IG-98-022

AUDIT REPORT

RISKS ASSOCIATED WITH ARC'S ACQUISITION OF MILITARY FAMILY HOUSING

AUGUST 13, 1998



National Aeronautics and Space Administration **OFFICE OF INSPECTOR GENERAL**

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ACRONYMS

ARC	Ames Research Center
BAQ/VHA	Basic Allowance for Quarters/Variable Housing Allowance
CFO	Chief Financial Officer
DoD	Department of Defense
MFA	Moffett Federal Airfield
NASA	National Aeronautics and Space Administration
OIG	Office of Inspector General

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RISKS ASSOCIATED WITH ARC'S ACQUISITION OF MILITARY FAMILY HOUSING

EXECUTIVE SUMMARY

Background	Due to base realignment and closure decisions, Onizuka Air Station, California, is excessing 693 housing units near Ames Research Center (ARC). Some of this housing is immediately adjacent to ARC, and some is off-site about a half mile from ARC (see map in Appendix B). ARC plans to acquire the housing units for two reasons. First, ARC needs to maintain the adjacent housing as a noise buffer between the Center's wind tunnels and the surrounding community. Second, ARC management believes that the low-cost housing would both retain and attract military tenant organizations to defray the cost of maintaining and operating Moffett Federal Airfield (MFA). The ARC plan asserts that the housing operation adds no additional cost to ARC operations and was approved by NASA Headquarters.
OBJECTIVES	The overall objective of the audit was to evaluate the operational and financial benefits of acquiring the Onizuka Air Station housing units. Specifically, we determined:
	 whether acquiring the housing units will operationally benefit NASA or ARC, the estimated financial benefit to NASA of acquiring the housing units, and the legal and environmental issues that may affect the value of acquiring the housing units.
	Additional details on the objectives, scope, and methodology are in Appendix A.
R ESULTS OF AUDIT	ARC management believes that the housing units can be acquired at no cost and little risk to NASA. However, a cost-benefit study performed for the Navy that supports ARC's assertion that housing revenue will at least equal the operating costs does not fully identify and consider all costs associated with the housing. In addition, ARC has not resolved all legal and environmental issues associated with the housing. As a result, the planned housing

acquisition and operation could incur additional operational costs for ARC and increase liability for NASA.

Leasing the housing operation to a military resident agency is a key element of ARC's plan. The resident agency will accept responsibility for activities in the housing areas and contract with a commercial property management firm to operate the housing. As of April 1998, ARC had not yet identified a military resident agency for the housing operation.

- **RECOMMENDATIONS** This report contains recommendations to help ARC:
 - ensure that the proposed military family housing operation incurs no cost for NASA and involves no use of Agency personnel and
 - minimize NASA's exposure to potential tort and environmental liability from continuing the military family housing operation.

MANAGEMENT'SManagement concurred with all recommendations and will take
actions to prevent the use of NASA resources to operate the
military family housing and to minimize the Agency's exposure to
tort and environmental liability. We consider planned actions
responsive to the intent of the recommendations.

INTRODUCTION

BACKGROUND On June 30, 1997, NASA's Director, Facilities Engineering Division, formally requested the transfer of the 693 housing units identified as excess by the Air Force. The transfer is planned for September 2000. NASA also requested the transfer of the 111 units that the Air Force anticipates will be excess in the future; however, the Air Force declined that request. The Air Force has orally agreed to commit an additional 111 housing units to central management if the Agency is successful in identifying a resident agent to operate the housing for the benefit of all military organizations at Moffett Federal Airfield (MFA).

The annual cost of operating MFA is about \$12 million, and the current airfield tenants contribute about \$6 million toward that cost. NASA must pay the remaining \$6 million even though an MFA Office official estimated the value of ARC's use to be only about \$2.5 million. ARC estimated that the income from the tenants' basic housing allowance will cover all housing expenses and allow for a modest housing replacement program.

FINDINGS AND RECOMMENDATIONS

ALL POTENTIAL COSTS NEED TO BE CONSIDERED

ARC's approved plan to acquire and operate military housing at MFA does not consider all potential unfunded liabilities. ARC's plan is based on the housing operation incurring no additional cost to the Agency and an October 1997 cost-benefit study prepared for the Navy which indicates that housing revenues will at least equal operation costs. However, the study does not address all potential costs and liabilities to NASA, identify the alternative cost to "mothball" or demolish the housing, or address the potential impact of continuing military downsizing. In addition, ARC has not identified a military resident agency to operate the housing. As a result, ARC's planned acquisition and operation of military housing at MFA may incur additional costs.

Additional Costs to All the housing being acquired is outside ARC's perimeter fence; 567 units are immediately adjacent to the Center and 126 Consider units are located off-site about a half mile from the Center (see Appendix B). While the housing operation itself will not financially benefit ARC, lease payments (\$6 million) by military organizations, whose personnel use the housing, help defray the cost of operating MFA (\$12 million). The Navy study showed that housing revenue would exceed expenses by about \$1.3 million to \$5 million annually (see Appendix C). However, we believe that some of the assumptions and cost data in the report were too optimistic. For example, we believe the assumed 95-percent occupancy rate was too high, and we questioned the accuracy of the estimated utility and maintenance costs. In addition, the study was prepared for the Navy and did not cover some expenses and potential liabilities that could affect NASA. Therefore, we requested that the NASA Chief Financial Officer (CFO) review the study results.

Cost Liabilities Identified
by the NASA ChiefThe CFO determined that the methodology used in the Navy cost-
benefit study and the estimated costs were reasonable, although
optimistic. However, the CFO identified some of the same
concerns we had (see Appendix D) and noted several potential
unfunded liabilities and other areas of concern including the
following:

- No estimate for property insurance that could cost about \$500,000 per year in this earthquake prone area.
- Exclusion of handling and disposal costs for hazardous materials (lead paint, asbestos, etc.) during the planned renovation and replacement of housing.
- No discussion of the Department of Defense (DoD) agreements and funding provided to local civilian police agencies and schools to compensate for people living in military housing but using local services. The study also did not indicate whether DoD would continue this practice for the transferred housing units or whether NASA would incur this expense.
- Lack of a clear determination that Basic Allowance for Quarters/Variable Housing Allowance (BAQ/VHA) funds could legally be used for demolishing and replacing housing units over time, which is a part of the ARC overall housing management plan.
- No discussion of the effects of potential military downsizing. DoD is closing military bases and/or consolidating units on existing bases. While there is currently a waiting list for the housing on MFA, if DoD decreases its presence there, most of the housing management expenses would continue, while the "revenue" (BAQ/VHA) from the military occupants could decrease significantly.

Potential Liabilities Related to Infrastructure and Procurement	Our discussions with an ARC official also showed that infrastructure maintenance costs for the housing areas were not fully accounted for in the Navy study. An official in ARC's MFA Office estimated the costs to be about \$1 million per year. NASA will also absorb additional costs for the use of procurement resources if ARC assists the military resident agency in preparing a request for proposal and in negotiating a property management contract as planned. Details are provided below in the section entitled "Military Resident Agency Not Identified."
Potential Liability to Excess Housing	ARC correspondence concerning the plan states that if DoD drastically cuts operations at MFA in the future, the Center would excess the off-site housing area through the General Services Administration and retain the adjacent housing areas for a continued noise barrier. If the housing units in the adjacent areas are retained but not used, NASA would need to either "mothball" or demolish the vacant buildings. According to ARC officials, the

Center has not estimated the costs of those actions.

Downsizing at Onizuka Air Station prompted NASA's decision to Effect of Future Military acquire and operate the family housing units at MFA. Further Downsizing military cuts could occur and affect the housing operation if Congress approves DoD's proposed base closings in 2001 and 2005 or if the Services continue to reorganize. While we cannot predict the long-term effects of future downsizing, some organizations at MFA are already being affected. Most notably, three Naval Reserve organizations at MFA will be decommissioned or relocated to another airfield by the time ARC takes possession of the military housing. Personnel from those Naval Reserve organizations now use about 240 of the housing units, and the organizations contribute more than \$2 million toward MFA operating costs. The Naval Reserve would have been the largest housing user when NASA took ownership. ARC had planned to use the Naval Reserve as the resident agency to be responsible for and operate the housing, but because of the Naval Reserve reorganization, ARC is still searching for a military resident agent.

When ARC formulated its proposal to operate the housing, 165 military personnel were on a waiting list for housing. ARC believed there would be a strong demand for the housing. However, when NASA takes ownership of the property, Onizuka Air Station personnel will need 210 fewer units and Naval Reserve personnel will no longer need the majority of the 240 units currently occupied. Nevertheless, ARC officials believe that demand from other military organizations in the area will be sufficient to keep the housing fully occupied.

Based on an informal survey by the Naval Reserve, more than 1,000 military active duty personnel will be in the San Francisco Bay area when NASA takes ownership of the housing. While military personnel are not required to live on base, an Air Force official estimated that about 65 percent of active duty members uses military housing when it is available. Accordingly, even without the Naval Reserve, there may still be adequate demand for the military housing.

Military Resident AgencyDespite the demand for housing, ARC is having difficultyNot Identifiedidentifying a military resident agency willing to lease and overseethe housing operation.According to the Naval Reserve housing

survey, the active duty personnel are spread among 50 military organizations. Only 13 will be located at MFA, and no single organization will need a significant portion of the housing. With the exception of Onizuka Air Station, which is prohibited by base realignment and closure decisions from operating the housing, the Air National Guard with 93 active duty members and a potential need for 60 housing units is the largest potential user.

Additionally, as of April 1998, ARC had not yet identified a military resident agency to lease and operate the housing. Without a military resident agency to oversee the housing, ARC's entire proposal is at risk. NASA must identify a cognizant resident agency to:

- negotiate with the Air Force to commit its 111 units of officer housing (needed for a proper mix of housing types) to management by the resident agency,
- negotiate a memorandum of understanding to lease property to a military Service, and
- begin the contracting process to obtain a commercial property management firm to operate the housing.

Without a cognizant resident agency, ARC will have to either abandon its plan to provide military housing or devote resources to awarding and overseeing a contract for the operation and maintenance of the housing units.

RECOMMENDATION 1 The ARC Center Director should, prior to acquiring the property at MFA, revalidate the cost-benefit analysis performed for the Navy and include the costs unique to NASA. The additional costs considered should include but not be limited to the need for and cost of property insurance, the handling and disposal costs for hazardous materials during planned renovations and replacements, all infrastructure maintenance costs in the housing areas, compensation to local communities for services such as police and schools, and the costs to "mothball" and demolish the buildings if the housing operation is not successful.

Management's Response	Concur. ARC will review and revalidate the cost-benefit analysis. All identified costs will be included in resident agency's draft request for proposal to outsource the housing operation. The complete text of management's comments is in Appendix E.	
Evaluation of Management's Response	ARC's planned action is responsive to the recommendation.	
RECOMMENDATION 2	The ARC Center Director should proceed with the plan to provide military family housing at MFA only if a resident agency accepts responsibility for the housing operation.	
Management's Response	Concur. ARC has no intention of providing military family housing without a resident agency to operate the housing under an agreement with NASA. Recent developments indicate that the Army is strongly interested in accepting responsibility to operate the housing.	
Evaluation of Management's Response	ARC's planned action is responsive to the recommendation. Identifying a resident agency to accept responsibility for the housing is a key element in minimizing NASA's risk.	
Recommendation 3	The NASA Associate Administrator for Management Systems and Facilities should issue a letter to the Under Secretary of Defense for Personnel and Readiness, requesting the DoD to designate a military organization to operate the housing for the benefit of all the military organizations in the San Francisco Bay area.	
Management's Response	Concur. The Office of Management Systems and Facilities is preparing a letter to the Under Secretary of Defense for Personnel and Readiness.	
Evaluation of Management's Response	We reviewed the Office of Management Systems and Facilities letter, dated July 15, 1998, which was fully responsive to the recommendation.	

NASA NEEDS to Minimize Exposure to Liability

ARC has not resolved all the tort¹ and environmental liability issues associated with the proposed military housing operation. While ARC has examined some of those issues, its plan does not adequately address the potential liabilities associated with owning and providing services in the housing areas. In addition, ARC has not identified a military resident agency to accept responsibility for operating the housing. As a result, NASA may face increased exposure to tort and environmental liabilities as a provider of services and as property owner.

Tort Liability A significant tort liability arises from ARC's plan to provide police protection in the housing areas on a cost-reimbursable basis. Military police now provide police protection in the housing areas, but the military will no longer have jurisdiction when the property transfers to NASA.

The housing units in the acquisition plan are all outside ARC's perimeter fence, and the Federal government has only a proprietary interest in the property. Therefore, NASA, as owner, or the cognizant State and local governments will have the authority to enforce criminal laws in the housing areas. The resident agency that leases the property could also arrange for police protection in the housing areas. The Santa Clara County sheriff currently provides no-cost, backup police protection in the housing areas on an as-needed basis and could become the primary law enforcement provider. According to an ARC official, the Center has not determined the costs of obtaining the required law enforcement services from the Santa Clara County sheriff.

To meet the need for police protection, an ARC official stated the Center plans to expand its current security contract because it is a cost-efficient way to provide the service. Federal agencies can be held liable under the Federal Tort Claims Act for the actions of its contractor personnel. Consequently, ARC's plan to provide police protection will expose NASA to increased tort liability.

¹A tort is a private or civil wrong or injury for which the court will provide a remedy in the form of an action for damages. Tort liability may arise from a legal wrong committed upon a person or property whether intentional or due to negligence.

NASA could become liable for existing environmental problems Environmental Liability arising from past activities and future environmental problems that result from the continued housing operation. Before the housing property can be transferred to NASA, Air Force regulations require the completion of an Environmental Baseline Survey to identify any existing environmental problems. In addition, a National Environmental Policy Act analysis must be performed by both agencies to assess the possible environmental impact of the property transfer and housing operation. In June 1997, ARC's Chief, Environmental Services Office, requested environmental information about the property and expressed the Center's desire to participate in the Environmental Baseline Survey. However, the Air Force has neither provided the requested information nor sought NASA's input for the environmental assessments. ARC's Chief, Environmental Services Office, stated that the studies need to begin by the start of fiscal year 1999, and NASA plans to be involved.

The 1992 Memorandum of Understanding that transferred the other areas of Naval Air Station Moffett Field from the Navy to NASA contains a section stating that the Navy retains responsibility for any existing environmental problems arising from its use of that property. While a memorandum of understanding to transfer the housing has not been drafted, ARC officials stated that they are planning to draft one that includes a similar clause.

In addition to existing environmental contamination, NASA must protect itself from future environmental problems that arise as a result of the housing operation. ARC's Chief, Environmental Services Office, stated that Federal environmental laws such as CERCLA² are joint, several, and strict liability laws that make all parties potentially liable for any environmental problems that occur. As owner, NASA will be liable for any environmental problems that occur and that are not completely resolved by the tenant agency. Despite general interagency agreement clauses that require MFA tenant organizations to handle environmental problems in their leased areas, ARC has experienced misunderstandings about NASA's role and responsibility for environmental compliance. For example, after Naval Air Station Moffett Field was transferred to NASA, ARC experienced an operational problem with the Air

²Comprehensive Environmental Response, Compensation, and Liability Act

Force regarding drinking water complaints in the housing areas. This issue was ultimately resolved to NASA's satisfaction, but ARC initially had to devote staff and financial resources to investigate drinking water problems. Because of past experiences, ARC's Chief, Environmental Services Office, is concerned that the housing operation will consume ARC's environmental resources unless the resident agency's environmental responsibilities are clearly defined in an interagency agreement.

NASA cannot eliminate the potential liability arising from its position as property owner. However, ARC plans to reduce the administrative burden of dealing with tort claims and environmental complaints by leasing the property to a military resident agency to operate. Therefore, identifying a resident agency to operate the housing is critical to minimizing NASA's exposure to liability. NASA needs to address and resolve all legal liability and environmental issues before the decision to provide military family housing is finalized.

RECOMMENDATION 4	The ARC Director should establish an interagency agreement with
	a military resident agency responsible for the housing operation at
	MFA that:

- Includes a clause in the lease agreement making the resident agency responsible for providing police protection.
- Specifies the environmental responsibilities of the resident agency.
- *Management's Response* Concur. The agreement with the resident agency for the MFA housing operation will be modified to make the resident agency responsible for providing police protection and to specify the agency's environmental responsibilities.

Evaluation of	ARC's planned action is responsive to the recommendation.
Management's Response	

RECOMMENDATION 5 ARC's Chief, Environmental Services Office, should follow up on existing environmental issues with the Air Force and participate in any studies or assessments that are performed to ensure NASA's concerns are fully addressed.

Management's Response	Concur. ARC has requested that the Air Force conduct an environmental survey and address the Center's concerns. Onizuka Air Station has indicated ARC will be involved in the process to ensure NASA's environmental concerns are included.	
Evaluation of Management's Response	ARC's planned action is responsive to the recommendation.	
R ECOMMENDATION 6	The Associate Administrator for Management Systems and Facilities should include in the memorandum of understanding, that will be used to transfer the property from the Air Force to NASA, a section specifying that DoD is responsible for any preexisting environmental contamination.	
Management's Response	The Office of Management Systems and Facilities has included language in past property transfers specifying that DoD is responsible for any preexisting environmental contamination and anticipates using similar language in any agreement transferring this property.	
Evaluation of Management's Response	ARC's planned action is responsive to the recommendation.	

OBJECTIVES, SCOPE, AND METHODOLOGY

OBJECTIVES	The overall objective of the audit was to evaluate the operational and financial benefits of NASA acquiring the Onizuka Air Station housing units. Specifically, we determined:
	 whether acquiring the housing units will operationally benefit NASA or Ames Research Center, the estimated financial benefit to NASA of acquiring the housing units, and the legal and environmental issues that may affect the value of acquiring the housing units.
Scope and Methodology	We performed detailed survey work at Ames Research Center. We also contacted NASA Headquarters officials in the Office of Management Systems and Facilities (Code J), the Office of Legislative Affairs (Code L), and the Office of Aeronautics and Space Transportation Technology (Code R). In addition, we contacted the Air Force Audit Agency to obtain its perspective on the proposed transfer of housing units to NASA.
	To determine the operational benefit of providing military family housing, we interviewed officials in ARC's Office of the Director of Center Operations and NASA Headquarters Facility Engineering Division. We also reviewed the Center's proposal for operating the housing and correspondence concerning the proposed acquisition.
	To estimate the costs of operating the housing, we reviewed the final report of the Feasibility Study of Outsourcing the Operation and Maintenance of Military Housing for the Naval Reserve Center, Santa Clara, dated October 30, 1997, which estimated the costs and revenue for the housing units. We also obtained an independent assessment of those cost estimates from NASA's Office of the Chief Financial Officer (Code B). Additionally, we

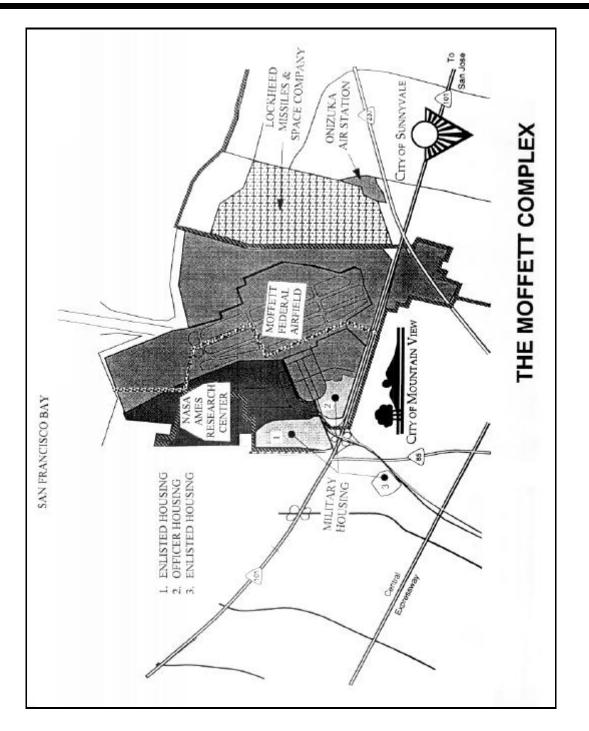
Appendix A

discussed the proposed housing operation and estimated costs with MFA Office officials and a representative of the ARC Office of Chief Counsel.

To assess the legal and environmental issues surrounding the housing operation, we interviewed officials in ARC's Office of Chief Counsel and Environmental Services Office. We also reviewed the December 22, 1992, Memorandum of Understanding covering NASA's acquisition of Naval Air Station Moffett Field and a lease agreement with a military tenant of the airfield and examined jurisdictional maps of the Center. In addition, we requested opinions from the NASA OIG Attorney-Advisor on issues of tort and environmental liability.

MANAGEMENT
CONTROLSWe reviewed the process ARC used to determine that the property
acquisition and proposed military family housing operation would
benefit NASA. We also examined the process ARC followed to
justify the property acquisition and to obtain NASA Headquarters'
approval. The controls in place were considered adequate.

AUDIT FIELD WORK Field work was conducted from November 1997 through March 1998 at Ames Research Center and NASA Headquarters. The audit was performed in accordance with generally accepted government auditing standards.



MAP OF ARC AND HOUSING UNITS

NAVY FEASIBILITY STUDY: SUMMARY OF ESTIMATED COSTS AND HOUSING ALLOWANCE

COST SOURCE							
AND INCOME 1	1997	1998	1999	2000	2001	2002	2003
Maintenance	\$ 873,982	\$ 917,681	\$ 963,565	\$ 1,011,743	\$ 1,062,330	\$ 1,115,446	\$ 1,171,219
Utilities	662,697	695,832	730,623	767,155	805,512	845,788	888,077
Utilities							
Infrastructure	100,000	105,000	110,250	115,763	121,551	127,628	134,010
Landscaping	504,000	529,200	555,660	583,443	612,615	643,246	675,408
Insurance	241,401	253,471	266,145	279,452	293,424	308,096	323,500
Administrative	506,351	531,668	558,251	586,164	615,472	646,246	678,558
Fire/Security	988,711	1,038,147	1,090,054	1,144,557	1,201,784	1,261,874	1,324,967
Renovation and	Not	Not					
Replacement ²	Applicable	Applicable	2,637,290	2,769,155	2,907,613	3,052,993	3,205,643
Subtotal Costs	3,877,142	4,070,999	6,911,838	7,257,432	7,620,301	8,001,317	8,401,382
Property							
Management Profit	775,428	814,200	1,382,368	1,451,486	1,524,060	1,600,263	1,680,277
Total Costs	4,652,570	4,885,199	8,294,206	8,708,918	9,144,361	9,601,580	10,081,659
Total Available							
Housing Allowance ³	9,572,549	9,859,725	10,155,517	10,460,183	10,773,988	11,097,208	11,430,124
Excess of Housing							
Allowance ⁴	\$ 4,919,979	\$ 4,974,526	\$ 1,861,311	\$ 1,751,265	\$ 1,629,627	\$ 1,495,628	\$ 1,348,465

¹ Cost estimates were calculated for 1997 and escalated at a compounded annual growth rate of 5 percent.

² Renovation and replacement costs were based on replacing 19 housing units per year.

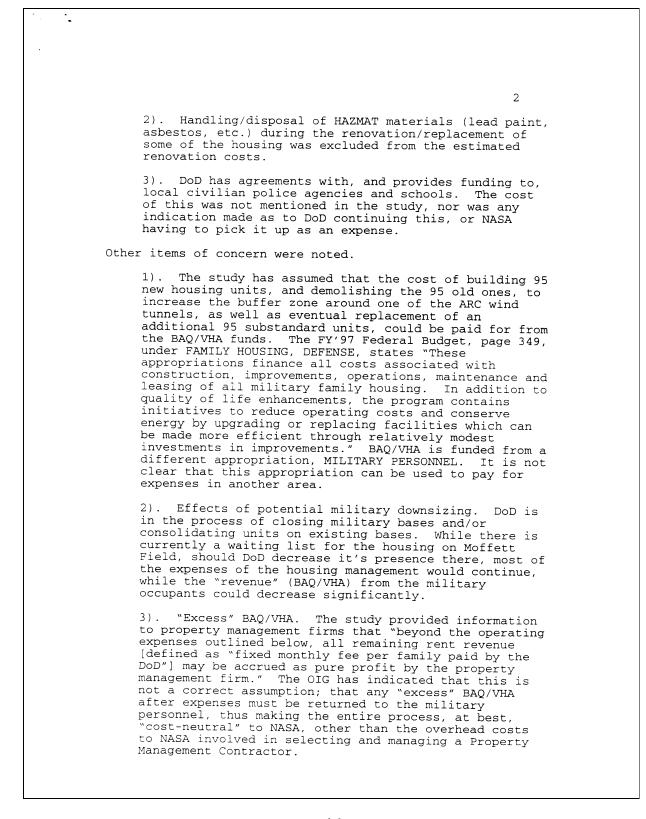
- ³ Total housing allowance estimates assumed a 95-percent occupancy rate and were based on 1997 figures according to military rank and escalated at a compounded annual growth rate of 3 percent.
- ⁴ According to an ARC official, excess housing allowance was to be used to recapitalize (replace additional units each year or improve housing areas) housing.

Appendix D

NASA CHIEF FINANCIAL OFFICER COST ANALYSIS

	National Aeror Space Admini		
	Headquarters		A
	Washington, L	0C 20546-0001	
eply to Attn of:	В		
	TO:	W/Inspector General	
	FROM:	B/Chief Financial Officer	
	SUBJECT :	Request for Cost Analysis for the Survey of Ames Research Center's (ARC's) Planned Acquisition of Military Housing Units Assignment Number A-HA-98-004	
	been made included	nse to your request, an independent assessment has e of the reasonableness of the cost estimates in the feasibility study and the methodology used at future costs and revenue.	
	In general, the estimated costs presented in the study appear reasonable, with some minor exceptions. Specifically, the average cost of utilities, including gas, electricity, water, and sewage, is listed as \$68.69/unit/month (1997\$). This cost is for a 1200 square foot average housing unit with 2.5 bedrooms. A DoD internet site http://www.dmdc.osd.mil/sites/owa/ OVERVIEWS.frame?GEO=1&SITEID=0700&CAT=06&SUB=03&CTR=5 GOVERNMENT HOUSING lists average utilities cost for this area as \$135.35 per month		
	future co	odology contained in the study for escalation of osts appears reasonable. The amount of BAQ/VHA is at 3.0% per year, and the expenses are increased per year.	
		e several potential unfunded liabilities that were ded in the study.	
	for insu majc dama back insu this for	Property insurance on the buildings and land wer uded. The study did include liability insurance the Property Management Firm, but excluded other brance. Since this property is in the middle of a pr earthquake zone, there is a significant chance ge/destruction of some or all of the housing. A t-of-the-envelope estimate from a source in the brance industry indicates earthquake insurance in s area could be on the order of \$500,000 per year 804 units, assuming insurance carriers would erwrite it.	

Appendix D



Appendix D

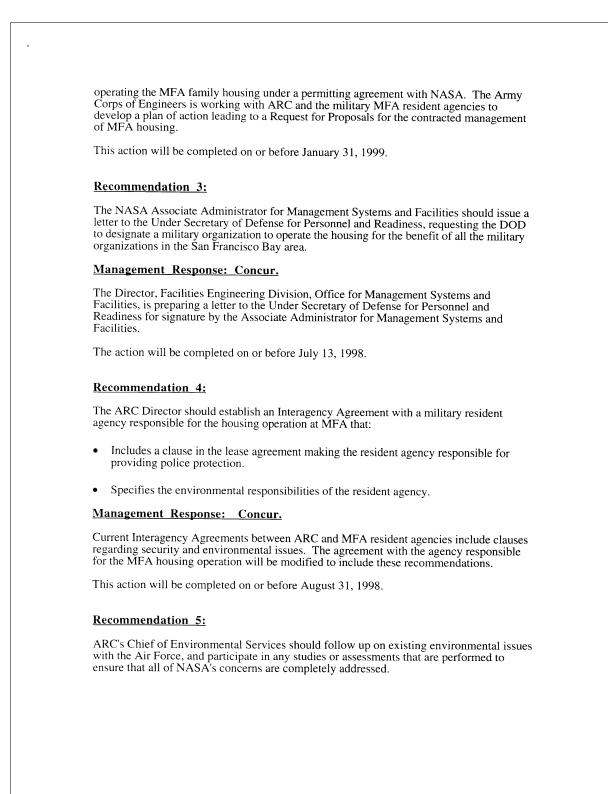
۰. ٠. . 3 Conclusion: The study cost estimate, as presented, is generally reasonable, although optimistic. The proposed use of funds from one military appropriation to pay for expenses normally funded under a different military appropriation may not be permitted under current laws. An expert in military appropriations should be consulted before proceeding any farther. Additionally, the potential unfunded liabilities of property insurance, HAZMAT handling, and payments to local authority for police and schools should be addressed. Arnold G. Holz cc: B/K. Winter M. Peterson BR/R. Brozen

Appendix E

MANAGEMENT'S RESPONSE

	National Aerona Space Adminis Headquarters Washington, DC	tration	NATSA		
			JUN 30 1998		
koly to Arth of	RB				
	TO:	W/Assistant Inspector General for Audi	ing		
	FROM:	R/Associate Administrator for Aeronaut and Space Transportation Technology			
	SUBJECT:	Draft Report on Survey of ARC's Acqu (Assignment Number A-HA-98-004)	isition of Military Housing Units		
	Thank you fo The followin	or the opportunity to review and respond to g are the responses to the recommendation	o your May 28, 1988 draft report. Is.		
	Recommend	dation 1:			
The Ames Research Center (ARC) Director should, prior to acquiring the property at Moffett Federal Airfield (MFA), revalidate the cost-benefit analysis performed for the Na and include the costs unique to NASA. The additional costs considered should include, not be limited to, the need for and cost of property insurance, the handling and disposal costs for hazardous materials during planned renovations and replacements, all infrastructure maintenance costs in the housing areas, compensation to local communities for services such as police and schools, and the costs to "mothball" and demolish the buildings if the housing operation is not successful. Management Response: Concur.			efit analysis performed for the Navy costs considered should include, but rance, the handling and disposal is and replacements, all ompensation to local communities		
	outsourced op Agency for th revalidate the including tho	at the initial analysis could not possibly ide peration of housing. As part of the negotia neir plan to outsource the operation of the cost-benefit analysis previously performe se in the recommendation. All identified c Proposals developed by the contracting age	tion with the identified Resident nousing, ARC will review and d, and include estimates for all costs osts will be included in the Draft		
	This action w	vill be completed on or before August 31,	1998.		
	Recommend	dation 2:			
	The ARC Cer at MFA only	nter Director should proceed with the plan if a resident agency accepts responsibility	to provide military family housing for the housing operation.		
	Management Response: Concur.				
	ARC has no i include the or	intention of proceeding with any plans to p peration of housing by a resident agency. I on the part of the U.S. Army to accept res	provide family housing that does not Recent developments indicate a		

Appendix E



Appendix E

Management Response: Concur. ARC's Chief of Environmental Services has written the Air Force requesting a survey be conducted and ARC's concerns be addressed. By BRAC law, the Air Force is required to conduct an Environmental Base Line Survey of the property prior to transfer. Onizuka Air Station has indicated that ARC will be involved in the process to ensure all of NASA's environmental concerns are included. This action will be completed on or before September 30, 1998. **Recommendation 6:** The Associate Administrator for Management Systems and Facilities should include in the memorandum of understanding, that will be used to transfer the property from the Air Force to NASA, a section specifying that DOD is responsible for any preexisting environmental contamination. Management Response: Concur. The Office for Management Systems and Facilities has included language in past property transfers specifying that DOD is responsible for any preexisting environmental contamination and anticipates using similar language in any agreement transferring this property. Should you have any questions regarding our response, please contact Katie Garcia, Ames Research Center, at (650) 604-5669 or Tina Kearney, Code R, at 358-4730. Spence M. Armstrong CC: B/Mr. Holz G/Mr. Frankle J/Mr. Sutton

REPORT DISTRIBUTION

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Director, Ames Research Center

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Ames Research Center Goddard Space Flight Center Jet Propulsion Laboratory Lyndon B. Johnson Space Center John F. Kennedy Space Center Langley Research Center Lewis Research Center George C. Marshall Space Flight Center John C. Stennis Space Center

Appendix F

Non-NASA Federal Organizations and Individuals

Assistant to the President for Science and Technology Policy Deputy Associate Director, Energy and Science Division, Office of Management and Budget Budget Examiner, Energy Science Division, Office of Management and Budget Associate Director, National Security and International Affairs Division, General Accounting Office Special Counsel, House Subcommittee on National Security, International Affairs, and Criminal Justice Professional Assistant, Senate Subcommittee on Science, Technology, and Space

Chairman and Ranking Minority Member - Congressional Committees and Subcommittees

Senate Committee on Appropriations Senate Subcommittee on VA, HUD and Independent Agencies Senate Committee on Commerce, Science and Transportation Senate Subcommittee on Science, Technology and Space Senate Committee on Governmental Affairs House Committee on Appropriations House Subcommittee on VA, HUD and Independent Agencies House Committee on Government Reform and Oversight House Committee on Science House Subcommittee on Space and Aeronautics, Committee on Science

Congressional Member

Honorable Pete Sessions, U.S. House of Representatives

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