

DOCUMENT RESUME

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Report to Rep. Charles W. Whalen, Jr.; Rep. John E. Moss; Sen. Hubert H. Humphrey; Sen. John Glenn; by Robert F. Keller, Acting Comptroller General.

Issue Area: Facilities and Material Management: Building, Buying, or Leasing Federal Facilities and Equipment (706).

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Congressional Relevance: Rep. Charles W. Whalen, Jr.; Rep. John E. Moss; Sen. Hubert H. Humphrey; Sen. John Glenn.

The Secretary of the Air Force announced the consolidation at Brooks Air Force Base, Texas, of the environmental health laboratories located at Kelly Air Force Base, Texas, and the McClellan Air Force Base, California, and the radiological health laboratory at Wright-Patterson Air Force Base, Ohio. GAO believes the Air Force's proposed use of minor military construction funds to finance building modifications and other construction work needed to support the consolidation is contrary to the spirit and purpose of the applicable U.S. statute and its implementing regulations. Findings/Conclusions: Top laboratory personnel oppose the consolidation and question whether it will result in increased efficiency and effectiveness. According to laboratory employees, facilities under the current proposal are poorly designed and do not provide adequate space for current and future needs. Over \$2 million in new construction over what is currently proposed may be necessary to provide additional space for the consolidated laboratory. GAO estimates the cost for proposed consolidation at about \$1.9 million compared to \$986,000 estimated by the Air Force. The action will result in one-time savings of \$272,000. There are no identifiable recurring savings in personnel. Recommendations: The Secretary of Defense should direct the Secretary of the Air Force to: postpone construction and alteration plans related to the consolidation of the laboratories at Brooks Air Force Base; make a thorough study of the construction requirements and costs for adequate laboratory and supporting facilities; and submit a single proposed construction project for all related needs through the normal appropriation process, if consolidation is viewed as in the best interest of the Government. (Author/QM)

01139



REPORT OF THE COMPTROLLER GENERAL OF THE UNITED STATES

Consolidation Of The Air Force's Environmental And Radiological Health Laboratories

Department of Defense

The Air Force proposed use of minor military construction funds to finance building modifications and other construction work needed to support the consolidation is contrary to the spirit and purpose of the applicable U.S. statute and regulations in our opinion. The Air Force should submit any construction project resulting from a consolidation to appropriate congressional committees for review and approval.

Top laboratory operating officials strongly oppose consolidation. They believe that it will result in a less efficient and effective operation than provided by the separate laboratories.

GAO estimates the cost for the consolidation at about \$1.9 million compared to \$986,000 estimated by the Air Force. In addition, the action will result in one-time savings of \$272,000. There are no recurring savings in personnel.



COMPTROLLER GENERAL OF THE UNITED STATES
WASHINGTON, D.C. 20548


B-172707

The Honorable Charles W. Whalen, Jr., House of Representatives
The Honorable Hubert H. Humphrey, United States Senate
The Honorable John Glenn, United States Senate
The Honorable John E. Moss, House of Representatives

In response to your requests, we reviewed the proposed consolidation of the Air Force's environmental and radiological health laboratories. Our review concerned the savings and costs related to the proposed consolidation. We also obtained comments from affected laboratory officials on the technical benefits of combining the laboratories.

As you requested, we have not obtained written comments on this report from the agencies involved. However, we have discussed the report with Department of Defense officials and included their views where appropriate.

As you have agreed, the report is also being made available for unrestricted general distribution.

ACTING 
Comptroller General
of the United States

REPORT OF THE
COMPTROLLER GENERAL
OF THE UNITED STATES

CONSOLIDATION OF THE AIR FORCE
ENVIRONMENTAL AND RADIOLOGICAL
HEALTH LABORATORIES
Department of Defense

D I G E S T

On March 11, 1976, the Secretary of the Air Force announced the consolidation at Brooks Air Force Base, Texas, of the environmental health laboratories currently located at Kelly Air Force Base, Texas; and McClellan Air Force Base, California; and the radiological health laboratory at Wright-Patterson Air Force Base, Ohio. (See p. 1.)

GAO believes the Air Force's proposed use of minor military construction funds to finance building modifications and other construction work needed to support the consolidation is contrary to the spirit and purpose of the applicable U.S. statute and its implementing regulations. (See p. 4.)

Legal aspects concerning the minor military construction projects in question have been discussed with the Secretary of Defense and the pertinent correspondence and GAO's legal opinion are included as appendixes. (See pp. 21 through 45.)

Top laboratory personnel oppose the consolidation and question whether it will result in increased efficiency and effectiveness. According to laboratory employees, facilities under the current proposal are poorly designed and do not provide adequate space for current and future needs. (See p. 13.)

Over \$2 million in new construction above what is currently proposed may be necessary to provide additional space for the consolidated laboratory. (See p. 14.)

GAO estimates the cost for proposed consolidation at about \$1.9 million compared to \$986,000

estimated by the Air Force. The action will result in one-time savings of \$272,000. There are no identifiable recurring savings in personnel. (See p. 15.)

The Secretary of Defense should direct the Secretary of the Air Force to

- postpone construction and alteration plans related to the consolidation of the laboratories at Brooks Air Force Base;
- make a thorough study of the construction requirements and costs for adequate laboratory and supporting facilities; and
- submit a single proposed construction project for all related needs through the normal appropriation process, if consolidation of the three laboratories at Brooks Air Force Base is viewed as in the best interest of the Government.

GAO has not obtained written comments on the report from the agencies involved. However, GAO discussed the report with Defense officials and included their views where appropriate.

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ABBREVIATIONS

AFB	Air Force Base
GAO	General Accounting Office

CHAPTER 1

INTRODUCTION

BACKGROUND

In response to requests from Senators Hubert H. Humphrey and John Glenn and Congressmen Charles W. Whalen, Jr., and John E. Moss, we have examined various aspects of an Air Force proposal to consolidate two Air Force environmental health laboratories and one radiological health laboratory.

On March 11, 1976, the Secretary of the Air Force announced plans to begin studying several proposed base realignment and reduction actions. Included in the announcement was the consolidation at Brooks Air Force Base (AFB), Texas, of the environmental health laboratories at Kelly AFB, Texas; and McClellan AFB, California; and the radiological health laboratory at Wright-Patterson AFB, Ohio.

The Air Force believed that the consolidation would improve the effectiveness and efficiency of its environmental missions and responsibilities. Additionally, the Air Force contended that the consolidation would avoid costly facility construction.

The laboratories were in the Air Force Logistics Command until September 30, 1976, when operational responsibility was transferred to the Air Force Systems Command.

The laboratories currently have a total authorization of 80 military and 54 civilian personnel.

	<u>Military</u>	<u>Civilian</u>	<u>Total</u>
Kelly AFB	28	26	54
McClellan AFB	23	18	41
Wright-Patterson AFB	<u>29</u>	<u>10</u>	<u>39</u>
Total	<u>80</u>	<u>54</u>	<u>134</u>

ORIGIN AND CURRENT STATUS OF THE LABORATORIES

Kelly AFB, Texas

The environmental health laboratory at Kelly AFB was organized in June 1962. Its mission is to provide professional consultation services and guidance for the Air Force in environmental health and toxicology, military public health, occupational medicine, aerospace medicine, bioenvironmental and

sanitary engineering, analytical chemistry, entomology, and veterinary ecology-toxicology.

The Kelly AFB laboratory is located outside San Antonio, Texas, and is housed in two wooden structures built in the early 1940s. The laboratory has since increased its space requirements, while the physical condition of the buildings has deteriorated. Hallways are now used to store equipment and supplies.

McClellan AFB, California

The McClellan AFB environmental health laboratory mission is the same as the Kelly AFB laboratory's. However, its geographical area of responsibility does differ from the Kelly AFB laboratory.

The McClellan AFB laboratory, built in 1967, is located outside Sacramento, California, and is housed in a specially designed facility which can be expanded. Each end of the building has knockout panel walls which can be moved and the building expanded laterally.

Wright-Patterson AFB, Ohio

The radiological health laboratory at Wright-Patterson conducts the Air Force-wide radiological health programs. Some of its responsibilities are to (1) conduct field surveys and investigations, (2) provide consultation to operational units on the hazards of infrared, ultraviolet, and laser radiation, and (3) provide calibration of field unit and in-house radiation detection and measurement instruments.

The facility that houses the Wright-Patterson AFB radiological laboratory is somewhat crowded but is considered adequate.

SCOPE OF REVIEW

We made our review at McClellan AFB, Kelly AFB, Brooks AFB, and Wright-Patterson AFB. We also performed work at the Aerospace Medical Division of the Air Force Systems Command. Our findings were discussed with officials of the Bases and Units Division, Headquarters, Department of the Air Force. During our review, we

--reviewed documentation supporting the consolidation;

- interviewed and obtained position papers from laboratory operating officials on the technical benefits of the consolidation;
- reviewed the applicable U.S. statute and legislative history pertinent to minor military construction projects;
- obtained and analyzed a legal opinion from the Department of the Air Force on the propriety of using minor military construction funds for construction projects at Brooks AFB;
- analyzed Air Force estimates of savings, cost and cost avoidances; and
- developed independent estimates for the costs and savings attributed to the consolidation.

CHAPTER 2

QUESTIONABLE USE OF MINOR MILITARY

CONSTRUCTION FUNDS

Several minor military construction projects have been proposed for Brooks Air Force Base in order to finance building modifications and other construction work needed to provide facilities for the consolidated laboratory. We question whether these minor military construction projects planned for Brook AFB will comply with the spirit and purpose of the U.S. statute and its implementing regulations.

The applicable U.S. statute ^{1/} authorizes the construction of military projects that are not otherwise authorized by law and do not cost more than \$400,000. A project costing between \$75,000 and \$400,000 must be supported by a determination either that it is urgently needed or that it will, within 3 years following its completion, result in a savings of maintenance and operation costs in excess of the project's cost.

Although the Air Force has determined that the primary construction project for the consolidation is urgently required, we believe this determination is questionable.

To stay within the minor construction limitation of \$400,000, the Air Force has excluded originally planned construction requirements and subdivided construction projects. The primary construction project, estimated at \$398,800, did not include originally planned construction requirements totaling \$225,400 and other projects totaling \$289,300. In our opinion, the proposed use of the other minor military construction projects to finance building modifications and other construction work needed for the consolidated laboratory is contrary to the spirit and purpose of the applicable U.S. statute and its implementing regulations.

The legal aspects of the consolidation have been explored with the Secretary of Defense and the Air Force, and the pertinent correspondence is included in appendix I and II. A detailed legal analysis by our Office of General Counsel is contained in appendix III.

^{1/10} U.S.C. §2674.

URGENCY TO CONSOLIDATE QUESTIONABLE

The determination of urgency for the primary project relating to the consolidation appears to have been based on two messages issued by the Air Force Systems Command in March 1976. The messages set a June 1977 target date for the consolidation of the Air Force environmental and radiological health laboratories. One message gave the following rationale for consolidating:

"3. Air Force basic rationale for realignment actions and reductions and base closure nominations for study. To retain combat capability by reduction in support expenditures where possible, we plan to consolidate, reduce, and realign various Air Force installations and activities throughout the CONUS [Continental United States]* * *"
(Emphasis added.)

In our opinion, the savings expected to accrue from the consolidation were not sufficient justification for the urgency determination. The costs and savings related to the proposed consolidated are discussed in chapter 4. Further, Department of Defense regulations state that consideration of economy, efficiency, welfare or morale alone is normally not sufficient for considering a project urgent.

Officials at Brooks AFB have stated that the functions of the planned consolidated laboratory have been adequately performed by the three existing environmental and radiological laboratories at McClellan AFB, Kelly AFB, and Wright-Patterson AFB.

The urgency of the consolidation was explained further in the enclosed letter from the Air Force dated February 3, 1977 (see app. II), and in subsequent discussions with Air Force and Department of Defense officials. These officials stated that they decided to consolidate the laboratories because the Air Force needed more capability to meet its responsibilities under the National Environmental Policy Act, pollution control legislation, and the Occupational Safety and Health Act. Moreover, Air Force officials stated the decision to consolidate promptly was made in response to the expected increased workload without increasing authorized manpower.

Without the prompt acquisition of space for the consolidation, the Air Force states that it cannot satisfactorily accomplish the mission of the consolidated laboratory. The Air Force also said that the consolidation had to be done by

the end of fiscal year 1977 because of certain Air Force budgetary restraints and manpower requirements. Therefore, the Air Force has concluded that providing a suitable facility at Brooks AFB cannot await a future military construction program and is, therefore, urgently required.

Air Force officials stated that the project met the urgency requirement of the Air Force regulation 1/ since the consolidation was an unforeseen developing condition. However, Air Force documentation indicates that a staff study on the consolidation of the two environmental health laboratories was prepared as early as April 1973. Also, consolidation of all three laboratories was originally recommended in March 1974, 2 years before the consolidation was ordered.

We recognize that the statute 2/ governing minor military construction gives agency officials authority and discretion to make urgency determinations. However, in this instance, we believe it is questionable whether the Air Force was justified in determining that the project is urgently required.

REQUIREMENTS EXCLUDED AND CONSTRUCTION PROJECTS SUBDIVIDED

In our opinion, to stay within the \$400,000 funding limitation for minor military construction projects, the Air Force has excluded construction requirements and subdivided construction projects. In December 1976, the Air Force estimated a cost of \$398,800 to modify four buildings intended to partially house the consolidated laboratory. To insure that the costs did not exceed the funding limitation for its primary construction project, the the Air Force excluded originally planned construction requirements totaling \$225,400. The primary project also excluded other construction projects totaling \$289,300 which have been identified as requirements for the consolidated laboratory.

The following table compares the two latest Air Force costs estimates with our estimate of the potential cost for the construction requirements.

1/Air Force Manual 86-1, Sept. 26, 1973.

2/10 U.S.C. §2674.

Construction Cost Estimates

	<u>Air Force</u>		<u>GAO</u>
	<u>December</u> <u>1976</u>	<u>February</u> <u>1977</u>	
Primary project:			
Modifications to buildings 140 and 175W	\$391,000	\$391,000	\$613,700
Modifications to building 796	5,200	5,200	5,200
Modifications to building 1192	<u>2,600</u>	-	<u>2,600</u>
Total for modifications	<u>398,800</u>	<u>396,200</u>	<u>621,500</u>
Architect/engineer fee (note a)	<u>39,000</u>	<u>39,000</u>	<u>39,000</u>
Additional projects:			
Calibration range facility	75,000	b/2,600	75,000
Field calibration facility	75,000	-	75,000
Hazardous storage facility	-	-	c/61,600
13 other projects	<u>77,700</u>	<u>77,700</u>	<u>77,700</u>
Total for projects	<u>227,700</u>	<u>80,300</u>	<u>289,300</u>
Total	<u>\$665,500</u>	<u>\$515,500</u>	<u>\$949,800</u>

a/Per Defense Department instructions, when considering the \$400,000 limitation for minor military construction projects, this cost is not included as part of the project cost.

b/In February 1977 the Air Force excluded the \$2,600 from the primary project and included it in another Brooks AFB operations and maintenance project that supports the Aerospace Medical School's activities.

c/The total cost for this facility is estimated at \$246,200. The Air Force estimates about 25 percent of this facility will be for the consolidated laboratory.

The differences between these estimates are discussed on the following pages.

Exclusion of requirements
from the primary project

In June 1976, Brooks AFB officials prepared initial documentation to request approval for modifying buildings 140, 175W, and 125 which would house the consolidated laboratory. The Brooks AFB civil engineer then hired an architect/engineer to design and estimate the cost to modify these buildings. His study was completed in September 1976, and the estimated cost for modifying buildings 140 and 175W was \$578,700. The Air Force determined that building 125 would not be used.

To stay within the \$400,000 limitation for minor military construction projects, the Air Force deleted or excluded \$225,400 in originally planned construction requirements from the primary project. In December 1976, the Air Force estimated a cost of \$391,000 to modify buildings 140 and 175W. To provide additional space, the Air Force also planned to modify buildings 796 and 1192 at an estimated cost of \$7,800 for a total project cost of \$398,800.

The following schedule shows our estimates of the costs for the primary project, including the initially planned requirements.

Modifications to buildings 140, 175W,
796, and 1192 a/\$396,100

Initially planned requirements not
satisfied:

Open area for large scale analytical sample processing	\$118,000
Road and dock	15,000
Relocate environmental chamber	5,500
Well	40,000
Water tank (8,400 gal.)	10,000
13 6-ft. exhaust hoods	35,000
Library shelves	<u>1,900</u>

\$225,400

Total \$621,500

a/The difference between the Air Force estimate of \$398,800 and our estimate of \$396,100 is due to (1) excluding \$400 for water tank pad and \$1,300 for two 500 gallon water tanks and (2) rounding and an architect/engineer mathematical error of \$1,000.

Top laboratory personnel believe that the primary items which were excluded are necessary for the efficient operation of the consolidated laboratory. For example, laboratory officials stated that open areas are critical for large-scale-analytical-sample processing. Specific comments from operating personnel are included in chapter 3.

Officials at Brooks AFB are planning to renovate nine 4-foot exhaust hoods currently installed in buildings 140 and 175W. The hoods are considered unsafe by laboratory officials because they fail to meet standards established by the Occupational Safety and Health Act. Laboratory personnel prefer 6-foot hoods because many tests are run simultaneously and the 4-foot hoods do not provide sufficient space. The architect/engineer said the Air Force should include the larger hoods in the construction project. He believed that Brooks AFB officials plan to eventually replace the smaller hoods. In addition, space has been provided in building 140 for three additional 6-foot hoods, which the architect/engineer believes will be purchased in the future. Also, one 6-foot exhaust hood will be Government furnished, but was not included in the project's cost. The estimated cost for the 13 6-foot exhaust hoods is \$35,000.

Construction projects subdivided

The following projects were initially identified as requirements for the consolidated laboratory, but were not considered as part of the primary project.

Field calibration facility

Modification costs for the consolidated laboratory did not include a field calibration facility. Such facilities are currently provided at the three laboratories and are required for the consolidated laboratory. These facilities are used to calibrate field equipment, pack and unpack field kits, clean instruments, and store equipment used in field surveys.

The environmental health laboratories at both Kelly AFB and McClellan AFB use field kits to perform analyses and studies at various Air Force installations. The Kelly AFB kit is primarily used for water samples, while the McClellan AFB kit is used for air samples. The radiological health laboratory at Wright-Patterson AFB has a kit designed especially to be deployed in the event of a nuclear accident.

Brooks AFB officials submitted a request in June 1976 for a 2,250 square foot building to house a field calibration

facility at a cost of \$75,000. This request was approved, but not funded. As late as December 1976, these officials stated they could use temporary wooden buildings until funding could be obtained and approved at the command level.

On February 3, 1977, the Air Force stated that approval of this project had been withdrawn based on availability of existing buildings at Brooks AFB. At a meeting with Air Force officials on February 11, 1977, the deputy commander of the consolidated laboratory said that any of three buildings would be satisfactory for the field kit preparation requirement. However, he was uncertain whether any of these buildings could be adopted or modified for the calibration room, mechanical room, and two offices shown as requirements in the original project. He said office space was unnecessary, and construction cost for the calibration and mechanical rooms probably would be nominal.

We believe the requirement for the field calibration facility is valid and any cost involved in acquiring it should be included in the primary construction project.

Calibration range facility

In planning the consolidated laboratory at Brooks AFB, the Air Force did not provide for a radiation calibration range which is needed to calibrate Air Force radiation detection equipment. To provide such a facility, Brooks AFB officials submitted a construction project in June 1976 to modify the basement of building 140 at an estimated cost of \$75,000.

As a temporary measure, the commander of the consolidated laboratory has arranged to share the calibration ranges at Brooks AFB now used solely by the School of Aerospace Medicine. However, Brooks AFB officials emphasized that joint use is a temporary arrangement, and they plan to request a calibration facility in future budget requests.

On February 3, 1977, the Air Force wrote to us stating that the calibration range requirement will be colocated with an existing calibration facility at Brooks AFB, thus, eliminating the need for this \$75,000 project. At a February 11, 1977, meeting, however, Air Force officials stated that if the consolidated laboratory workload increases, a new calibration range may be appropriately funded in the future. Since one justification for the consolidation was to satisfy a growing workload, there is a likelihood this project will be resubmitted in the future.

Hazardous storage facility

The Air Force proposed constructing a building to store hazardous chemicals to be jointly used by the School of Aerospace Medicine at Brooks AFB and the consolidated laboratory. The consolidated laboratory was the primary justification for the storage facility, and the project was approved on this basis. In a February 3, 1977, letter, the Air Force stated that it was an overstatement to attribute the total reason for the project to the consolidation. The Air Force stated that a better way to characterize the consolidation would have been as an additional justification for the facility, which reenforced and expanded the project's urgency.

Air Force officials stated that the original scope (3,432 square feet) included a 50 percent safety factor which can be described as potential expansion space. Therefore, since excess capacity was planned, it was determined that the consolidated laboratory could absorb about 25 percent of the facility--about 860 square feet. We believe at least \$61,000 of the \$246,200 project cost should be allocated to the primary consolidated project.

The use of 860 square feet of the facility would not appear to fully meet the needs of the consolidated laboratory. The three separate laboratories currently have available about 4,550 square feet for storing chemicals and other materials. Laboratory officials said they would need at least 2,850 square feet for storing chemicals at the consolidated laboratory.

Other projects related to the consolidation

In addition to the above costs, 13 work orders were initiated by the School of Aerospace Medicine to modify certain School facilities for approximately \$77,700. The work order records show that the School is moving to the modified facilities as a "direct result" of the consolidation. We believe that these costs should also be included as part of the primary project.

CHAPTER 3

IMPROVED EFFICIENCY AND EFFECTIVENESS

QUESTIONABLE UNDER PROPOSED CONCEPT

Top level laboratory operating personnel believe the proposed consolidation will be less efficient than the current laboratory structure at the three locations. Radiological laboratory officials at Wright-Patterson Air Force Base have also stated that the proposed consolidation has severely demoralized their laboratory personnel.

DESIGN OF FACILITY DEFICIENT

Operating officials stated that environmental health laboratory activities are largely production oriented and large open analytical areas are desirable. Samples are received and flow through the laboratory in a matter of hours or days, and the open space concept provides flexibility to monitor several automated instruments simultaneously. Open spaces also increase production and provide a relatively safe working environment.

Top laboratory officials at Kelly AFB and McClellan AFB have expressed concern about the adequacy of the Brooks AFB facilities as an analytical laboratory. In a position paper on that subject, operating officials of the McClellan AFB laboratory stated,

"A second aspect which must be evaluated is the suitability of the proposed facilities to be provided at Brooks AFB. The present laboratory facilities vary widely as to suitability. The facility at Kelly AFB is poor and replacement has been requested numerous times in the past. The facility at Wright-Patterson AFB is adequate; however, the facility is somewhat crowded and additional space would be useful. The facility at McClellan consists of two buildings. One is an adequate but aging building (#600). The second building, #642, was designed and built in 1967 specifically to serve as an environmental health laboratory. It is a uniquely valuable building which is fully adequate for the current program and for future expansion. The proposed facilities at Brooks AFB consist of building #140 and part of building #175W. According to the June 1976 MCP document: 'Building 140 consists of many small work spaces and offices which

are unsuitable for large scale analytical sample processing functions. Space can be made available in Building 175 by removing/relocating interior partitions.' Therefore, it was proposed to remove walls, partitions and casework, and modify ceilings and lights. Prior to drawing up final plans for the building modifications, each laboratory was asked to make specific recommendations. The individual laboratory recommendations, which involved numerous concessions on space and laboratory layout, were consolidated into a consensus plan for the modification of the two buildings. This plan was submitted to an architect-engineering firm in early September 1976. Sometime later it was decided, without further consultation with this laboratory, to reduce the scope of the modifications. The net result is that the buildings after modification will still be largely 'unsuitable for large scale analytical sample processing functions.'

The chief chemist at Kelly AFB laboratory stated that the planned Brooks AFB facility has design deficiencies and is unsuitable for large-scale analytical sample processing.

The Brooks AFB civil engineer also identified the lack of open laboratory space in buildings 140 and 175W for production line operations as a major problem.

INADEQUATE SPACE TO BE PROVIDED

The three laboratories currently have about 60,000 square feet. An Air Force environmental assessment in July 1975 noted that the consolidated laboratory would require about 75,000 square feet for future expansion. The following table compares that requirement to the amount planned in the proposed consolidation.

	<u>Required</u>	<u>Planned</u>	<u>Deficient</u>	<u>Percent deficient</u>
	———— (square feet) ————			
Wet lab area	17,435	12,306	5,129	29
Dry lab area	21,957	10,499	11,458	52
Administrative	27,317	17,154	10,163	37
Support/mechanical	<u>8,750</u>	<u>8,038</u>	<u>712</u>	8
Total	<u>75,459</u>	<u>a/47,997</u>	<u>27,462</u>	36

a/Buildings 140, 175W, 796, and 1192.

The Air Force also noted in its environmental assessment that by using selected Aerospace Medical Division support functions at Brooks AFB, the space planned would be adequate. In a position paper, McClellan AFB laboratory officials stated that these functions--maintenance and calibration, library, radiation calibration facilities, fabrication shop, and data automation--require only about 5,000 square feet in the existing three laboratories. Thus, using available support functions can only partially replace the required space, leaving a deficit of about 22,500 square feet.

The Kelly AFB laboratory commander stated in a May 1975 position paper that the 35,000 to 39,000 square feet in building 140 would be very adequate for the Kelly AFB laboratory alone, but not for consolidating the Kelly AFB and McClellan AFB laboratories. The Kelly AFB chief chemist said that buildings 140 and 175W do not have enough space for the combined functions of the consolidated laboratory.

At the current cost of construction, we estimate that at least \$2 million above what is currently proposed may be necessary to provide additional space to make up the 22,500 square foot deficit.

VIEWS OF RADIOLOGICAL HEALTH LABORATORY OFFICIALS

Officials of the radiological health laboratory in Ohio said that the way the consolidation was planned has severely demoralized laboratory personnel. The immediate effect has been that several laboratory personnel have resigned or plan to resign or retire early from the Air Force. Based on our interviews with Air Force officers, three officer health physicists have resigned or will resign, and two other officials will retire early because of the consolidation. This is out of an authorized officer staffing of 13. Laboratory officials said that the expertise and experience of these officers are invaluable and will take at least 5 years to replace.

Those officials also stated that the radiological health laboratory mission is completely distinct from the mission of the two environmental health laboratories. They stated that, from a technical point, they cannot understand why the consolidation is taking place because their technical equipment is not similar to the environmental health laboratory equipment.

CHAPTER 4

COSTS AND SAVINGS RELATED

TO THE CONSOLIDATION

The Air Force estimated that the proposed consolidation at Brooks Air Force Base will cost about \$986,400, including about \$515,500 to alter Brooks AFB facilities. We estimate that it will cost about \$1.9 million, including \$949,800 for construction. It will save \$271,600 of needed construction at the present locations. There are no recurring savings in personnel positions. The proposed consolidated laboratory is expected to have a higher ratio of administrative to technical personnel than the current organization.

ANALYSIS OF INITIAL AIR FORCE ESTIMATES

In April 1976 the Air Force estimated the costs for relocating personnel and equipment to Brooks AFB to be \$310,000, with no requirement for major facility alterations and minor alterations estimated to cost less than \$100,000. In May 1976 the Air Force estimated that it would cost about \$500,000 to move personnel and equipment and make minor alterations to existing facilities. Our work at the Aerospace Medical Division of the Air Force Systems Command showed that those estimates either were not applicable to the current consolidation or were not supported by documentation.

In September 1976, we asked the Air Force for an updated estimate of the costs and savings of the proposed consolidation. The Air Force gave us an updated cost study that month, which it continued to revise during our review. Our analysis of the revised estimates follows.

ANALYSIS OF LATEST AIR FORCE ESTIMATES

The planned consolidation will not reduce the total personnel requirements of the laboratories nor apparently save any other recurring operating costs. Therefore, the Air Force estimates are related solely to the one-time costs of moving personnel and equipment and altering facilities at Brooks AFB, minus savings in construction at the present locations and the release of equipment for use elsewhere in the Air Force.

The following table presents the Air Force's and our estimates.

Comparison of Air Force and GAO Estimate
of Transferring the Environmental and
Radiological Laboratories to
Brooks AFB

	<u>Air Force estimate</u>	<u>GAO estimate</u>	<u>GAO over or under</u>
Cost:			
Relocating personnel	\$177,900	\$ 288,900	\$ 111,000
Relocating equipment and supplies	166,000	202,900	36,900
New equipment	127,000	127,000	-
Repurchase of chemicals and supplies	-	60,000	60,000
Removing laboratory items and restoring labora- tory area	-	44,200	44,200
Downtime costs	-	62,900	62,900
Training costs	-	142,700	142,700
Construction at Brooks AFB	<u>a/515,500</u>	<u>a/949,800</u>	<u>434,300</u>
Total one-time cost	<u>986,400</u>	<u>1,878,400</u>	<u>892,000</u>
Savings:			
Construction projects avoided	275,100	271,600	(3,500)
Equipment excessed and purchases avoided	<u>410,900</u>	<u>-</u>	<u>(410,900)</u>
Total one-time savings	<u>686,000</u>	<u>271,600</u>	<u>(414,400)</u>
Net cost	<u>\$300,400</u>	<u>\$1,606,800</u>	<u>\$1,306,400</u>

a/These projects are discussed in chapter 2.

Costs

Relocating personnel

The Air Force estimate of \$177,900 was based on Headquarters' opinion that 25 military and 14 civilian personnel would relocate to Brooks AFB.

Our estimate of \$288,900 is for relocating 49 military and 19 civilians to Brooks AFB, based on data provided by laboratory officials at Wright-Patterson AFB and McClellan AFB and applicable Defense Department regulations.

Relocating equipment and supplies

The Air Force estimate of \$166,000 is based on receiving raw tonnage data from the laboratories multiplied by factors used in preparing budgets.

Our estimate of \$202,900 was based on data prepared by the laboratories and estimates obtained from base military and commercial shippers.

New equipment

The Air Force estimated that a film badge processor would cost \$127,000. The Air Force requested proposals for this equipment and received two--one for \$40,000 and one for \$140,000. A reliable estimate cannot be made until the Air Force evaluates the proposals, including demonstration of equipment by the offerors.

Repurchase of chemicals and supplies

The Air Force's estimate did not include the repurchase of chemicals which, due to physical or chemical characteristics, will not be moved to Brooks AFB. Air Force laboratory officials estimate that they will cost about \$60,000.

Removing laboratory items and restoring laboratory area

The Air Force did not consider the cost to remove fixed laboratory equipment at the three present locations and to restore the laboratories to a usable condition. The base civil engineer at McClellan AFB estimated that it will cost \$44,200 to remove the fume hoods and laboratory benches and restore the building. We did not obtain estimates for the Kelly and Wright-Patterson laboratories because those vacated laboratories may not be used in the future.

Downtime costs

The Air Force omitted the cost of losing productivity during the transfer. To make up for the laboratory services lost, the laboratories estimated that it would cost about \$62,900 for overtime work, temporary overhires, or contracting work to commercial laboratories.

Training costs

The Air Force's estimate did not include training personnel to replace the losses that occurred or are expected to

occur. Training costs include formal training, on the job training, and recruiting costs. Based on data provided by laboratory officials and the Air Force Analysis Division, we estimated that the training will cost about \$142,700.

Savings

Construction projects avoided

The Air Force cost study shows that the following planned construction projects could be avoided by the move to Brooks AFB: \$271,200 to renovate the Kelly AFB laboratory facilities and \$3,900 to improve the Wright-Patterson AFB radiological health laboratory. Our analysis indicates that the cost for the Kelly AFB should be \$267,700, which accounts for the difference.

These projects had been approved by the Air Force, but were cancelled because of the consolidation.

Equipment excessed and purchases avoided

Air Force officials identified excess equipment at the laboratories which they believe could be used elsewhere in the Air Force or sold, because not as much equipment is needed for the consolidated laboratory. The cost of these items was estimated at \$261,200. While the Government may save by not buying new equipment or gain some income by selling this excess equipment, we doubt that the amount saved on old and highly specialized equipment would be substantial.

The Air Force also estimated equipment savings of \$149,700. This savings represented planned purchases which were deleted because of the consolidation. Because these items were not documented by purchase requests, we do not believe the Air Force has demonstrated they are firm requirements.

Increase in administrative over technical personnel

The three separate laboratories have 134 positions authorized, the same number as authorized for the proposed consolidation. The Air Force originally estimated that the consolidation would save 13 staff-years at \$251,000 a year, by reducing personnel needed for common services at a single location. In its latest estimate, the Air Force

did not eliminate any authorized positions for the consolidated organization, which now includes 30 spaces for administration compared to 23 presently at the three locations.

CHAPTER 5

CONCLUSIONS AND RECOMMENDATION

In our opinion, the Air Force's proposed use of minor military construction funds to finance building modifications and other construction work needed to support the consolidation is contrary to the spirit and purpose of the applicable U.S. statute and its implementing regulations. The proposed action will be more costly than anticipated and may result in a less efficient and effective operation.

Many laboratory officials have contended that the Brooks Air Force Base facilities will be largely unsuitable for large-scale analytical sample processing even after costly modifications.

We believe that there is no need to hurriedly consolidate the three laboratories. The Air Force should perform an adequate study on total costs and benefits related to the consolidation, and alternative solutions should be explored.

We recommend to the Secretary of Defense that he direct the Secretary of the Air Force to

- postpone construction and alteration plans related to the consolidation of the laboratories at Brooks AFB;
- make a thorough study of the construction requirements and costs for adequate laboratory and supporting facilities; and
- submit a single proposed construction project for all related needs through the normal appropriation process, if consolidation of the three laboratories at Brooks AFB is deemed in the best interest of the Government.



UNITED STATES GENERAL ACCOUNTING OFFICE
WASHINGTON, D.C. 20548

OFFICE OF GENERAL COUNSEL

B-172707

DEC 7 1976

The Honorable
The Secretary of Defense

Dear Mr. Secretary:

In connection with requests from Congressman Charles W. Whalen, Jr., and Senators John H. Glenn, Jr., and Hubert H. Humphrey, we are reviewing a proposed minor construction project at Brooks Air Force Base in San Antonio, Texas. The construction project is intended to provide facilities for the merger of the Air Force Environmental and Radiological Health Laboratories into one consolidated Air Force Occupational and Environmental Health Laboratory at Brooks Air Force Base.

The project has been proposed for minor construction funding under the authority of 10 U.S.C. §2674, which permits the construction of an urgently needed facility at a military installation where the cost of the project is not in excess of \$400,000. Minor construction projects costing between \$200,000 and \$400,000 must receive your advance approval in accordance with 10 U.S.C. §2674(b). We understand that the construction project at Brooks Air Force Base will cost more than \$200,000 and, therefore, that the project documentation will be submitted to you for approval in December 1976.

Under 10 U.S.C. §2674(a), a minor military construction project costing between \$75,000 and \$400,000 must be supported by a determination either that it is urgently needed or that it will, within three years following its completion, result in a saving of maintenance and operation costs in excess of the project cost. The construction project at Brooks Air Force Base is supported by a determination that it is urgently required. This determination or "Certification of Urgency" was apparently issued because CSAF/PRPO Messages 1022092, March 1976, and 2316452, March 1976, require the consolidation of the Air Force Environmental and Radiological Health Laboratories at Brooks Air Force Base to be accomplished by July 1977.

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With respect to the "urgently needed" requirement in 10 U.S.C. §2674, paragraph 5-2.g. of Air Force Manual 86-1, 26 September 1973, states:

"Urgent Requirement. When, an unrecognized existing or unforeseen developing condition cannot be satisfied by the normal inclusion of a construction project in future military construction authorization legislation (Major Construction Program) because of its imperative need to effectively accomplish the mission, the project will be considered as urgent."

Paragraph C of the Interim Policy Amendment of Department of Defense Directive 7040.2, March 26, 1976, further states that, "[n]ormally, consideration of economy, efficiency, welfare or morale alone is not sufficient for considering a project as urgent."

Officials at Brooks Air Force Base informed us that the functions of the planned consolidated Occupational and Environmental Health Laboratory are currently being performed by three existing laboratories at McClellan Air Force Base, California; Kelly Air Force Base, Texas; and Wright-Patterson Air Force Base, Ohio. We were also told that if the deadline for consolidation of the laboratories had been set at, for example, July 1960 or later, rather than July 1977, the project would not have been determined to be urgently required.

It appears, therefore, that the urgency of the Brooks Air Force Base project may have been created by command directive instead of by "an unrecognized or unforeseen developing condition." Because of this possibility, we question whether the project qualifies as urgently needed under 10 U.S.C. §2674 and its implementing regulations.

The second question raised in connection with the consolidation at Brooks Air Force Base is whether the construction work in support of the consolidation has been improperly subdivided in order to reduce costs below the \$400,000 limitation in 10 U.S.C. §2674(b). In this regard, paragraph 5-5 of Air Force Manual 86-1, 26 September 1973, states in part:

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Criteria for Minor Construction Projects. Prerequisites for establishing a minor construction project are shown below. In addition, the projects undertaken under the minor construction authority must be consistent with the intent of the statute (Section 10 U.S.C. 2674) as to what constitutes a separate project. It is not feasible to prescribe absolute criteria for determining the work that would, under the circumstances, properly constitute a separate minor construction project. Existence of concurrent construction requirements is a requisite for the scope of work required to be included within a single project. All construction requirements which are generated by the same circumstances or event; which associate with the same use of a facility or part thereof, or similar facilities, and which are known to exist at the time a minor construction project is proposed should be satisfied at the same time.

a. All projects must meet all the following criteria:

* * * * *

(3) The project will result in a complete and usable facility or a complete and usable improvement to a facility. This criterion is applicable even though it is necessary to include work on one or more dissimilar facilities. The planned acquisition of, or improvement to a real property facility through a series of minor construction projects (incremental type construction) is prohibited.

* * * * *

[(8)](b) All construction concurrently required to be done to a real property facility in which one functional purpose

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or related functional purposes are performed, will be treated as one project." (Emphasis added.)

With respect to the possible subdivision of the consolidated laboratory construction project, it appears that the most recent request for funding for the project does not provide for either a calibration range, which would be used by radiological personnel, or a field kit preparation area, which would be used by environmental personnel. We understand from Brooks Air Force Base officials that the functions that would be performed by a calibration range and a field kit preparation area are necessary for the support of the proposed consolidated laboratory. Further, it appears that two separate minor construction projects, each costing an estimated \$75,000 in operation and maintenance funds, have been approved to provide facilities for a calibration range and a field kit preparation area. Despite this approval, we have been informed that the two projects have not yet been funded, but that funds may be allocated to the projects if any remain after the funded projects for fiscal year 1977 are completed. We were also told by the Commander of the consolidated laboratory that he plans to resubmit requests for funding for the two projects in the future. We note that the documentation for the calibration range project states that the project would provide an addition to Building 140 at Brooks Air Force Base, one of the two buildings intended to house the consolidated laboratory.

The third and fourth questions raised in connection with the Brooks Air Force Base construction project pertain to 13 work orders initiated by the Air Force School of Aerospace Medicine for the purpose of modifying certain facilities for the school at an estimated cost of \$77,707.94. We understand that the School of Aerospace Medicine currently occupies part of the facilities at Brooks Air Force Base that are proposed to be renovated for the consolidated laboratories. The documentation for the work orders indicates that the School of Aerospace Medicine plans to move to facilities that are modified by the work orders as a "direct result" of the consolidation of the Environmental and Radiological Health Laboratories.

The third legal question is whether the \$77,707.94 estimated cost of moving the School of Aerospace Medicine

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should have been included as a funded cost of the Brooks Air Force Base construction project. In this regard, paragraph 5-3 of Air Force Manual 86-1, 26 September 1973, states in part:

"a. Funded Costs. * * * Funded project costs will include, but will not necessarily be limited to:

* * * * *

"(6) Construction agency overhead (Corps of Engineers, Naval Facilities Engineering Command, etc.). This further includes that portion of installations overhead or support costs which can be identified as representing additional costs which would not have been incurred were it not for the project. An example would be the overhire of a construction inspector for a specific project." (Emphasis added.)

The fourth question for resolution is whether the 13 work orders, which are to be paid for out of operation and maintenance funds, should have been grouped together as a single construction project under 10 U.S.C. §2674 and its implementing regulations.

We understand that the 13 work orders are concurrent construction requirements directly related to the transfer of the School of Aerospace Medicine to other locations. Further, it appears that if the 13 work orders were considered to be a single minor construction project, the total cost of the project would exceed \$75,000. Under 10 U.S.C. §2674(b) and (e) projects costing more than \$75,000 may not be paid for from operation and maintenance funds, and they must be approved by the Secretary of the military department concerned, rather than by a base commander as was apparently done in this instance.

As stated earlier, we believe you should resolve the four legal questions discussed above before making a decision on whether to approve the consolidated laboratory construction project. We would appreciate your views and supporting rationale on these questions. Please include all pertinent information which you believe we should consider before reaching any conclusions on the construction project. If a decision is made to

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approve the consolidated laboratory construction project, we request that you delay the project until our Office has had an opportunity to analyze and, if appropriate, respond to your position as to the propriety of the project under 10 U.S.C. §2674 and its implementing regulations.

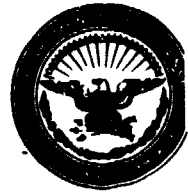
Your assistance is appreciated and we look forward to your response. Since our report on the consolidation of laboratories at Brooks Air Force Base is scheduled to be issued in February 1977, we will need to receive your response within 30 days from the date of this letter. Any questions your staff may have may be directed to Clarence K. Ellington, Logistics and Communications Division (275-2599), or William L. Taylor, Office of the General Counsel (275-3150).

Sincerely yours,

Paul G. Dembling

Paul G. Dembling
General Counsel

DEPARTMENT OF THE AIR FORCE
WASHINGTON, D.C. 20330



Received 3 Feb. 1977

Mr. Paul G. Dembling, General Counsel
United States General Accounting Office
Washington, D. C. 20548

Dear Mr. Dembling:

This responds to your letter of December 7, 1976, to the Secretary of Defense, which requested the Department of Defense position on the propriety of authorizing construction projects in support of the consolidated Air Force Occupational and Environmental Health Laboratory (OEHL) at Brooks Air Force Base, Texas, under 10 USC 2674 and its implementing regulations. The Air Force has considered the points highlighted and provides the following responses to the specific questions. This letter has been coordinated with the appropriate officials in the Office of the Secretary of Defense.

Consolidation of the Air Force Environmental and Radiological Health Laboratories at Brooks Air Force Base was recommended by the HQ USAF and ordered by the Secretary of the Air Force following approval by the Secretary of Defense. The public announcement was made by the Secretary of the Air Force on March 11, 1976, with the consolidation to be effective by the end of FY 1977. The two CSAF/PRPO messages cited in your letter dated in March, 1976, gave preliminary planning guidance in support of the Secretary's directive. Under the terms of the news release, the Air Force was required to wait 30 days to allow for public comment. The Air Force Systems Command was directed to proceed with implementation on June 9, 1976.

The determination to consolidate resulted from the necessity to increase Air Force capability to meet its responsibilities under the National Environmental Policy Act, pollution control legislation, and the Occupational Safety and Health Act. The decision to consolidate promptly was made to respond to the expected increase in the

environmental requirements workload without the necessity to increase the authorized manpower. Brooks was selected as the site due to its central geographic location, the compatibility and mutually supportive aspects of other on-base missions, and the availability of space for conversion at reasonable cost. Failure to acquire such space promptly will cause unsatisfactory mission performance.

Under these circumstances, the Air Force determined that the provision of a suitable facility at Brooks in support of the consolidation could not await a future military construction program and was, therefore, urgently required. A minor construction project to convert space in Buildings 140, 175, and 796, a total of 39,992 square feet, \$396,200, has been forwarded to OSD for approval. Completion of the beddown by end FY 1977 was dictated by the timing of the anticipated new workload and the limits of budgetary resources. Our considerations have extended beyond "normal considerations of economy, efficiency, welfare or morale alone." The issue is the ability to accomplish the workload in its greater diversity and magnitude. At the present time, inability to house the consolidated organization promptly at Brooks has impacted heavily and adversely upon retention/recruitment of specialist personnel to accomplish the growing workload. The ability to perform that workload in a timely manner is now seriously threatened. Such an urgency determination is clearly a matter of judgment upon which reasonable people may differ. However, it is committed to agency discretion, and we believe the exercise of that discretion in this case is entirely consistent with the language and intent of 10 USC 2674.

With regard to the provision of facility support at Brooks, project planning has advanced from an initial proposal for three projects to be approved (two by the base, by authority delegated from the major command; one by the SECDEF) under 10 USC 2674 to a single minor construction project (above) for the laboratory itself. Available space has been located for the field kit preparation requirement, thereby negating the need for one construction project. The calibration range requirement will be collocated with an

existing calibration facility on Brooks, the cost of which (approximately \$2,500) will be included and combined with other functionally similar work orders as explained below. We are pleased to have had the benefit of advice from personnel of the General Accounting Office in the review of these projects. A conclusion was reached that the initial plan to accomplish two projects not to exceed \$75,000 each, utilizing operations and maintenance (O&M) funds, would be inappropriate. Accordingly, the approval of these two projects has been withdrawn.

One other urgent minor construction project was developed by the base and major command and approved by the Air Force (July 12, 1976) and Office of the Secretary of Defense (August 10, 1976). It would provide 3,432 square feet of permanent new facility to provide safe handling and storage of hazardous chemicals and exotic, flammable, and toxic gases required by the laboratories of the USAF School of Aerospace Medicine and the consolidated OEHL. This requirement was originally developed prior to the announcement of the OEHL consolidation as evidenced by the file. The project was initiated in February, 1976, and includes a certification of urgency which was executed by the Commander, USAF School of Aerospace Medicine on February 3, 1976. Three other required certifications were executed through March 5, 1976. They contain no reference to OEHL. That project was rewritten as to justification to accommodate the additional storage requirement of the OEHL when consolidation was announced on March 11, 1976. The latter addition, given the projected operational date of October 1, was clear and valid enhancement of the justification for this project. Its urgency was re-enforced and expanded by the addition; it was an overstatement, which we regret, to attribute the total reason for the project to the consolidation action.

The Air Force finds no error under the statute in the handling of the 13 work orders cited in the reference. These orders have been properly treated separate from the consolidation project. The special circumstances of one order have caused us to remove it entirely from consideration, as

indicated below. With respect to the balance, the following comments are offered:

a. Department of Defense Directive (DODD) 4270.24* provides implementing guidance for development and approval of minor construction projects under 10 USC 2674. The principal element of these guidelines is facility "functional purpose" as defined in the 3-digit category codes established in DOD Instruction 4165.3. Construction of facilities to satisfy the same event at the same time is concurrent construction. When two or more work orders with the same 3-digit category code satisfy the same event at the same time, they must be included in a single project for approval under the statute.

b. When grouped by 3-digit category code, the 12 work orders are found to be of three separate functions. When aggregated by separate function, their total is well within the maximum (\$75,000) which has been delegated to the approval authority, as indicated in subparagraph a below.

c. The Air Force has complied with the intent and the substance of DODD 4270.24 with respect to the relationship of the work orders and the consolidation minor construction project. All work was (1) known to exist at the same time and (2) programmed separately by functional purpose. Each purpose complies with the definition of "unrelated" as prescribed in the directive, particularly the requirement that each function can perform independently of the others.

d. There are many precedents that support programming separate projects for concurrent construction requirements by functional category. A recent example is the program of construction to support the E-4 aircraft beddown at Offutt Air Force Base, Nebraska. It included construction in the FY-77 Military Construction Program, and (because of an immediate need to provide interim facilities) several minor construction projects (each with separate 3-digit category codes) for departmental approval under 10 USC 2674. The Surveys and Investigations Staff of the House Appropriations Committee performed an in-depth

*Guidance for funding projects in accordance with DODD 4270.24 is contained in DODD 7040.2.

study of these projects including the requirement, scope of work, cost and authority to be used. Subsequent Congressional approval and full funding of all E-4 beddown projects in the military construction program with knowledge that several minor construction projects for interim facilities -- approximately \$2 million -- had received departmental approval indicates total agreement with the use of minor construction authority for multiple projects in support of a single event (the assignment of E-4 aircraft to Offutt Air Force Base).

e. The exception concerned work to disconnect a piece of non-real property equipment in a structure. It is not properly categorized as construction. Instead, it is accountable as reimbursable services to other organizations. Appropriate adjustments in accounting records have been directed.

The fourth question asks whether the work orders, which are to be funded with O&M funds, should not be grouped as a single construction project under the provisions of 10 USC 2674. The answer is found in the discussion of functional purpose and the development of separate projects above. Specifically:

a. Grouping the 12 work orders in 3-digit (functional purpose) categories results in the following breakout: ten work orders for research and development functions (310-XXX) at \$35,975; one work order for medical functions (510-XXX) at \$3,500; and one work order for training functions (171-XXX) at \$38,000.

b. As noted above, the work to provide a calibration range will be included in the work for research and development functions (310-XXX). This will increase the cost of this functional category to (\$35,975 + \$2,500) \$38,475, which is still within the approval authority of the major command.

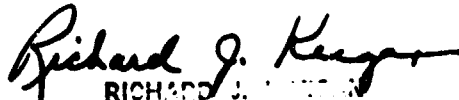
Based on the established guidance and the facts as to the work orders, the Air Force concludes that a single construction project under 10 USC 2674 is not required. The work was

properly authorized in each order and is well within the limits on approval authority for projects grouped by functional purpose.

The Air Force appreciates the opportunity to clarify its decision-making process in approving construction projects in support of the OEHL at Brooks. While recognizing some inconsistency in the base level programming effort, we believe our proposals to be in full compliance with the provisions of 10 USC 2674. Our total review procedure, which includes detailed project analysis at major command, Headquarters USAF, and Office of the Secretary levels, is designed to identify lapses that may occur at base level where urgent minor construction project frequency is low.

In summary, the Air Force has determined that the consolidation project is urgent in the interests of national defense and has forwarded it to the Office of the Secretary of Defense for approval. The OEHL is faced with significant, immediate loss of production as it struggles with the problems of relocation and consolidation, suffers attrition of professional and support personnel at the operating locations, and deals with the inevitability of personnel reassignment. Overall, the present difficulties are forestalling the management solutions which would assure its capability to meet the basic mission. Matters of procedure notwithstanding, the fact-of-life situation is urgent and growing more so. We have requested an early opportunity to satisfy any questions which may arise in OSD on the project. We are also anxious to meet with your representatives and resolve any matters of interest to the GAO.

Sincerely,



RICHARD J. KEEGAN

Acting Assistant Secretary of the Air Force
(Installations & Logistics)

PROPRIETY OF THE MINOR
CONSTRUCTION PROJECTS PROPOSED
FOR BROOKS AIR FORCE BASE

Several minor construction projects have been proposed for Brooks AFB in order to support or provide facilities for the consolidated laboratory. These projects are governed by 10 U.S.C. §2674 and its implementing regulations, which address the construction of military public works not otherwise authorized by law which do not cost more than \$400,000. 1/ A project costing between \$75,000 and \$400,000 must be supported by a determination either that it is urgently needed or that it will, within 3 years following its completion, result in a saving of maintenance and operation costs in excess of the cost of the project.

Projects Costing between \$75,000 and \$400,000 at Brooks AFB

There are two projects proposed for Brooks AFB that are estimated to cost between \$75,000 and \$400,000. One of these, the primary construction project for providing facilities for the consolidated laboratory, has an estimated cost of approximately \$398,800. The project calls for the modification of four buildings and is supported by a determination that it is urgently required.

The determination of urgency appears to have been based on two messages issued by the Air Force Systems Command in March 1976. The messages set a June 1977 target date for the consolidation of the Air Force Environmental and Radiological Health Laboratories, and one of the messages gave the following rationale for the decision to consolidate:

1/ The Department of Defense and our Office have interpreted the cost limitations in 10 U.S.C. §2674 as applying only to the "funded" costs of a project. Funded costs (sometimes referred to as "out-of-pocket" costs) are those to be met from an allocation of appropriated funds made specifically for the project; for example, the cost of materials purchased. Unfunded costs, on the other hand, would represent moneys already required and earmarked for normal operating expenses, such as the pay of troops. Unfunded costs may also include the money value of supplies on hand and the use of equipment on hand. See H.R. Rep. No. 1858, 87th Cong., 2d Sess. 19 (1962). For purposes of this analysis, the term "cost" refers to funded cost unless otherwise indicated.

"3. AIR FORCE BASIC RATIONALE FOR REALIGNMENT ACTIONS AND REDUCTIONS AND BASE CLOSURE NOMINATIONS FOR STUDY. TO RETAIN COMBAT CAPABILITY BY REDUCTION IN SUPPORT EXPENDITURES WHERE POSSIBLE, WE PLAN TO CONSOLIDATE, REDUCE, AND REALIGN VARIOUS AIR FORCE INSTALLATIONS AND ACTIVITIES THROUGHOUT THE CONUS.
* * * (Emphasis added.)

Thus, at the time the determination of urgency was made, the only documented reasons for the decision appear to be that the consolidation was directed and was in the interests of economy and efficiency.

However, with regard to determinations of urgency for minor construction projects, paragraph 5-2.g. of the Air Force Manual 86-1, 26 September 1973, states:

"Urgent Requirement. When, an unrecognized existing or unforeseen developing condition cannot be satisfied by the normal inclusion of a construction project in future military construction authorization legislation (Major Construction Program) because of its imperative need to effectively accomplish the mission, the project will be considered as urgent."

Department of Defense regulations further state that, "[n]ormally, consideration of economy, efficiency, welfare or morale alone is not sufficient for considering a project as urgent." See, e.g., paragraph C of the Interim Policy Amendment of Department of Defense Directive 7040.2, March 26, 1976.

Officials at Brooks AFB have indicated that the functions of the planned consolidated laboratory have been adequately performed by the three existing environmental and radiological laboratories at McClellan AFB, Kelly AFB, and Wright-Patterson AFB. We were also told that if the consolidation had been set for June 1980 or later, rather than June 1977, the project would not have been determined to be urgently required.

In the letter from the Air Force dated February 3, 1977, and in a subsequent conversation with Air Force and Department of Defense officials, the urgency of the consolidation was explained further. We were told that the determination to consolidate resulted from the necessity of increasing Air Force capability to meet its responsibilities under the National Environmental Policy Act, pollution control legislation and the Occupational Safety and Health Act. The Air Force maintains that the decision to consolidate promptly was made to respond to the expected increase in the environmental requirements workload without the necessity of increasing authorized manpower.

Without the prompt acquisition of space for the consolidation, the Air Force states that it cannot satisfactorily accomplish the mission of the consolidated laboratory. Also, consolidation by the end of fiscal year 1977 is said to be needed in order to meet certain budgetary restraints and manpower requirements of the Air Force. For these additional reasons, the Air Force has concluded that the provision of a suitable facility at Brooks AFB cannot await a future military construction program and is, therefore, urgently required.

Contrary to the above stated position, our review indicates that the consolidation, as proposed, may well be less efficient than the current separate laboratory structure. GAO's investigation indicates that the consolidated laboratory has not been designed to ensure maximum efficient operations and that the space to be provided for the laboratory is inadequate even for current needs.

Also, although this was not detailed in the written urgency justification, Air Force officials have informed us that the primary construction project relating to the consolidation satisfies the urgency requirement of the Air Force regulation quoted earlier because the consolidation was an unforeseen developing condition. However, Air Force documentation indicates that a staff study on the consolidation of the environmental health laboratories at Kelly AFB and McClellan AFB was prepared in April 1973. The consolidation of all three environmental and radiological laboratories was originally reported on in March 1974, 2 years before the consolidation was ordered.

Although in our opinion the urgency determination by the Air Force is questionable, we recognize that the statute governing minor military construction, 10 U.S.C. §2674, gives the authority and discretion to make such determinations to appropriate agency officials. Nevertheless, because of this discretion and the importance of these decisions, we believe such officials should be given sufficient written information in or accompanying Certificates of Urgency to ensure that they will be able to make informed decisions as to the urgency of a minor construction project.

Moreover, if sufficient documentation exists as to the urgency of a project, Congress will be better able to oversee minor construction projects. In this regard, the Report of the House Appropriations Committee on the Military Construction Appropriation Bill, 1977, states in part:

"The Committee feels that, in general, management of the use of minor construction funding may need to be tightened. In recent years the allowance for the cost of projects which may be accommodated through the minor construction program has been increased from \$200,000 to \$400,000. While increased allowances have enabled the services to catch up and keep up with the rate of inflation in construction, they do imply an increased obligation on the part of the services and Defense agencies to use this program wisely and in strict accordance with both the letter and intent of the law.

"During fiscal year 1977 hearings some witnesses were unable to provide details or justification for minor construction projects. The Committee hereby puts reasonable managers in this area on notice that they may, at any time, be called upon to justify their actions in approving such projects." H.R. Rep. No. 94-1222, 94th Cong., 2d Sess. 23 (1976).

In addition to the primary construction project at Brooks AFB, the Air Force has determined that there is an urgent need for a facility to store hazardous chemicals at an estimated cost of \$246,200. The facility was originally proposed to provide storage for chemicals used by the School of Aerospace Medicine at Brooks AFB. However, before a minor construction project to provide the facility was approved, the consolidation of the environmental and radiological laboratories was announced and the justification for the facility was revised. The storage requirements of the consolidated laboratory then became the primary justification for the hazardous storage facility, and the project was approved subsequent to that revision. In the February 3 letter from the Air Force, we were informed that it had been an overstatement to attribute the total reason for the project to the consolidation action. The Air Force indicated that a better way to characterize the consolidation would have been as an enhancement of the justification for the facility which re-enforced and expanded the project's urgency.

Thus, it appears that, unlike the approval of the primary construction project, which was based on an inadequate written justification, the approval of the hazardous storage facility was based on an inaccurate justification. This raises a question as to whether the officials who approved the two largest minor construction projects at Brooks AFB were able to make informed decisions regarding those projects.

Scope of the Minor Construction Projects at Brooks AFB

10 U.S.C. §2674(b) provides that a minor military construction "project" shall not cost more than \$400,000. However, the question of what constitutes and should be included within a minor construction project has been the subject of much discussion over the years. In this regard, the regulations that implement 10 U.S.C. §2674 state:

"It is not feasible to prescribe absolute criteria for determining what scope of work would, under all possible circumstances, properly constitute a separate minor construction project."

See, e.g., paragraph IV.A.7. of Department of Defense Directive 4270.24, November 5, 1976; and paragraph 5-5 of Air Force Manual 86-1, 26 September 1973.

While recognizing the difficulty in defining the term "project" in 10 U.S.C. §2674, the Department of Defense and military departments have set forth guidelines for this purpose. These guidelines also require that minor construction projects be consistent with the legislative intent behind 10 U.S.C. §2674.

Paragraph 5-5 of Air Force Manual 86-1, 26 September 1973, states in part:

"Criteria for Minor Construction Projects.
* * * Existence of concurrent construction requirements which are generated by the same circumstances or event; which associate with the same use of a facility or part thereof, or similar facilities, and which are known to exist at the time a minor construction project is proposed should be satisfied at the same time.

"a. All projects must meet all the following criteria:

* * * * *

"(3) The project will result in a complete and usable facility or a complete and usable improvement to a facility. This criterion is applicable even though it is necessary to include work on one or more dissimilar facilities. The planned acquisition of, or improvement to a real property facility through a series of minor construction projects (incremental type construction) is prohibited." (Emphasis added.)

Air Force officials interpret these regulations narrowly in determining the scope of minor construction projects. Although the officials have not cited specific regulations in support of their interpretation, it appears that they construe the applicable regulations as permitting them to separate concurrent construction requirements, regardless of whether generated by the same circumstances or event, as long as the requirements will be satisfied at different buildings having different functions.

The military departments determine functions by use of a 3-digit category code system described in Department of Defense Instruction 4165.3, September 1, 1972. Under the Air Force interpretation, if concurrent, related minor construction projects are given different 3-digit category codes and are performed at different buildings, they may be considered separate minor construction projects for purposes of 10 U.S.C. §2674 and its implementing regulations.

In its February 3 letter, the Air Force states:

"There are many precedents that support programming separate projects for concurrent construction requirements by functional category. A recent example is the program of construction to support the E-4 aircraft beddown at Offutt Air Force Base, Nebraska. It included construction in the FY-77 Military Construction Program, and (because of an immediate need to provide interim facilities) several minor construction projects (each with separate 3-digit category codes) for departmental approval under 10 USC 2674. The Surveys and Investigations Staff of the House Appropriations Committee performed an in-depth study of these projects including the requirement, scope of work, cost and authority to be used. Subsequent Congressional approval and full funding of all E-4 beddown projects in the military construction program with knowledge that several minor construction projects for interim facilities -- approximately \$2 million -- had received departmental approval indicates total agreement with the use of minor construction authority for multiple projects in support of a single event (the assignment of E-4 aircraft to Offutt Air Force Base)."

Congressional approval of a funding request which contains details as to minor construction projects totaling more than the statutory maximum does not carry with it, in our opinion, implicit or explicit approval of such projects. The matter

presented to the Congress, and studied by the Surveys and Investigations staff of the House Appropriations Committee, involved the need for appropriations for yet to be performed construction projects, not the propriety of the various minor military construction projects already departmentally approved. There is no indication that the Congress considered this latter question in appropriating funds for the construction program. In this regard, we have been informed by the Surveys and Investigations staff of the House Appropriations Committee that while the minor construction projects referred to had been listed in the Staff Study, the question of whether the projects should have been grouped together for funding purposes had not been considered.

Additionally, our Office considered a similar interpretation by the Army in B-159451, September 3, 1969. That case involved five minor construction projects in Nha Trang, Vietnam, undertaken to renovate a hotel and annex, to construct a 600-man cantonment, to install a power plant and electrical distribution system, and to install a security fence at a total funded cost of \$208,423. Each project was funded separately and assigned a different 3-digit category code, with no individual project costing more than \$25,000 (then the cost ceiling for projects financed by operation and maintenance funds). We stated:

"The category codes enumerated above are defined in DOD Instruction 4165.3 as covering the following types of facilities--

- 610 Administrative Buildings
- 723 Troop Housing -- Detached Facilities
- 811 Electricity Source (including generating plant)
- 841 Water Supply, Treatment and Storage
- 872 Grounds Fencing, Gates and Guard Towers

"While it can be contended that the establishment of separate projects of less than \$25,000 each did not violate the

literal terms of DOD Directive 7040.2 [which implements 10 U.S.C. §2674], such action is not consistent with the spirit and purpose of the Directive. These separate projects in and of themselves would have served little purpose, if any. Their primary use was only as a part of the overall purpose of establishing a Field Forces I headquarters."

We think that this reasoning applies with equal force to the case at hand.

Cost of the Consolidation

As stated earlier, several projects have been proposed for Brooks AFB to support or provide facilities for the consolidated laboratory. In accordance with the previously discussed Air Force position, these projects are considered separate minor construction projects for purposes of 10 U.S.C. §2674 and its implementing regulations.

The primary project is for the modification of four buildings at an estimated cost of \$398,800. This project has a category code of 530, "Laboratories." However, the project does not provide for either a calibration range, which would be used by radiological personnel for measuring radiation levels, or a field kit preparation area, which would be used by both radiological and environmental personnel for "fly-away" travel to other locations. Air Force officials admit that the functions to be performed by a calibration range and a field kit preparation area are necessary for the support of the consolidated laboratory and that these functions are in fact performed at the existing laboratories, but they have not added the costs of those projects to the cost of the primary construction project.

With respect to the calibration range, in December 1976, the Air Force planned a separate minor construction project costing approximately \$75,000 in operation and maintenance funds. However, in its response to our December 7, 1976, letter to the Secretary of Defense, the Air Force concluded that this \$75,000 project was inappropriate, and the approval for it was withdrawn.

Currently, the Air Force plans to satisfy the calibration range requirement by adding its revised cost of about \$2,600 to another project having a 3-digit category code of 310, "R&D [Research and Development] and Test Buildings." However, the Commander of the Radiological Health Laboratory has informed us that the laboratory is prohibited from performing research and development functions.

In December 1976, it was planned that the requirement of a field kit preparation area would be satisfied in a manner similar to the calibration range requirement. A separate \$75,000 minor construction project was approved. However, in its response to our December 7 letter, the Air Force decided that this project was also inappropriate, and approval for it was withdrawn.

At the present time, Brooks AFB officials do not know exactly how the requirement of a field kit preparation area will be satisfied. We were told that this function may be housed in one of three buildings at Brooks AFB and that the construction costs associated with the project are expected to be nominal.

In our opinion, the costs of providing the calibration range and field kit preparation area should not only be determined before undertaking the primary construction project, but they should also be included within the cost of the primary construction project. The functions to be performed by these projects are admitted to be necessary in support of the consolidated laboratory. Therefore, inclusion of their costs, regardless of the 3-digit category code assigned to them, would appear to be consistent with paragraph 5-5.a.(3) of Air Force Manual 86-1, quoted above. Further, inclusion of the costs of the two projects would be consistent with the following definition of "construction project" in the Glossary of Terms for Department of Defense Directive 7040.2, February 22, 1972:

"Construction project. A single acquisition of land or real property or a construction undertaking for purposes of programing, budgeting and accounting. A project will include any separate physical structure or facility at a single

installation, which upon completion will be utilized to serve a single functional purpose, or a group of similar structures or facilities as, for instance, a group of barracks buildings or a group of warehouse structures. A construction project will generally include such auxiliary facilities (e.g., utility feeder lines and roadways) as are required to result in a useful increment of construction."

The fourth minor construction project proposed in support of the consolidated laboratory is the hazardous storage facility, which has previously been mentioned. This facility was given a 3-digit category code of 442, "Storage--Covered--Installation and Organizational." Although the documents justifying this project indicate that it is primarily required to support the consolidated laboratory, the Air Force has not added any of the costs of this project to the primary project costs because there is a different facility and different 3-digit category code involved.

Our review indicates that approximately 25 percent of the space in the hazardous storage facility will be needed to support the consolidated laboratory. Therefore, it appears that a substantial portion of the estimated cost of the hazardous storage facility has been justified and approved as a consequence of the primary construction project relating to the consolidation.

In addition to the above, 13 work orders have been initiated by the School of Aerospace Medicine for the purpose of modifying certain facilities for the School at a cost of approximately \$77,500. The School currently occupies part of the facilities to be renovated for the consolidated laboratory, and the documentation for the work orders indicates that the School is moving to the facilities that are modified by the work orders as a "direct result" of the consolidation. In our December 7 letter, we questioned whether the work orders should have been included as a funded cost of the primary construction project in accordance with paragraph 5-3 of Air Force Manual 86-1, 26 September 1973, which states in part:

"a. Funded Costs. * * * Funded project costs will include, but will not necessarily be limited to:

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* * * * *

"(6) Construction agency overhead (Corps of Engineers, Naval Facilities Engineering Command, etc.). This further includes that portion of installations overhead or support costs which can be identified as representing additional costs which would not have been incurred were it not for the project. An example would be the overhire of a construction inspector for a specific project." (Emphasis added.)

Although the Air Force did not refer to this regulation in its February 3 letter, we were informally advised that this regulation is interpreted as applying only to the overhead of a construction agency such as the Corps of Engineers or the Naval Facilities Engineering Command. Since the 13 work orders are to be performed by private contractors, the Air Force does not believe the costs of those contracts are required to be included under the regulation. In our opinion, while the regulation is not entirely clear, it may more reasonably be read to cover additional costs justified and approved by an installation because of a minor construction project.

We believe the costs of the 13 work orders and at least a portion of the cost of the hazardous storage facility should be added to the costs of the primary construction project. Such a result would be consistent with the spirit and purpose of 10 U.S.C. §2674 and its implementing regulations, and since the costs were generated by and justified on the basis of the consolidated laboratory's needs, their inclusion would seem to be a more reasonable method of computing project costs than the method employed by the Air Force. Furthermore, in our opinion, inclusion of these costs would clearly be within the scope of the DOD and Air Force guidance quoted above.

Also, several items, such as a loading dock and a water tank, were initially among the stated needs of the consolidated laboratory, but had to be deleted to bring the project cost within the \$400,000 limitation. These deletions, plus the significant reduction in the estimated cost of providing a calibration range and field kit preparation area, raise questions as to whether there may need to be further expenditures relating to the consolidation in the near future. Concern over this type

of situation was expressed as follows in a Report of the House Committee on Government Operations, entitled "Illegal Actions in the Construction of the Airfield at Fort Lee, Va."

"Still another method of ignoring section 2674 is the 'foot in the door' technique whereby administrative approval of a project is first obtained and then, after considerable sums, both 'funded' and 'unfunded,' have been spent, plans for further construction and improvement of the facility are included in the military construction program submitted to Congress. The justification is that further funds are necessary to protect or enhance an already large investment which has not yet resulted in full realization of its objective.
* * * H.R. Rep. No. 1858, 87th Cong., 2d Sess. 7 (1962).

Conclusion

In view of our reservations as to the urgency of the consolidation and the proper scope and ultimate costs of the minor construction projects generated by it, we believe the accomplishment of the consolidation, as planned, would, at the least, contravene the spirit and purpose of 10 U.S.C. §2674 and its implementing regulations. For this reason, it would be more appropriate for the Air Force to submit the consolidation to Congress for approval and funding through the normal appropriation process than to attempt to accomplish it under the authority of 10 U.S.C. §2674.