. For example, Ames leased land for the placement of two satellite antennas and accepted the part-time use of the antennas as in-kind consideration. However, NASA has not used the transmission frequencies available through the antennas over the past four years. Without improved guidance, NASA may not realize the full benefits of its in-kind authority.

Conclusion

NASA faces significant challenges as it works to comply with the 2010 Authorization Act directive to reduce its infrastructure at a time when mission requirements are still evolving and somewhat uncertain. Given these challenges, it is important that NASA consider an array of options to manage its underutilized real property, including leasing it to other entities. Properly implemented, leasing can generate revenue to offset facilities

⁹ The best value is the most advantageous balance of revenues and compatibility with NASA mission achieved through competitive methods that provides the greatest overall benefit to the Government.

operations and maintenance costs and potentially reduce the Agency's deferred maintenance liability. However, NASA must be careful not to use leasing as a substitute for excessing property for which it has no current or expected future mission use. Leasing property in such circumstances frustrates the Agency's efforts to reduce its real property footprint and can divert effort and resources from its core missions. As NASA considers expanding its leasing agreements to help manage its infrastructure challenges, the Agency should strengthen its guidance, training, and documentation requirements to ensure it is receiving the highest possible benefits from its lease agreements and that the agreements are made in the most transparent manner to ensure fairness to all parties.

Management Action

To improve management of NASA's real property leasing program, we recommended that the Associate Administrator for Mission Support revise existing policy and develop new policy:

- articulating the criteria Centers should use to determine whether underutilized property has a current or future mission use;
- requiring that Federal entities be considered for leasing opportunities and that NASA coordinate with the GSA Office of Client Solutions to identify potential Federal tenants;
- requiring that leasing opportunities be widely publicized;
- providing guidance for Center management addressing the requirements for lease agreements; and
- providing guidance for determining whether in-kind consideration provides the best value to the Government.

In addition, the Associate Administrator should coordinate with the Centers to implement a process for identifying and maintaining a complete inventory of real property available for leasing. Finally, the Associate Administrator should institute a review of all existing agreements to ensure they are consistent with applicable statutes and regulations regarding signature authority and other required terms.

In response to a draft of this report, the Associate Administrator concurred with our recommendations to clarify the criteria Centers should use to determine if underutilized property has a current or future mission-related use, maintain a complete inventory of real property available for leasing, and review all real property agreements to ensure they are consistent with applicable statutes and regulations. The Associate Administrator partially concurred with our other recommendations, stating that while NASA's current policy addresses these issues, he agreed that the policies could be strengthened to better articulate that Federal entities be considered for leasing opportunities; require that leasing

opportunities be widely publicized; provide guidance for Center management addressing the requirements for lease agreements; and provide guidance for determining whether in-kind consideration provides the best value to the Government.

We question why NASA characterized its responses to five of our eight recommendations as partial concurrences when the Agency agreed in each instance that its policy could “be strengthened” and agreed to take corrective action. Nevertheless, because we find that the Agency’s proposed actions address the intent of our recommendations we are resolving all eight recommendations and will close them upon completion and verification of the proposed corrective actions.

As NASA considers expanding its leasing agreements to help manage its infrastructure challenges, the establishment and clarification of guidance, training, and documentation requirements will help ensure that the Agency is receiving the highest possible benefits from its lease agreements and that the agreements are made in the most transparent manner to ensure fairness to all parties.

CONTENTS

INTRODUCTION

Background _____	1
Objectives _____	4

RESULTS

NASA Guidance for Identifying Property for Lease Is Unclear and the Agency Lacks a Comprehensive Inventory of Property Available for Leasing _____	6
Centers Did Not Adequately Market Their Properties for Leasing _____	13
Internal Controls Need Strengthening to Ensure the Best Value to the Government and Fairness to Partners for Real Property Agreements _____	16
NASA's Reporting of In-Kind Consideration Is Improving but In-Kind Benefits Were Not Consistently Realized _____	24

APPENDIX A

Scope and Methodology _____	27
Review of Internal Controls _____	29
Prior Coverage _____	30

APPENDIX B

History of Federal and NASA Requirements _____	31
--	----

APPENDIX C

Management Comments _____	34
---------------------------	----

APPENDIX D

Report Distribution _____	37
---------------------------	----

INTRODUCTION

Background

For the past several years, the Government Accountability Office (GAO) and Congress have identified real property management as a high-risk area in agencies across the Federal Government. NASA is no exception. The Agency's real property inventory consists of more than 100,000 acres, including more than 44 million square feet within approximately 5,000 buildings and other structures. Over 80 percent of these facilities are 40 or more years old, and NASA faces a backlog of deferred maintenance totaling \$2.5 billion.¹⁰ Moreover, the NASA Authorization Act of 2010 called for a reduction in NASA's real property to fit current and future missions and expected funding levels. Against this backdrop, NASA is undergoing considerable changes in mission focus and operating in a budget-constrained environment. Given these challenges, NASA's real property managers must balance reducing the Agency's real property footprint with ensuring that NASA prudently retains and maintains facilities that are currently underutilized but may later be needed to support future missions.

This balancing act is not a new challenge for NASA or the other Federal agencies. Since 1949, agencies have been required to identify and promptly report excess property to the Administrator of General Services.¹¹ More recently, the Federal Real Property Council in 2004 and President Obama in 2010 issued guidance to Federal agencies regarding disposal of unneeded real property. Particular to NASA, Congress has noted that the Agency needs to re-scope and, as appropriate, downsize its physical footprint and directed it to develop a strategy to evolve toward the most efficient retention, sizing, and distribution of facilities, laboratories, test capabilities, and other infrastructure consistent with its mission.¹²

Real Property Agreements. In June 2010, NASA updated its policy to include the Agency's first overall guidance for developing and managing real property agreements. This revised guidance requires that, with limited exceptions, only property that has a current or future mission-related use be made available for lease to third parties.

NASA has several options if it identifies any of its real property as underutilized: retaining the property in its present state, demolition, mothballing, declaring the property "excess" to NASA's needs and transferring it to the General Services Administration

¹⁰ NASA defines deferred maintenance as the essential but unfunded work necessary to bring its Centers up to required standards.

¹¹ 40 U.S.C. § 524.

¹² Public Law 111-267, "National Aeronautics and Space Administration Authorization Act of 2010."

(GSA) for disposition, or making the property available for lease.¹³ In this audit, we focused on NASA's leasing program, including the different types of real property agreements NASA uses. For purposes of this report, we are using the term "lease" to refer to any type of real property agreement, (also referred to as an "out-grant" in NASA Procedural Requirements (NPR) 8800.15B "NASA Real Property Management," June 21, 2010), including easements, concessionaire agreements, nonreimbursable agreements, reimbursable agreements, or Enhanced Use Leases (EUL), that allows others to use NASA real property.

- *Easements.* NASA grants an entity a temporary or permanent right to use real property for a specific purpose. For example, NASA granted an easement to the Southeast Louisiana Flood Protection Authority-East for a flood protection levee at Michoud Assembly Facility.
- *Concessionaire Agreements.* A private business, such as a gift shop or food service vendor, operating at a NASA Center.
- *Nonreimbursable Agreements.* NASA and one or more agreement partners are involved in a mutually beneficial activity that furthers the Agency's mission with each party bearing its own costs and no exchange of funds between the parties. For example, NASA has a nonreimbursable agreement with the Ames Child Care Center.
- *Reimbursable Agreements.* NASA makes land or facilities available to a third party and the third party pays NASA for the right to use the property. Under a reimbursable agreement with another Federal agency, NASA receives payment to cover its costs. For example, NASA has multiple agreements with the Navy for buildings and land at Stennis Space Center (Stennis) in which the Navy reimburses the Center for costs incurred. Leases to non-Federal entities should be set at market rate and any revenues in excess of cost that NASA receives should be remitted to the U.S. Treasury, unless the agreement is an enhanced use lease as discussed below.
- *Enhanced Use Leases.* Agreements that allow NASA to retain proceeds in excess of its costs.

As of September 30, 2011, NASA had 430 active real property agreements. The scope of these agreements varied from use of a single office in a larger facility at Stennis to a lease for more than 75 acres of land at Ames Research Center (Ames). For our review, we included one additional reimbursable agreement at Kennedy Space Center (Kennedy) that was created on October 6, 2011, 6 days outside our audit sample timeframe, because of its high visibility.

¹³ NPR 8800.15B, "Real Estate Management Program," June 2010.

The following table shows the 431 agreements by type and location.

Type of Agreements						
Center/ Component	Enhanced Use Lease	Reimbursable	Non- Reimbursable	Concessionaire	Easement	Total
Ames	52	20	4	—	27	103
Glenn	—	3	3	1	3	10
- PBS	—	21	1	—	17	39
Goddard	—	2	—	—	2	4
- Wallops	—	12	4	—	13	29
JPL	—	—	—	—	5	5
Johnson	—	2	3	—	56	61
- White Sands	—	—	—	—	2	2
Kennedy	14	6	7	1	7	35
Langley	—	1	2	—	3	6
Marshall	—	4	—	6	—	10
- Michoud	—	14	4	1	4	23
Stennis	—	35	5	10	54	104
Total	66	120	33	19	193	431
Ames:	Ames Research Center		Johnson:	Johnson Space Center		
Glenn:	Glenn Research Center		- White Sands:	White Sands Test Facility		
- PBS:	Plum Brook Station		Kennedy:	Kennedy Space Center		
Goddard:	Goddard Space Flight Center		Langley:	Langley Research Center		
- Wallops:	Wallops Flight Facility		Marshall:	Marshall Space Flight Center		
JPL:	Jet Propulsion Laboratory		- Michoud:	Michoud Assembly Facility		
			Stennis:	Stennis Space Center		

Source: Office of Inspector General (OIG) analysis of active real property agreements received from Centers.

Evolution of NASA Enhanced Use Leases. In the Consolidated Appropriations Resolution of 2003, NASA received authority to establish EUL demonstration projects at two of its Centers. NASA selected Ames and Kennedy to exercise this authority. Under the law, NASA could accept cash or in-kind consideration in the form of maintenance, construction, modification, or improvement of facilities or the provision of services, including launch services and payload processing services.¹⁴ For example, NASA has an EUL agreement with Airship Ventures for the use of 24,000 square feet of space in Hangar 2 at Ames’ Moffett Field to store a rigid airship.¹⁵ In return, the base rent and

¹⁴ Public Law 108-7, “Consolidated Appropriations Resolution, 2003,” February 20, 2003.

¹⁵ Airship Ventures is a privately held company that conducts sightseeing tours by airship.

reimbursement of costs for institutional support services from this agreement generated over \$98,000 in fiscal year (FY) 2011.

In 2007, GAO reported that NASA did not have adequate controls in place to report in-kind consideration received from its EULs.¹⁶ In response, in July 2007 NASA issued an interim Agency-wide facilities policy for EULs, which was finalized in December 2008 as the NASA Desk Guide for Enhanced Use Leasing of Real Property (the EUL Desk Guide). Under the policy, Centers with EUL authority are responsible for developing leases that support NASA missions in space exploration, scientific discovery, and aeronautics research. The policy states that “each lease will likely be unique in its aspects but all should support the NASA mission.”¹⁷

In 2008, Public Law 110-161 extended NASA’s EUL authority to all Centers but limited the Agency to accepting cash rather than in-kind consideration for any new leases. NASA subsequently placed a moratorium on EULs while it developed further guidance.¹⁸ NASA revised its EUL Desk Guide in February 2010 and lifted the moratorium on EULs in March 2010.

In June 2010, NASA published updated guidance, NPR 8800.15B, “Real Estate Management Program,” which directs the Centers to submit all EULs, regardless of scope, duration, or amount of revenue, to the Director, Facilities Engineering and Real Property Division, for review and approval, rescinding authority previously granted to Centers to enter into some EULs without prior review by Headquarters.¹⁹

In November 2011, Public Law 112-55 restored NASA’s authority to accept in-kind consideration but only for leases related to the development of renewable energy production facilities.²⁰

Objectives

Given the Agency’s real property challenges and the potential for leasing to help address aspects of those challenges, we examined NASA’s leasing program and reviewed leasing operations at selected NASA Centers and component facilities: Ames; Glenn Research Center (Glenn) and its Plum Brook Station; Kennedy; Michoud Assembly Facility

¹⁶ GAO Report, “NASA: Enhanced Use Leasing Program Needs Additional Controls” (GAO-07-306R, March 1, 2007).

¹⁷ EUL financial policy was included in NASA Procedural Requirements (NPR) 9090.1, “Reimbursable Agreements,” finalized in September 2008.

¹⁸ NASA Associate Administrator Memorandum to all Center Directors, “Enhanced Use Leasing Agreements,” February 17, 2009.

¹⁹ The Facilities Engineering and Real Property Division is now referred to as the Technical Capabilities and Real Property Management Division.

²⁰ Public Law 112-55, “Consolidated and Further Continuing Appropriations Act, 2012,” November 18, 2011.

(Michoud), a component of Marshall Space Flight Center; and Stennis. Specifically, we assessed whether NASA (1) effectively identified space available for lease to other entities, (2) effectively marketed its available space to potential Federal and non-Federal tenants, and (3) had effective internal controls to ensure that agreements provide the best value to the Government and are fair to potential tenants and to account for in-kind consideration received from EULs. See Appendix A for details of the audit's scope and methodology, our review of internal controls, and a list of prior coverage.

NASA GUIDANCE FOR IDENTIFYING PROPERTY FOR LEASE IS UNCLEAR AND THE AGENCY LACKS A COMPREHENSIVE INVENTORY OF PROPERTY AVAILABLE FOR LEASING

Although NASA has made improvements to its leasing guidance, the Agency still faces significant challenges in identifying real property that is available for leasing.²¹ Specifically, we found that the Centers have greater incentives to retain and lease underutilized property than to declare it excess to Agency needs so that it can be removed from NASA's inventory. In addition, NASA's leasing guidance does not make clear the criteria the Centers should use for determining if underutilized property has a current or future mission use and is therefore suitable for leasing. Accordingly, NASA may be leasing property that is more appropriate for excessing. We also found that NASA does not have a complete inventory of the space it has available to lease, making it more difficult for the Agency to maximize potential leasing opportunities and perform effective oversight of its leasing operations.

Challenges to Identifying Real Property Suitable for Leasing

The decision whether to lease or excess underutilized real property represents a difficult balancing act for NASA. On one hand, leasing could generate revenue to offset facilities operations and maintenance costs and potentially reduce some of the Agency's deferred maintenance liability. On the other hand, retaining and leasing property that has no identified mission use hinders the Agency's efforts to reduce its real property footprint and diverts focus and resources from NASA's primary space, aeronautics, and science missions to property development and management.

According to NASA policy, the Agency's overall utilization goal is to put its facilities to their highest and best uses and to ensure that its inventory of facilities remains consistent with its program and institutional priorities.²² In sum, NASA should operate the minimum number of facilities and infrastructure required to conduct Agency programs and meet its varied responsibilities.

NASA Has Few Incentives to Identify Property as Unneeded. Centers may have valid reasons for retaining underutilized real property, such as a potential future mission use, the need to maintain a buffer area surrounding test and launch facilities, historical preservation, or the location of the property within the Center's established boundary.

²¹ In February 2010, NASA revised its 2008 EUL Desk Guide, and in June 2010 NASA issued NPR 8800.15B, "Real Estate Management Program," which included NASA's first overall guidance for developing and managing real property agreements.

²² NPR 8800.15B.

However, according to Agency and Center officials, few incentives exist for NASA to identify underutilized property as unnecessary to its mission needs, a prerequisite to removing the property from the Agency's jurisdiction and relieving NASA of the associated maintenance costs. For example, demolition can have significant up-front costs and there may be local and political opposition to disposing of facilities. Similarly, if NASA declares property excess and transfers it to GSA, any proceeds from a subsequent sale go to the general Treasury rather than NASA. In addition, it may be difficult for NASA to predict future mission needs and therefore give up technical or highly specialized assets that would be extremely expensive to replicate. For all of these reasons, leasing may be a more attractive option to NASA managers than disposing of the property.

The Agency's efforts to dispose of Hangar One – an iconic landmark built in the 1930s to house naval airships that is located at Ames' Moffett Field – illustrate several of these challenges. In April 2012, the NASA Administrator notified a member of Congress that because NASA no longer needed Hangar One and other property at Moffett Field, it was working with GSA to transfer the property for disposition.²³ At the time, the massive hangar was being “de-skinned” to remove siding that was leeching toxic chemicals. Prior to the Administrator's decision to transfer the hangar to GSA, a private company, H211, had proposed to evaluate the possibility of re-siding the hangar in return for rights to lease space in the hangar to house its private aircraft. Although, as stated in the Administrator's April 2012 letter to a member of Congress, because NASA had no mission use for Hangar One or the other Moffett Field property it would not be consistent with Federal law for the Agency to lease the property to H211.²⁴ The Administrator's action nevertheless sparked significant opposition from members of Congress, local residents, and the media.

Unclear Guidance for Determining Whether Underutilized Property Is Suitable for Lease. Although NASA improved its leasing guidance, we found that the Agency still needs to clarify the criteria the Centers should use for determining whether underutilized property is needed for a current or future mission and therefore suitable for leasing. Prior to 2010, NASA guidance did not specifically require a link to a NASA mission before underutilized property could be considered for leasing. In an effort to ensure Centers do not lease underutilized property that has no mission connection, NASA revised its leasing policy in June 2010 to mirror Federal guidance that directs agencies to reduce their unneeded property and overall footprint. Specifically, the policy states that, with limited exceptions, only real property that has a current or future mission use should be considered for leasing.²⁵ Absent an identified current or future use, Center Directors

²³ We reported on the re-siding project in “NASA's Hangar One Re-Siding Project” (IG-11-020, June 22, 2011). We questioned whether NASA spending \$32.8 million to re-side the hangar was the best use of the Agency's limited funding given that the Agency had no identified mission need for the building and had other higher priority and mission-critical renovation projects.

²⁴ 40 U.S.C. § 524.

²⁵ NPR 8800.15B, Excess property, as defined in 40 U.S.C. 472(e), is property under the control of a Federal agency that is not required for its needs and the discharge of its responsibilities as determined by the head of the agency.

must provide a justification for retaining the property and request approval from NASA Headquarters to do so.²⁶

Despite these improvements, the revised policy does not adequately explain the criteria Centers should use to determine whether property has a current or future mission use. For example, the policy does not direct the Centers to request formal input from Mission Directorates regarding their real property needs and future plans or suggest consideration of such factors as the cost of rebuilding unique assets.

The difficult choices NASA faces in determining whether property is suitable for leasing are demonstrated by several current leasing agreements at Ames and Plum Brook Station that were entered into prior to the 2010 change in NASA policy. In 2008, Ames entered into two EUL agreements:

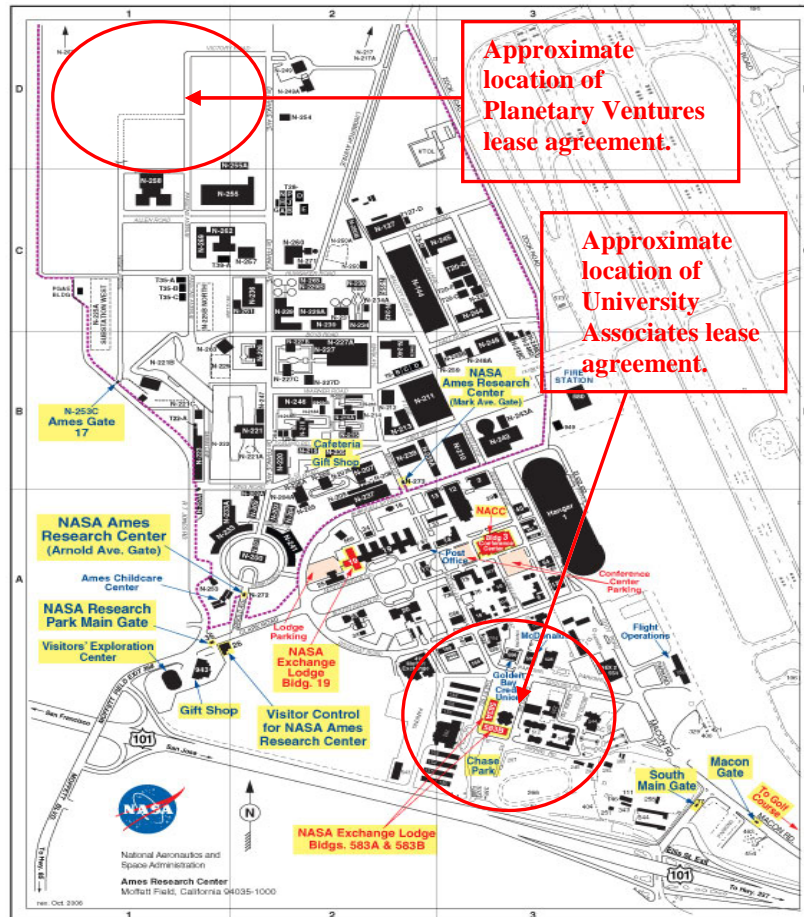
- The first with Planetary Ventures for 42 acres of undeveloped land for a maximum 90-year term to develop business and research-related facilities on the property.²⁷ NASA is receiving both cash and in-kind consideration in the form of infrastructure improvements under this agreement.
- The second with University Associates for 77 acres of land for a maximum 90-year term to develop business, education, research, and housing facilities on the property.²⁸ Although the agreement calls for NASA to receive both cash and in-kind consideration for infrastructure improvements, as of February 2012 University Associates had not begun the planned improvements.

Figure 1 shows the location of the property covered by these agreements.

²⁶ Approvals are granted by the Director of the Technical Capabilities and Real Property Management Division.

²⁷ Planetary Ventures is a Delaware-incorporated limited liability company owned by Google, Incorporated.

²⁸ University Associates is a nonprofit Silicon Valley limited liability company formed by the University of California, Santa Cruz, and Foothill-De Anza Community College District to provide integrated academic and research programs. Several NASA buildings on this parcel are currently slated to be demolished by University Associates.

Figure 1. Ames Land Involved in Two Lease Agreements

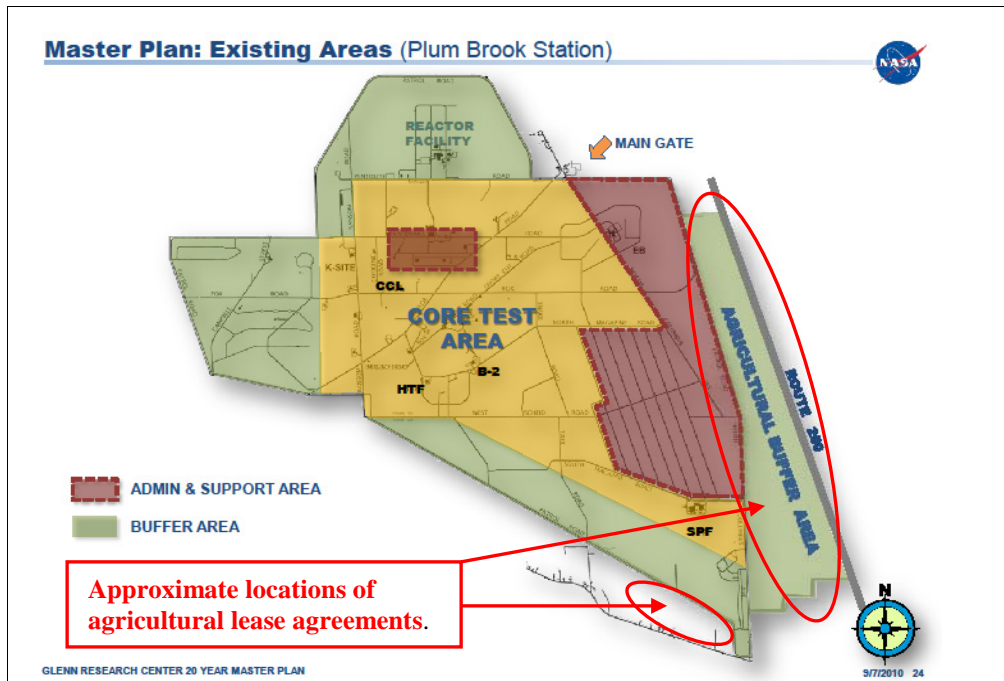
Source: Map from Ames Research Center; captions added by the OIG.

Part of the Ames campus has been designated as the Shenandoah Plaza Historic District and NASA has an obligation under Federal law to preserve this area. Ames has developed a research park in portions of the Center including the Historic District, which has been recognized for its preservation efforts. However, the parcels of land Ames leased to Planetary Ventures and University Associates are outside the Historic District and Ames did not identify a mission use for the parcels other than enabling collaboration with external partners. Furthermore, the agreements are not contingent on any formal collaboration between the lessees and NASA.

Similarly, in January 2009 and May 2010 Glenn leased two parcels of land totaling approximately 900 acres outside the fence line at Plum Brook Station to private entities for agricultural use. According to Glenn's 20-year Facilities Master Plan, NASA hopes to someday develop this land into a visitors' center and technology park.

Plum Brook Station is shown in Figure 2 and the leased land is marked as “Agricultural Buffer Area.” Although Glenn officials identified the land as “Buffer Area,” they could not provide documentation to support safety-based or other reasons why such a buffer zone was required.

Figure 2. Plum Brook Station Land Involved in Glenn’s Lease Agreements



Source: Glenn Research Center’s 20-year master plan; captions added by OIG.

As noted above, all of these leases were entered into prior to NASA’s 2010 guidance requiring a mission-related use for property considered for leasing; consequently, we are not suggesting that the Centers acted inappropriately by entering into these agreements. However, looking forward NASA may miss opportunities to reduce its real property footprint if it leases rather than excesses properties like these Ames and Plum Brook Station parcels.

In sum, we found that NASA policy is unclear regarding what criteria the Centers should use to evaluate whether to retain and lease underutilized Agency property rather than dispose of it. Without guidance that more clearly articulates what constitutes a NASA mission, the Agency may be missing significant opportunities to reduce its real property footprint and decrease associated operations and maintenance costs.

Incomplete Inventory of Space Available to Lease

NASA's lack of a complete inventory of space available to lease makes it more difficult for the Agency to manage its leasing efforts effectively, to advertise available space to potential tenants, and to match potential tenants with the space that best fits their needs.

Although the Centers are required to identify underutilized real property suitable for lease, none of the five Centers we visited had compiled complete inventories of available land and buildings. Ames managers had a list of buildings and land in the NASA Research Park available for lease, but it did not include any buildings on the main Ames campus. Similarly, Kennedy's inventory included facilities within its launch complexes but no land or buildings located on other parts of the Center, and Stennis had a complete inventory of buildings but had not identified underutilized land.

Managers at Glenn and Michoud could not provide us with a formal inventory of available properties. According to Glenn personnel, the Center had very little underutilized space at its Cleveland campus. However, we estimated that Glenn had over 500 acres of underutilized land within the core of its Plum Brook Station facility. According to Michoud personnel, approximately 40–60 percent of their facilities were underutilized and therefore potentially available for lease but because of uncertainties about future requirements for NASA programs they had not identified the precise areas that could be leased. After our visit to Michoud, officials told us they have received more definitive information about NASA's needs and implemented a space management tracking system that identifies underutilized space suitable for leasing.

We acknowledge that identifying potentially leasable space is challenging given the Agency's changing and uncertain mission requirements and the current lack of guidance regarding how to evaluate current or future mission needs. However, identifying and maintaining inventories of real property available for lease is essential to effective marketing of potential leasing opportunities. Moreover, according to NASA policy the identification of underutilized real property assets should be part of a continuous process so that as future mission requirements become more firm Centers can efficiently and effectively identify leasable property.²⁹

²⁹ NPR 8800.15B.

Recommendations, Management's Response, and Evaluation of Management's Response

To improve management of NASA's real property leasing program, we made the following recommendations to the Associate Administrator for Mission Support:

Recommendation 1. Clarify the criteria Centers should use to determine whether underutilized property has a current or future mission-related use and provide training to Center personnel on the revised criteria.

Management's Response. The Associate Administrator concurred with our recommendation, stating that while NASA's current policy addresses this item the Agency agrees that the policy could be strengthened to ensure Centers have clearer statements of requirements relating to NASA's leasing program. The Associate Administrator said management will draft and submit for official review the revised policy by the end of calendar year 2012.

Evaluation of Management's Response. Management's comments are responsive; therefore, the recommendation is resolved and will be closed upon verification and completion of the proposed corrective actions.

Recommendation 2. Coordinate with the Centers to develop a process to maintain a complete inventory of real property available for leasing.

Management's Response. The Associate Administrator concurred with our recommendation, stating that NASA will include the requirement for Centers to identify and maintain a complete inventory of real property leasing opportunities in its revised policy. In addition, NASA will establish within its Real Property Management System the capability for Centers to identify and maintain inventory of real property leasing opportunities and request that Centers submit a complete inventory of real property leasing opportunities by the end of calendar year 2012.

Evaluation of Management's Response. Management's proposed actions are responsive; therefore, the recommendation is resolved and will be closed upon verification and completion of the proposed corrective actions.

CENTERS DID NOT ADEQUATELY MARKET THEIR PROPERTIES FOR LEASING

The Centers we visited generally relied on informal “word-of-mouth” efforts to attract new leasing clients. However, NASA could take additional steps to market its leasing opportunities more effectively to Federal and non-Federal entities. For example, NASA had not coordinated with the GSA Office of Client Solutions to promote leasing opportunities to Federal entities and the Centers had not consistently published leasing opportunities to the widest-possible market to attract non-Federal tenants. Unless it expands its marketing efforts, NASA may not realize the full benefits of its leasing authority.

Marketing to Federal Entities

We found that the NASA Centers we visited had not effectively marketed leasing opportunities to other Federal entities. In our judgment, giving preference to Federal agencies would promote the Federal Government’s goal of reducing the costs of maintaining facilities and consolidating its overall real property inventory. The President and the Office of Management and Budget (OMB) issued memorandums in 2010 and 2011 directing Federal agencies to realign and consolidate Government-wide real property inventories. However, NASA has not provided guidance to its Centers about giving other Federal agencies preference for leasing opportunities. In addition, none of the five Centers we visited had formal marketing plans to identify or attract Federal tenants. Rather, the Centers primarily relied on informal word-of-mouth efforts to attract new tenants.

Although word-of-mouth can be an effective tool to attract Federal tenants and at least at Stennis has appeared to work successfully (Stennis is known as a “Federal City”), NASA could improve its marketing efforts by coordinating with the GSA Office of Client Solutions to identify potential Federal tenants.³⁰ One of GSA’s missions is to provide facilities and workspace to Federal agencies, which look to GSA when they need to acquire space. By failing to coordinate with the GSA Office of Client Solutions, NASA may be missing opportunities to lease its underutilized property and other Federal agencies may be missing opportunities to use existing space in the larger Federal inventory. GSA staff we spoke with indicated a willingness to work with NASA to increase efficiency in back-filling vacant space, sharing existing space, and maximizing utilization of property between NASA and other agencies. Such coordination would

³⁰ In the mid-1970s, Stennis adopted a multi-agency facility concept to better utilize its Federal land. Stennis now supports Federal tenants including the Navy, the National Oceanic and Atmospheric Administration, and the Environmental Protection Agency.

align with plans for cutting waste by pursuing consolidation opportunities within and across Federal agencies as outlined in OMB's Accountable Government Initiative.³¹

Marketing to Non-Federal Entities

We also found that Centers could improve their marketing efforts to non-Federal entities. According to NASA guidance, Centers should ensure that the intent to lease land or facilities to non-Federal entities is made available to the widest possible competitive market and the guidance suggests publishing leasing opportunities on public websites. However, the Centers we visited generally limited their marketing efforts to informal word-of-mouth outreach. For example, officials at several Centers we spoke with said they notify State development organizations, local media, attendees at tradeshow, and existing tenants about available space. Although this method has been successful in many cases and should be continued, additional opportunities exist to expand Centers' marketing efforts. For example, we found that the Centers did not consistently publish opportunities to nationwide markets or make use of Government-operated websites such as FedBizOpps.³² Specifically, we found 10 instances at 4 Centers we visited where we believe it would have been prudent for Centers to market leasing opportunities on a national level in order to ensure the greatest level of competition.

We determined that inadequate marketing stemmed from Center personnel's lack of knowledge about available options for publishing leasing opportunities or reluctance to widely disseminate information about real property for fear that outside agencies might question why NASA was retaining the property. If potential tenants are not aware of opportunities to lease buildings or land at NASA Centers, the Agency may be missing opportunities to earn revenue that could be used to defray the costs of maintaining its aging infrastructure.

Recommendations, Management's Response, and Evaluation of Management's Response

To improve management of NASA's real property leasing program and maximize its leasing potential, we made the following recommendations to the Associate Administrator for Mission Support:

Recommendation 3. Develop guidance that requires increased consideration of Federal entities for leasing opportunities and coordination with GSA to identify potential Federal tenants.

³¹ Memorandum for the Senior Executive Service from OMB, "The Accountable Government Initiative – an Update on Our Performance Management Agenda," September 14, 2010.

³² FedBizOpps is a database of Federal Government contracting opportunities, including notices of proposed Government procurement actions, contract awards, and sales and leases of Government assets.

Management's Response. The Associate Administrator partially concurred with our recommendation, noting that NASA's current policy addresses this item but agreeing that the policy could be strengthened to ensure that Centers have clearer requirements relating to the Agency's leasing program. The Associate Administrator stated that revisions to the existing policy will be drafted and submitted for official review by the end of calendar year 2012.

Evaluation of Management's Response. We consider the Associate Administrator's proposed corrective actions responsive; therefore, the recommendation is resolved and will be closed upon verification and completion of the proposed corrective actions.

Recommendation 4. Develop guidance and training for personnel addressing the requirements and best practices for marketing leasing opportunities to non-Federal entities.

Management's Response. The Associate Administrator partially concurred with our recommendation, noting that NASA's current policy addresses this item but agreeing that the policy could be strengthened to ensure Centers have clearer statements of requirements relating to best practices for marketing leasing opportunities to non-federal entities. The Associate Administrator stated that changes to the Agency's existing policy would be drafted and submitted for official review by the end of calendar year 2012. In addition, the Associate Administrator stated that further guidance relating to this subject has been provided in the Real Property Desk Guide and that this information was presented at training in June 2012.

Evaluation of Management's Response. We consider the Associate Administrator's proposed corrective actions responsive; therefore, the recommendation is resolved and will be closed upon verification and completion of the proposed corrective actions.

INTERNAL CONTROLS NEED STRENGTHENING TO ENSURE THE BEST VALUE TO THE GOVERNMENT AND FAIRNESS TO PARTNERS FOR REAL PROPERTY AGREEMENTS

We found that NASA personnel at four of the five Centers we visited did not consistently use competition to ensure the best value to the Government for real property agreements with non-Federal entities. In addition, three Centers did not conduct a required market analysis or used the analysis inappropriately when developing pricing, and three Centers entered into lease agreements signed by unauthorized personnel.³³ The overriding factors contributing to these conditions were inadequate internal controls, particularly in training and guidance, and lack of documentation that led to confusion on how and when to use competition, when to use market analysis to develop pricing, and who has the proper signature authority. Without stronger internal controls, it will be difficult for NASA to ensure that the Agency is receiving the best possible benefits from its real property agreements and that the agreements are legally binding.

Internal Controls Need Strengthening to Ensure Competition Is Used Where Appropriate

NASA did not have sufficient internal controls to ensure competition was used where appropriate for its real property agreements with non-Federal entities.³⁴ Although NASA is not required to follow the Federal Acquisition Regulation when leasing real property, according to NASA guidance competition should be used when appropriate to ensure the best value to the Government and fairness to all potential tenants.³⁵

We examined 48 leasing agreements to determine whether they involved circumstances in which competition would have been appropriate. We based our determination on the desirability of the property, the duration of the lease, the amount of property involved, and whether more than one party had expressed interest. Based on these factors, we identified 17 agreements where we believe competition would have been appropriate. We found that the Centers took appropriate steps to ensure competition before entering into 6 of the 17 agreements, but either failed to do so or could not provide adequate evidence that they had done so for the other 11 agreements.

³³ The best value is the most advantageous balance of revenue and compatibility with NASA's mission achieved through competitive methods that provides the greatest overall benefit to the Government.

³⁴ Competition is generally not required when making agreements with other Federal agencies. In fact, the Economy Act of 1932 directs agencies to price services to other agencies based on estimated or actual costs.

³⁵ Competition may not be appropriate when a mutually beneficial relationship exists with an entity that directly relates to the real property or when a cost-based NASA contractor is searching for space.

The following leases at Ames and Glenn are examples of where competition was used appropriately.

- In 2005, Ames issued a Request for Proposal (RFP) to locate a tenant for its animal care facility. Although Ames received only one qualified proposal, the announcement of the opportunity was sent to eight entities and the resulting agreement appeared to provide NASA with the best benefit possible. Ames also maintains a public website where it publishes the availability of property within the Center-controlled NASA Research Park and Moffett Field.³⁶ Within our sample, we identified three other leasing agreements that resulted from use of this website.
- In November 2008, Glenn issued an RFP to lease 13 plots of land at Plum Brook Station for agricultural use.³⁷ Glenn appropriately applied a competitive process to leasing the properties by posting the RFP at local post offices and through outreach to area farm associations. Glenn received 37 proposals for the 13 plots of land. Glenn based the competition solely on price, and the agreements appeared to provide NASA with the best benefit possible.

The following leases are examples where we believe the Centers should have taken additional steps to ensure the competitive process was transparent or where Centers failed to document that the tenant chosen represented the best value to the Government.

- As previously discussed, Ames entered into lease agreements with Planetary Ventures and University Associates in 2008 for 42 and 77 acres of land respectively. According to Ames personnel, they contacted local media, other research partners, and existing tenants to inform them of the availability of this land. These efforts attracted a number of parties interested in leasing the land. However, Ames did not publish the announcement or identify the specific location of the land to a national market. In addition, although Ames personnel told us they chose the current tenants because they met the Center's overall goals for use of the land and provided the best value to NASA, they could not document their analyses or the methodology they used to narrow the competition to the current tenants. Given the relatively narrow search and lack of documented analyses, it is unclear whether these leases provided the best value to NASA.
- In July 2007, Ames entered into a 2-year EUL agreement, later extended to 7 years, that provides H211 the use of over 69,000 square feet of space in a hangar at Moffett Field. Ames used a market estimate to determine the price of the lease agreement. In FY 2011, this agreement generated over \$1.1 million in cash. This type of agreement – leasing space in an underutilized hangar to a

³⁶ <http://researchpark.arc.nasa.gov/> (accessed July 5, 2012).

³⁷ This is the same property discussed on page 8. Note that our sample of 48 real property agreements included only 2 of the 13 agricultural agreements.

private entity to maintain aircraft – is consistent with NASA guidance and applicable laws.

According to Center personnel, H211 knew about the unused hangar space because of dealings the company had with Ames on other matters and unilaterally approached the Center to inquire about leasing the hangar to house the company's passenger aircraft. According to Center officials, NASA and H211 have conducted 155 flights in support of scientific research-related missions using the company's Alpha Jet or other aircraft.

Although there was no specific requirement that Ames publish the availability of the hangar space to other parties before leasing it to H211, an official announcement of the hangar's availability would have ensured a more transparent leasing process as well as fairness to other interested parties.³⁸

Figure 3. H211 Alpha Jet Plane at Ames Research Center's Moffett Field



Source: NASA photograph.

- In October 2011, Kennedy entered into an agreement with Space Florida for a maximum term of 21 years for use of the Orbiter Processing Facility 3 (OPF3), the Processing Control Center, and other peripheral buildings.³⁹ Kennedy managers conducted outreach and published the availability of the properties on the FedBizOpps webpage and received seven responses of interest in one or more of the properties. However, according to a Kennedy official, Kennedy and Space Florida have a long-standing partnership and the Center was in discussions with Space Florida to lease the OPF3 properties prior to the public notification. The

³⁸ In May 2012, Senator Charles Grassley, Ranking Member of the Senate Committee on the Judiciary, sent a letter to the NASA Administrator requesting additional information on the Planetary Ventures and H211 partnerships with NASA, including their activities at Moffett Field.

³⁹ Space Florida is an independent agent of the State of Florida created to foster the growth and development of a sustainable space industry in Florida.

official indicated that Space Florida was always the preferred tenant for these properties and the public notification was only to comply with NASA regulations.

Other Kennedy officials said, that in making their selection, they determined that only Space Florida would be ready to lease the property in June 2011 and that timing was the reason the other parties were not considered. However, according to a Space Shuttle Transition and Retirement Program official we spoke with, NASA was not scheduled to vacate the majority of the facilities covered by the agreement until January 2012 and all the facilities until May 2012. Moreover, the lease with Space Florida was not signed until October 2011 and, as of January 2012, NASA still had personnel in all of the primary facilities and was providing funding for the majority of the maintenance and utilities of these facilities. Therefore, even though Kennedy officials used schedule as their primary selection criteria, other parties may have been ready to lease the property by the time the property was available and were, therefore, excluded prematurely.

- In July 2010, Michoud entered into a real property agreement with Blade Dynamics for over 29,000 square feet of manufacturing and office space where Blade Dynamics plans to manufacture wind turbine blades. According to Michoud personnel, they contacted State development organizations, local media, and trade shows to identify possible tenants for unused space at Michoud. However, Michoud officials did not publicize the availability of this space to a national market.

In these cases, we question the thoroughness and fairness of the solicitation process and ultimately could not determine if NASA was receiving the best value from these agreements. According to Center officials we interviewed, many of these issues resulted from inadequate guidance on when to use competition. Specifically, the current guidance does not explain when it is appropriate to use competition, how the competition should take place, or what information should be retained as part of the Center's official records to document the solicitation and decision process. Without clear guidance, it will be difficult for the Centers to determine how and when competition should be used. Moreover, without documenting the Center's decision process, it is difficult to determine whether the lease agreements resulted from an open process that was fair to all potential tenants and whether NASA is receiving the best value on these long-term agreements.

Inconsistent Adherence to Pricing Policy for Real Property Agreements

Of the 51 agreements we assessed, we found 9 cases from three of the five Centers where the Centers did not price real property agreements in accordance with NASA policy.⁴⁰

⁴⁰ For this section of the report, we added 3 agreements to our sample as a result of Glenn personnel identifying additional agreements that did not conform to pricing guidance but were outside the timeframe of our original sample.

We determined that four of these agreements were priced at rates that were not fully beneficial to NASA.

Pricing guidance is different for Federal and non-Federal tenants. Government policy requires Federal agencies to price goods or services provided to another Federal agency at the estimated or actual costs of those goods or services, a requirement also reflected in NASA guidance.⁴¹ When leasing to non-Federal entities, NASA policy generally requires that the Centers conduct a market analysis to ensure the Agency does not inappropriately compete for potential tenants with owners of private facilities.⁴²

Market Analysis for Non-Federal Tenants. We found five cases – one at Stennis and four at Michoud – where market analyses were not conducted before lease agreements with non-Federal tenants were signed. In one of these cases, we determined that the Agency undercharged the tenants, which gave the tenant an unfair cost advantage over its competitors and resulted in NASA unfairly competing with private industry by charging less than the prevailing market rates. In lieu of a market analysis, both Michoud and Stennis priced the real property agreements based on the Center’s costs.

- Michoud had four active agreements where managers did not conduct market analyses prior to entering into lease agreements with private parties. Michoud completed a market analysis for these properties in 2011 and determined that the rents the Center was charging were consistent with the market rates.
- Stennis appears to be pricing an agreement with Rolls Royce below the market rate for its buildings and charges no rent for the use of NASA land. Specifically, Stennis officials were charging Rolls Royce \$2.14 per square foot annually for office space.⁴³ Stennis had not performed a market analysis to set the rent and the amount charged covered only its estimated costs. A market analysis, as required by NASA policy, would clarify the appropriate rate for future Stennis agreements. Moreover, in addition to the buildings that Rolls-Royce is leasing from Stennis, the company also constructed four additional buildings or structures for their use on Center-owned land. However, Rolls-Royce is not paying any additional rent for this land and we question the basis for and appropriateness of this arrangement.

⁴¹ The Economy Act of 1932 requires Federal agencies to price goods or services provided to another Federal agency at the estimated or actual cost for those goods or services. NPR 9090.1, “Reimbursable Agreements,” provides the same direction to NASA organizations.

⁴² NPR 9080.1G, “Review, Approval, and Imposition of User Charges.” OMB Circular A-25, “User Charges,” July 1993, also requires user charges to be based on market prices when the Government, not acting in its capacity as a sovereign, is leasing or selling goods or resources or is providing a service (e.g., leasing space in federally owned buildings).

⁴³ A market analysis completed by officials at Michoud, approximately 40 miles from Stennis, determined that local office space in the Michoud region rents for between \$8.50 and \$13.50 per square foot. The rates at Michoud would be expected to be higher than at Stennis given Michoud’s proximity to New Orleans, but absent market analysis, it is unclear whether this alone accounts for the substantial difference in the two rates.

Pricing for Federal Tenants. In other cases, the Agency leased real property to Federal tenants at rates that were not consistently beneficial to NASA. Specifically, we found that Glenn managers incorrectly priced four agreements with Federal tenants by inappropriately using a market analysis as a basis to price these property agreements.⁴⁴ As discussed above, NASA is required to use actual or estimated costs as the basis to determine the rent for Federal tenants. However, Glenn charged its Federal tenants almost \$70,000 less than the estimated costs for operations and maintenance of the facilities. Glenn personnel said they plan to adjust the pricing of these leases when the current agreements expire in 2013.

Center personnel at both Glenn and Stennis said it was unclear when they should use market analyses to establish lease costs. As a result of the different understandings of Center personnel and the resulting inconsistent adherence to policy, the Centers leased real property at rates that were not fully beneficial to NASA.

Real Property Agreements Were Improperly Signed

Of the 48 real property agreements we reviewed at the Centers, we found 13 signed by individuals who lacked the authority to bind the Agency.⁴⁵ According to the Code of Federal Regulations (C.F.R.), Center Directors or their designees do not have the authority to sign agreements for terms longer than 5 years.⁴⁶ In addition, the C.F.R. stipulates that all agreements signed by Center Directors are required to contain a specific termination clause. Pursuant to the C.F.R., Center Directors may delegate their signature authority to two subordinates. Of these 13 agreements, 6 were for terms longer than 5 years and 8 did not contain the required termination clause.⁴⁷ In addition, 5 were signed by personnel who had not received delegated authority from the Center Director. For example, the 30-year agreement signed in May 1998 by the Stennis Center Director with Boeing North American Inc. for use of the B-1 Test Stand did not contain the required termination clause. In addition, because the agreement was for more than 5 years, the Center Director was not authorized to sign for the Agency.

In 2010, NASA initiated a new process to route real property agreements through the Technical Capabilities and Real Property Management Division at NASA Headquarters. According to Center officials, the Directors may not have been fully aware of the limitations the C.F.R places on their signature authority.

⁴⁴ In one of the four agreements with Federal partners, Glenn charged more than the Center's estimated costs.

⁴⁵ These 13 agreements included 3 at Kennedy, 5 at Marshall (for Michoud), and 5 at Stennis.

⁴⁶ 14 C.F.R. 1204.503, "Delegation of Authority to Grant Easements," and 14 C.F.R. 1204.504, "Delegation of Authority to Grant Leaseholds, Permits, and Licenses in Real Property."

⁴⁷ The numbers add to more than 13 due to some leases fitting into multiple categories. For example, a lease may have been for longer than 5 years and also failed to contain the required termination clause.

Recommendations, Management's Response, and Evaluation of Management's Response

Recommendation 5. The Associate Administrator for Mission Support should clarify guidance to ensure the widest possible publication of leasing opportunities and competition when appropriate.

Management's Response. The Associate Administrator partially concurred with our recommendation, noting that NASA's current policy addresses this item but agreeing that the policy could be strengthened to articulate that leasing opportunities should be widely publicized. The Associate Administrator stated that changes to the Agency's existing policy will be drafted and submitted for official review by the end of calendar year 2012.

Evaluation of Management's Response. We consider the Associate Administrator's proposed corrective actions responsive; therefore, the recommendation is resolved and will be closed upon verification and completion of the proposed corrective actions.

Recommendation 6. The Associate Administrator for Mission Support should instruct Center management of the limitations of their signature authority regarding real property agreements.

Management's Response. The Associate Administrator partially concurred with our recommendation, noting that NASA's current policy addresses this item but agreeing that the policy could be strengthened to clearly articulate Center management roles and responsibilities for lease agreements. The Associate Administrator stated that changes to the Agency's existing policy will be drafted and submitted for official review by the end of calendar year 2012.

Evaluation of Management's Response. We consider the Associate Administrator's proposed corrective actions responsive; therefore, the recommendation is resolved and will be closed upon verification and completion of the proposed corrective actions.

Recommendation 7. The Associate Administrator for Mission Support should review all real property agreements to ensure they are consistent with applicable statutes and regulations regarding proper signature authority and required contractual terms.

Management's Response. The Associate Administrator concurred with our recommendation, stating that NASA will review and revise its policy to ensure that appropriate guidance is provided to Centers relating to the applicable statutes and regulations regarding signature authority and require the Centers to review all existing agreements for compliance with Agency leasing requirements. Finally, the Technical Capabilities and Real Property Management Division will conduct reviews of existing Center leasing agreements during fiscal year 2013.

Evaluation of Management's Response. We consider the Associate Administrator's proposed corrective actions responsive; therefore, the recommendation is resolved and will be closed upon verification and completion of the proposed corrective actions.

NASA'S REPORTING OF IN-KIND CONSIDERATION IS IMPROVING BUT IN-KIND BENEFITS WERE NOT CONSISTENTLY REALIZED

NASA is improving its reporting of the in-kind consideration received from EULs in its financial records, and Centers have achieved some benefits through EUL agreements. However, of the eight in-kind EUL agreements we reviewed, NASA did not receive any benefit from one agreement and received limited benefits from three others. This occurred because NASA does not have adequate guidance for determining whether in-kind consideration provides the best value to NASA.

NASA's Reporting of In-Kind Consideration Is Improving

According to NASA guidance, in-kind consideration may consist of expenses associated with property repairs, upgrades, or capital improvements that improve or extend the useful life of Agency property or other services rendered by the lessee. In 2007, GAO reported that NASA did not have adequate controls in place to report in-kind consideration received from its EUL agreements.⁴⁸ In response, NASA issued guidance for both the financial and facilities management of real property agreements, which included specific procedures for EULs. Although this guidance was issued in 2008, Kennedy had not recorded the Center's in-kind consideration as directed by the guidance. As a result of this audit, Kennedy's personnel are in the process of identifying the value of the in-kind consideration and plan to record the consideration as directed by NASA guidance.

In-Kind Benefits Were Not Consistently Realized

We found that NASA was not consistent in maximizing the potential of the in-kind benefits it accepted as part of EULs. Of the eight agreements we reviewed, we found two in which NASA received mission-related benefits; five in which NASA received improvements to the property but no direct mission-related benefits; and one in which NASA received no benefit.

In-Kind Benefits Fully Realized. In two agreements, NASA received mission-related benefits in the form of in-kind consideration. In an agreement with Florida Power and Light Company, Kennedy provides undeveloped land and Florida Power and Light provides the Center with a one-megawatt solar power facility that meets about 1 percent of the Center's electric power demand. This agreement benefits Kennedy by providing

⁴⁸ GAO Report, "NASA Enhanced Use Lease Program Needs Additional Controls" (GAO-07-306R, March 1, 2007).

about half of the energy needed to meet the Center's goal for the use of renewable energy. In a separate agreement with Lifesource Biomedical, Ames provides an animal care facility and, in lieu of some cash payments, Lifesource Biomedical provides care for animals involved in NASA research programs.

In-Kind Benefits Not Clearly Mission Related. We also identified five agreements in which NASA received improvements to the property but no direct mission-related benefits. In three cases, the Centers entered into agreements pursuant to which the tenants would develop land for business or educational use. The in-kind consideration was in the form of infrastructure improvements, such as installing roads and utilities.⁴⁹ Although NASA may accept such infrastructure improvements pursuant to its EUL authority, in our judgment they provide little benefit to the Agency when the terms of the lease agreements at issue are as long as 90 years. With agreements of such length, most of the improvements appear to benefit the current tenants rather than NASA. Accordingly, we question the value of such arrangements to the Agency.

In the other two agreements, both located at Ames, Bloom Energy renovated the building it occupies and H211 removed a skywalk in the hangar it leases at Moffett Field. NASA accepted the cost of these renovations as in-kind payment.⁵⁰ Although these in-kind benefits were not clearly mission related, these are short-term agreements and the improvements could benefit NASA if the properties revert to the Agency.

In-Kind Benefits Not Realized. For one real property agreement with General Dynamics at Ames, NASA did not receive any benefit. In February 2008, Ames entered into an agreement under which General Dynamics would place two satellite antennas on Ames property (see Figure 4). As in-kind consideration, Ames accepted the part-time use of the satellite antennas, which Ames personnel planned to use in connection with several planned small satellite missions. However, Headquarters did not grant approval to use the antennas and therefore Ames has not realized any benefit from this agreement. Ames officials said they do not expect to renew the agreement when it expires in December 2012.

⁴⁹ In one agreement with Planetary Ventures, the tenant agreed to relocate a cooling tower and construct a recreational field, improvements that once completed would provide an immediate benefit to the Agency.

⁵⁰ Bloom Energy is a private company that develops and produces power generation systems that utilize a new fuel cell technology.

Figure 4. Antennas at Ames Research Center



Source: OIG photograph.

In-kind benefits were not consistently realized because NASA did not have adequate guidance as to what services or goods should be accepted as in-kind consideration. Without adequate guidance on determining whether proposed in-kind consideration is the best value to the Government, NASA may not fully realize the benefits of its authority to accept in-kind consideration associated with renewable energy production.

Recommendation, Management's Response, and Evaluation of Management's Response

Recommendation 8. We recommended that the Associate Administrator for Mission Support develop guidance for determining whether in-kind consideration provides the best value to the Government.

Management's Response. The Associate Administrator partially concurred with our recommendation, noting that NASA's current policy addresses this item but agreeing that the policy could be strengthened to ensure the Centers have clearer requirements related to the Agency's leasing program. The Associate Administrator further noted that although at the start of the audit NASA did not have the authority to accept in-kind considerations, under the 2012 Consolidated and Further Continuing Appropriations Act the Agency may accept in-kind consideration for leases entered into for the purpose of developing renewable energy production facilities. The Associate Administrator stated that changes to Agency policy will be drafted and submitted for official review by the end of calendar year 2012.

Evaluation of Management's Response. We consider the Associate Administrator's proposed corrective actions responsive; therefore, the recommendation is resolved and will be closed upon verification and completion of the proposed corrective actions.

Scope and Methodology

We performed this audit from July 2011 through July 2012 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.

We reviewed real property agreement requirements contained in the following NASA policy, as well as Center-specific policy that corresponded with the NASA guidance:

- NASA Policy Directive (NPD) 1050.1I, “Authority to Enter Into Space Act Agreements,” December 23, 2008, and NASA Advisory Implementing Instruction (NAII) 1050-1B, “Space Act Agreements Guide,” June 10, 2011.
- NPD 8800.14D, “Policy for Real Estate Management (Revalidated, October 14, 2009),” July 15, 2004.
- NPR 8800.15B, “Real Estate Management Program,” June 21, 2010, and the previous version, NPR 8800.15A, “Real Estate Management Program Implementation Manual,” June 1998.
- NPR 9090.1, “Reimbursable Agreements,” September 30, 2008.
- NPD 9080.1G, “Review, Approval, and Imposition of User Charges (Revalidated w/admin changes 8/28/09),” October 14, 2004.
- “NASA Desk Guide for Enhanced Use Leasing of Real Property,” Revised February 2010, with earlier versions dated July 11, 2007, and December 29, 2008.

We reviewed real property agreement requirements contained in several Federal laws and policy documents as they related to NASA, as described in Appendix B.

To determine whether NASA effectively identified space available for lease to other entities, we interviewed real property and facility managers at NASA Headquarters and the following NASA Centers and component facilities: Ames Research Center, Glenn Research Center and its Plum Brook Station, Kennedy Space Center, Michoud Assembly Facility (a component of Marshall Space Flight Center), and Stennis Space Center. We also toured each of the NASA Centers identified above. Additionally, we coordinated

with officials at GSA to determine GSA practices for leasing real property to other Federal agencies.

To determine whether NASA appropriately used competition to ensure best value to the Government and fairness to potential tenants and whether NASA effectively marketed its available space to potential Federal and non-Federal tenants, we conducted in-depth reviews with real property managers, legal counsel, and other relevant Center officials at each of the Centers we visited. We performed a preliminary review of 430 agreements the Centers provided covering FY 2010 through FY 2011 (October 1, 2009, through September 30, 2011). We added one additional agreement that was created 6 days after the sample range (October 6, 2011) because of its high visibility prior to our visit to that Center (Kennedy). Our review analyzed all the leases for compliance with requirements in seven categories: (1) Benefit to NASA/Link to Mission, (2) Business Case, (3) Documented Future Use or Waiver, (4) Notice of Availability or Waiver, (5) Use of Market Prices for Private Entities, (6) Priority of Use (Termination) Clause or Waiver, and (7) Signed by Authorized NASA Official.

Of the 431 agreements in our preliminary review, 193 were easements, which we determined presented less risk to the Agency than the other agreement types, so we focused on agreements such as reimbursable Space Act Agreements, leases, and EULs.

We judgmentally chose the five Centers or subordinate facilities based on the number of real property agreements at these Centers, selecting a composite of some Centers with many agreements and others with less real property agreement experience. From these Centers, we chose 48 agreements for further review based on compliance issues with the regulatory requirements above and considering risk in leasing to private versus public entities, scope of the agreement, range of old and new leases, and outliers with issues in reporting documentation. The real property agreements selected for further review represented an average of 17 percent of the real property agreements at the selected Centers. During our site visits, we reviewed compliance with the seven regulatory requirements identified above and determined the circumstances related to compliance issues. We also reviewed the Centers' revenues and costs associated with the selected agreements. For the pricing section of the report, we added three agreements to our sample as a result of Glenn personnel taking proactive action to identify agreements that did not conform to pricing guidance.

To determine whether NASA had effective internal controls to account for in-kind consideration for EULs, we reviewed NASA policies identified in Appendix B as they referred to procedures for managing in-kind consideration. We also conducted interviews with real property managers and personnel in the Office of the Chief Financial Officer at the two Centers that have used EULs since the pilot authority was first granted in 2003: Ames Research Center and Kennedy Space Center. At the site visits for these Centers, we also reviewed EUL agreements selected from our sample with the real property and financial managers and legal counsel.

Use of Computer-Processed Data. We used the SAP Business Warehouse (BW) for its Real Property Management System (RPMS) and financial data, and the Space Act Agreement Maker (SAAM) system for data that was significant to the assignment objectives. We did not assess the reliability of financial data in SAP BW, but we did not rely on the data solely to make our conclusions; we also obtained supporting documentary and testimonial evidence from the Centers as appropriate.

We determined that the RPMS was not sufficiently reliable because an OIG report completed in August 2011 had already identified weaknesses in NASA's methods used to capture information on its real property assets, which resulted in significant data reliability issues in key fields in the RPMS, specifically in the three key elements of utilization, mission dependency, and condition.⁵¹ These elements are primary factors driving NASA's decisions on whether to maintain, repair, consolidate, lease, sell, or demolish existing assets. Therefore, we sought and obtained sufficient supporting documentary evidence from the actual agreements at each of the Centers. We did not assess the reliability of the SAAM system because we did not depend on its data to reach our conclusions, but we also obtained supporting documentary and testimonial evidence from the Centers.

Review of Internal Controls

We performed a preliminary assessment of the internal controls associated with our audit, including identifying controls that should be in place according to regulation. Throughout the audit we reviewed controls associated with the audit objectives and identified that NASA did not have sufficient controls to ensure that property identified for potential leasing is not excess to NASA's needs. Further, we found various internal control weaknesses, particularly in training and guidance, and lack of documentation that limit NASA's ability to ensure that leases provide the best value to the Agency and fairness to its real property agreement partners. Headquarters and Center officials have indicated they are taking actions to address these weaknesses.

⁵¹ NASA OIG Report, "NASA Infrastructure and Facilities: Assessment of Data Used to Manage Real Property Assets" (IG-11-024, August 4, 2011).

Prior Coverage

During the last 5 years, the NASA OIG and GAO have issued 11 reports and testimonies of particular relevance to the subject of this report. Unrestricted reports can be accessed over the Internet at <http://oig.nasa.gov/audits/reports/FY12> (NASA OIG) and <http://www.gao.gov> (GAO).

NASA Office of Inspector General

“NASA Infrastructure and Facilities: Assessment of Data Used to Manage Real Property Assets” (IG-11-024, August 4, 2011)

“NASA’s Hangar One Re-Siding Project” (IG-11-020, June 22, 2011)

“Final Memorandum on NASA’s Accounting for Real Property Leased to Other Entities” (IG-08-004, December 11, 2007)

Government Accountability Office

“Defense Infrastructure: The Enhanced Use Lease Program Requires Management Attention” (GAO-11-574, June 30, 2011)

“Reimbursable Space Act Agreements: NASA Generally Adhering to Fair Reimbursement Controls, but Guidance on Waived Cost Justifications Needs Refinement” (GAO-11-553R, May 26, 2011)

“Federal Real Property: Progress Made on Planning and Data, but Unneeded Owned and Leased Facilities Remain” (GAO-11-520T, April 6, 2011)

“GAO’s 2011 High-Risk Series: An Update” (GAO-11-394T, February 17, 2011)

“Federal Real Property: The Government Faces Challenges to Disposing of Unneeded Buildings” (GAO-11-370T, February 10, 2011)

“Federal Real Property: Authorities and Actions Regarding Enhanced Use Leases and Sale of Unneeded Real Property” (GAO-09-283R, February 17, 2009)

“NASA: Issues Surrounding the Transition from the Space Shuttle to the Next Generation of Human Space Flight Systems” (GAO-07-595T, March 28, 2007)

“NASA: Enhanced Used Leasing Program Needs Additional Controls” (GAO-07-306R, March 1, 2007)

HISTORY OF FEDERAL AND NASA REQUIREMENTS

The following table summarizes significant Federal and NASA requirements applicable to real property agreements.

Title	Date	Significance
31 U.S.C. 1535, "The Economy Act of 1932"	June 30, 1932	Provides guidance for establishing prices for Federal agencies to provide services or goods to another Federal agency. Pricing should be based on estimated or actual cost.
40 U.S.C. 524, "Duties of Executive Agencies,"	June 30, 1949	Requires agencies to identify and promptly report excess property to the Administrator of General Services.
40 U.S.C. 586, "Charges for space and services"	June 30, 1949	Provides that all revenues should be returned to Treasury under Miscellaneous Receipts.
31 U.S.C. 9701, "Fees and Charges for Government Services"	Aug. 31, 1951	Provides guidance for establishing prices for services to non-Federal entities.
National Aeronautics and Space Act	July 29, 1958	Authorizes NASA "to enter into and perform such contracts, leases, cooperative agreements, or other transactions as may be necessary in the conduct of its work and on such terms as it may deem appropriate, with any agency or instrumentality of the United States, or with any state, territory, or possession, or with any political subdivision thereof, or with any person, firm, association, corporation, or educational institution."
14 C.F.R. 1204.504, "Delegation of authority to grant leaseholds, permits, and licenses in real property."	Aug. 1, 1986	Delegates authority in the Space Act for leasing real property to the Assistant Administrator for Strategic Infrastructure and Director, Technical Capabilities and Real Property Management Division. Also grants NASA Center Directors the limited authority to lease NASA property.
OMB Circular A-25, "User Charges"	July 8, 1993	Provides 31 U.S.C. 9701 implementation guidance to agencies that convey special benefits to recipients beyond those accruing to the general public.
NPD 9080.1G, "Review, Approval, and Imposition of User Charges"	Oct. 14, 2004	Current NASA guidance for pricing special benefits as directed by OMB Circular A-25.
Public Law 108-7, "Consolidated Appropriations Resolution, 2003"	Feb. 20, 2003	First authority for two NASA Centers (Ames and Kennedy were chosen) to enter into Enhanced Use Leases. Also grants in-kind consideration as possible payment.

Title	Date	Significance
Executive Order 13327, "Federal Real Property Asset Management"	Feb. 4, 2004	Establishes the Federal Real Property Council.
Federal Real Property Council, "Guidance for Improved Asset Management"	Dec. 22, 2004	Guidance issued that directs agencies to dispose of real property that is not needed.
Public Law 110-161, "Consolidated Appropriations Act, 2008"	Enacted: Dec. 26, 2007 Effective: Dec. 31, 2008	Expands the Enhanced Use Lease authority to all NASA Centers. Removes the authority to take in-kind consideration as possible payment and stipulates that the real property to be leased cannot be excess.
NPR 9090.1, "Reimbursable Agreements"	September 30, 2008	Current NASA guidance for the financial management of reimbursable agreements.
NAII 1050-1, "Space Act Agreements Guide"	Aug. 15, 2006	First Desk Guide on NASA agreement practice and provide assistance to those involved in formation and execution of Space Act Agreements.
NPD 1050.1I, "Authority to Enter into Space Act Agreements"	Dec. 23, 2008	Current NASA guidance for development and management of Space Act Agreements.
"NASA Desk Guide for Enhanced Use Leasing of Real Property" (and the earlier versions dated July 2007 and December 2008)	February 2010	Revised the 2008 Desk Guide.
Presidential Memorandum "Disposing of Unneeded Federal Real Estate – Increasing Sales Proceeds, Cutting Operating Costs, and Improving Energy Efficiency"	June 10, 2010	Directed agencies to scrutinize and eliminate excess real property.
NPR 8800.15B, "Real Estate Management Program"	June 21, 2010	Revision of the first overall NASA guidance issued for developing and managing real property agreements, NPR 8800.15A, "Real Estate Management Program Implementation Manual," June 1998.
Public Law 111-267, "National Aeronautics and Space Administration Authorization Act of 2010"	Oct. 11, 2010	Authorizes NASA programs and directs NASA to re-scope and, as appropriate, downsize its institutional capabilities, including its infrastructure, to fit current and future missions and expected funding levels.
NAII 1050-1B, "Space Act Agreements Guide"	June 10, 2011	Revised NASA's 2008 Space Act Agreements Guide.

Title	Date	Significance
Presidential Memorandum, "Accelerating Technology Transfer and Commercialization of Federal Research in Support of High-Growth Businesses"	Oct. 28, 2011	Guidance for agencies to encourage external partners through real property agreements to locate applied research and support activities near Federal laboratories and other Federal research facilities.
Public Law 112-55, "Consolidated and Further Continuing Appropriations Act, 2012"	Nov. 18, 2011	NASA may accept in-kind consideration for leases entered into for the purpose of developing renewable energy production facilities.

Source: OIG compilation.

MANAGEMENT COMMENTS

National Aeronautics and Space Administration
 Headquarters
 Washington, DC 20546-0001



AUG _ 3 2012

Reply to Attn of:

Mission Support Directorate

TO: Assistant Inspector General for Audits
 FROM: Associate Administrator for Mission Support Directorate
 SUBJECT: Response to OIG Draft Report, "NASA's Infrastructure and Facilities:
 An Assessment of the Agency's Real Property Leasing Practices"
 (Assignment No. A-11-018-00)

The Mission Support Directorate (MSD) appreciates the opportunity to review and provide comments on the Office of Inspector General (OIG) draft report entitled "NASA's Infrastructure and Facilities: An Assessment of the Agency's Real Property Leasing Practices" (Assignment No. A-11-018-00) dated July 9, 2012. NASA's responses to the OIG's recommendations, including projected completion dates, are as follows:

Recommendation 1: Clarify the criteria Centers should use to determine whether underutilized property has a current or future mission-related use and provide training to Center personnel on the revised criteria.

Management's Response: Concur. NASA's current policy addresses this item; however, management agrees that the policy can be strengthened to ensure Centers have clearer statements of requirements relating to NASA's leasing program. Management shall submit revisions to current policy, NPD 8800.14B, Policy for Real Property Management, and NPR 8800.15B, Real Estate Management Program, to NODIS by the end of the calendar year 2012 to articulate that the Centers shall submit with leasing requests evidence that underutilized property has a current or future mission requirement.

Recommendation 2: Coordinate with the Centers to develop a process to maintain a complete inventory of real property available for leasing.

Management's Response: Concur. Management shall include in revised NPR 8800.15B the requirement for Centers to identify and maintain a complete inventory of real property leasing opportunities. Management shall establish within its current Real Property Management System the capability for Centers to identify and maintain inventory of real property leasing opportunities. Management shall submit revisions to NPR 8800.15B to NODIS by the end of the calendar year 2012. In the interim, management shall submit a Service Request to request changes to the Real Property Management System to include provisions for Centers to input and maintain leasing opportunities within the database by August 15, 2012. Management will request Centers submit a complete inventory of real property leasing opportunities by the end

of the calendar year 2012.

Recommendation 3: Develop guidance that requires increased consideration of Federal entities for leasing opportunities and coordination with GSA to identify potential Federal tenants.

Management's Response: Partially concur. NASA's current policy addresses this item; however, management agrees that the policy can be strengthened to ensure Centers have clearer statements of requirements relating to NASA's leasing program. Management shall submit revisions to current policy, NPD 8800.14B and NPR 8800.15B, to NODIS by the end of the calendar year 2012 to articulate that Federal entities shall be given first preferences for out-grant opportunities at Centers.

Recommendation 4: Develop guidance and training for personnel addressing the requirements and best practices for marketing leasing opportunities to non-Federal entities.

Management's Response: Partially concur. NASA's current policy addresses this item; however, management agrees that the policy can be strengthened to ensure Centers have clearer statements of requirements relating to best practices for marketing leasing opportunities to non-Federal entities. Training for personnel addressing these issues was provided in June 2012. Further guidance was provided in the Real Property Desk Guide presented at the June 2012 training. Management shall submit revisions to current policy, NPD 8800.14B and NPR 8800.15B, to NODIS by the end of the calendar year 2012 to articulate requirements for marketing leasing opportunities to non-Federal entities.

Recommendation 5: Clarify guidance to ensure the widest possible publication of leasing opportunities and competition when appropriate.

Management's Response: Partially concur. NASA's current policy addresses this item; however, management agrees that the policy can be strengthened to ensure Centers have clearer statements of requirements relating to NASA's leasing program. Management shall submit revisions to current policy, NPD 8800.14B and NPR 8800.15B, to NODIS by the end of the calendar year 2012 to articulate that leasing opportunities shall be widely publicized.

Recommendation 6: Inform Center management of the limitations of their signature authority regarding real property agreements.

Management's Response: Partially concur. NASA's current policy addresses this item; however, management agrees that the policy can be strengthened to ensure Centers have clearer statements of requirements relating to NASA's leasing program. Management shall submit revisions to current policy, NPD 8800.14B and NPR 8800.15B, to NODIS by the end of the calendar year 2012 to clearly articulate Center management roles and responsibilities for lease agreements.

Recommendation 7: Review all real property agreements to ensure they are consistent with applicable statutes and regulations regarding proper signature authority and required contractual terms.

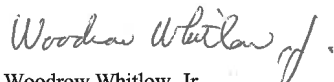
3

Management's Response: Concur. Management shall review and revise NPR 8800.14B to ensure that appropriate guidance is provided to Centers management relating to the applicable statutes and regulations regarding signature authority. Management shall submit revisions to NPR 8800.15B to NODIS by the end of the calendar year 2012. Management shall require Centers to review all existing agreements for compliance with Agency leasing requirements. Management shall conduct reviews of Center leasing agreements to validate compliance with Agency leasing requirements. The Technical Capabilities and Real Property Management Division will conduct reviews of existing Center agreements. Reviews shall be completed within FY 2013.

Recommendation 8: We recommend that the Associate Administrator for Mission Support develop guidance for determining whether in-kind consideration provides the best value to the Government.

Management's Response: Partially concur. Although at the start of the audit the authority for in-kind considerations was not available, effective under the 2012 Consolidated and Further Continuing Appropriations Act, the Administrator may accept in-kind consideration for leases entered into for the purpose of developing renewable energy production facilities. NASA's current policies address this subject; however, management agrees that the policy can be strengthened to ensure Centers have clearer statements of requirements relating to NASA's leasing program and revisions that need to be made to reflect the recent change in legislation. Management shall submit revisions to current policy and procedures, NPD 8800.14B and NPR 8800.15B, to NODIS by the end of the calendar year 2012 to articulate in-kind considerations, as applicable under the law, and in support of the best value to the Government. (The recently developed NASA Business Case Guide for Real Property and Facilities Project Investment provides guidelines for determining best value and will be referenced as a guide within the revised policies).

Again, thank you for the opportunity to review and comment on the subject draft report. Should you have further questions or require additional information on the NASA response to the draft report, please contact Natasha McNeill via 202-358-2638.



Woodrow Whitlow, Jr.

cc:

Olga M. Dominguez, Assistant Administrator for Strategic Infrastructure
Simon P. Worden, Director, Ames Research Center
David D. McBride, Director, Dryden Flight Research Center
Ramon Lugo III, Director, Glenn Research Center
Christopher J. Scolese, Director, Goddard Space Flight Center
Michael L. Coats, Director, Johnson Space Center
Robert Cabana, Director, Kennedy Space Center
Lesa B. Roe, Director, Langley Research Center
Arthur E. Goldman, Acting Director, Marshall Space Flight Center
Patrick Scheuermann, Director, Stennis Space Center

REPORT DISTRIBUTION

National Aeronautics and Space Administration

Administrator
Deputy Administrator
Chief of Staff
NASA Advisory Council's Audit, Finance, and Analysis Committee
Associate Administrator for Mission Support
Assistant Administrator for the Office of Strategic Infrastructure
Director, Ames Research Center
Director, Dryden Flight Research Center
Director, Glenn Research Center
Director, Plum Brook Station
Director, Goddard Space Flight Center
Director, Jet Propulsion Laboratory
Director, Johnson Space Center
Director, Kennedy Space Center
Director, Langley Research Center
Acting Director, Marshall Space Flight Center
Director, Michoud Assembly Facility
Director, Stennis Space Center

Non-NASA Organizations and Individuals

Office of Management and Budget
Deputy Associate Director, Energy and Science Division
Branch Chief, Science and Space Programs Branch
Government Accountability Office
Director, Office of Acquisition and Sourcing Management

Congressional Committees and Subcommittees, Chairman and Ranking Member

Senate Committee on Appropriations
Subcommittee on Commerce, Justice, Science, and Related Agencies
Senate Committee on Commerce, Science, and Transportation
Subcommittee on Science and Space
Senate Committee on Homeland Security and Governmental Affairs

Congressional Committees and Subcommittees, Chairman and Ranking Member (continued)

House Committee on Appropriations

 Subcommittee on Commerce, Justice, Science, and Related Agencies

House Committee on Oversight and Government Reform

 Subcommittee on Government Organization, Efficiency, and Financial Management

House Committee on Science, Space, and Technology

 Subcommittee on Investigations and Oversight

 Subcommittee on Space and Aeronautics

Major Contributors to the Report:

Ridge Bowman, Director, Space Operations Directorate

Karen VanSant, Project Manager

Janice Smith, Auditor

Troy Zigler, Auditor

Earl Baker, Attorney-Advisor



OFFICE OF AUDITS

OFFICE OF INSPECTOR GENERAL

ADDITIONAL COPIES

Visit <http://oig.nasa.gov/audits/reports/FY12/> to obtain additional copies of this report, or contact the Assistant Inspector General for Audits at 202-358-1232.

COMMENTS ON THIS REPORT

In order to help us improve the quality of our products, if you wish to comment on the quality or usefulness of this report, please send your comments to Mr. Laurence Hawkins, Audit Operations and Quality Assurance Director, at Laurence.B.Hawkins@nasa.gov or call 202-358-1543.

SUGGESTIONS FOR FUTURE AUDITS

To suggest ideas for or to request future audits, contact the Assistant Inspector General for Audits. Ideas and requests can also be mailed to:

Assistant Inspector General for Audits
NASA Headquarters
Washington, DC 20546-0001

NASA HOTLINE

To report fraud, waste, abuse, or mismanagement, contact the NASA OIG Hotline at 800-424-9183 or 800-535-8134 (TDD). You may also write to the NASA Inspector General, P.O. Box 23089, L'Enfant Plaza Station, Washington, DC 20026, or use <http://oig.nasa.gov/hotline.html#form>. The identity of each writer and caller can be kept confidential, upon request, to the extent permitted by law.