

March 1999

MILITARY HOUSING

Costs of Separate
Barracks for Male and
Female Recruits in
Basic Training



DISTRIBUTION STATEMENT A
Approved for public release;
Distribution Unlimited

19990308174

DTIC QUALITY INSPECTED 1



United States
General Accounting Office
Washington, D.C. 20548

National Security and
International Affairs Division

B-282081

March 1, 1999

The Honorable John Warner
Chairman
The Honorable Carl Levin
Ranking Minority Member
Committee on Armed Services
United States Senate

The Honorable Floyd D. Spence
Chairman
The Honorable Ike Skelton
Ranking Minority Member
Committee on Armed Services
House of Representatives

In response to a mandate in the National Defense Authorization Act for Fiscal Year 1999, we determined each military service's costs if required to provide housing for male and female recruits during basic training in separate structures.¹ We also (1) obtained the services' views on housing male and female recruits in separate barracks and (2) reviewed the services' compliance with the act's requirement to provide separate and secure areas for male and female recruits if they are housed in the same barracks.

Background

In June 1998, the Secretary of Defense approved plans of the military services to improve initial entry training programs and policies. The plans included measures to provide for the safety, security, privacy and appropriate supervision of recruits in barracks, a goal that responds to recommendations made by the Federal Advisory Committee on Gender-Integrated Training and Related Issues (also known as the Kassebaum-Baker panel). With these measures in place, the Army, Navy, and Air Force planned to continue housing male and female recruits on separate floors or in separate areas of the same barracks. The Marine Corps planned to continue housing male and female recruits in separate barracks.

Housing for male and female recruits has also been a concern of the Congress. The National Defense Authorization Act for Fiscal Year 1999 required the services to provide separate and secure housing for male and

¹P.L. 105-261 section 521(d), October 17, 1998.

female recruits with separate entrances and with sleeping and latrine areas separated by permanent walls.² According to the act, if an installation cannot meet this requirement by October 1, 2001, it must house males and females in separate facilities.

The services conduct gender-integrated basic training at Forts Leonard Wood, Jackson, and McClellan;³ Great Lakes Naval Training Command; and Lackland Air Force Base. The Marine Corps conducts gender-segregated basic training at Marine Corps Recruit Depot, Parris Island. The Army plans to move Fort McClellan's gender-integrated basic training to Fort Leonard Wood in fiscal year 1999 and begin gender-integrated basic training at Fort Sill in May 1999.

Results in Brief

We determined that the services would not incur additional construction costs if they housed male and female recruits in separate barracks. Our analysis showed that on the basis of the peak number of male and female recruits at each basic training installation during fiscal year 1998, the barracks capacity at each installation was sufficient to house male and female recruits in separate barracks. To meet personnel requirements over the next 5 years, the Army and the Navy forecast an increase in the annual number of recruits in basic training. If the two services' forecast is accurate, some new barracks would need to be constructed to meet recruit housing requirements. However, our analysis showed that the amount of new construction and the associated costs would be the same whether male and female recruits are housed in the same or in separate barracks.

The Army had previously estimated that \$271 million would be needed for barracks construction if male and female recruits were housed in separate barracks. The Army based this estimate on the assumption that, to maintain unit integrity, it would house only one training unit in a barracks. Thus, the Army assumed that barracks areas vacated when females moved out would not be reassigned to males from other training units and that new barracks would be constructed for the females. We believe that effective leadership and management oversight could overcome problems in sharing of barracks space and that the added costs of constructing separate buildings could thereby be avoided. The Army already assigns

²P.L. 105-261 section 521(a), (b), and (c), October 17, 1998.

³For the purposes of this report, we have included in basic training the Army's One Station Unit Training. This training combines basic training and advanced individual training into one continuous course.

more than one training unit to its newer 1,200-person recruit barracks providing each unit with a separate area of the barracks. Our analysis assumed that recruit barracks could be shared by more than one training unit and that each unit could be provided a separate floor or area for housing its members.

Army, Navy, and Air Force officials opposed housing male and female recruits in separate barracks. According to these officials, gender-integrated training is important in order to train recruits in a fashion mirroring the way they will operate and fight in their operational units, and this training can be conducted most effectively and efficiently when male and female recruits are assigned to separate areas of the same barracks. They also said that current recruit housing practices already provide separate and secure housing and that little, if any, additional security would be achieved if males and females were housed in separate buildings. They further said that placing males and females in separate barracks would (1) increase requirements for enlisted female supervisors to manage the barracks, thereby exacerbating an existing shortage of females in this skill area and (2) add training costs because of the time lost traveling between barracks whenever males and females attended the same training event.

According to service officials, recruit barracks at gender-integrated basic training installations, except for some at Fort Jackson, comply with the recruit housing requirements of the National Defense Authorization Act for Fiscal Year 1999. Male and female recruits are assigned to separate and secure sleeping and latrine areas on different floors or in discrete sections of the barracks. Separate entrances are provided to the male and female housing areas, and a security watch normally controls access to the areas. To bring Fort Jackson's barracks into full compliance, the Army plans to replace temporary walls in older barracks with permanent walls and install alarmed, metal doors. These modifications are estimated to cost about \$314,000 and are scheduled to be completed by March 30, 1999. During our January 1999 visits to the installations that conduct gender-integrated basic training, we toured several barracks. These barracks provided separate and secure sleeping and latrine areas for males and females.

Appendixes I through IV contain details of our analysis of each service's costs if required to provide housing for male and female recruits in separate barracks. Appendix V provides a summary of our analysis. Appendix VI contains our objectives, scope, and methodology.

Agency Comments and Our Evaluation

In oral comments on a draft of this report, the Department of Defense (DOD) did not agree with the results of our analysis showing that no additional barracks construction costs would be incurred if male and female recruits lived in separate barracks. DOD endorsed the Army's view that all soldiers assigned to a recruit training company should be housed in the same barracks for unit cohesion and to instill values and teamwork. If males and females were required to live in separate buildings, DOD stated that only one company should be housed in a barracks to maintain unit integrity. To accomplish this, DOD stated that additional barracks costing \$271 million would be needed at Army gender-integrated basic training installations.

We agree that unit integrity is an important element of the Army's training doctrine. However, limiting a barracks to a single training unit would leave large areas of some buildings unoccupied if female recruits were moved to separate buildings. Spending \$271 million to build additional barracks, yet leaving entire barracks floors vacant would, in our opinion, be wasteful. Using the Army's own argument, the principal of unit integrity would already be broken by housing female members of training units in separate buildings. Housing different training companies in separate areas or on separate floors of a single barracks would not appear to erode unit integrity to any additional extent yet would provide more efficient use of space and minimize construction costs.

DOD disagreed with our conclusion that no additional construction funds would be required at the Navy's recruit training installation if males and females were required to live in separate barracks. DOD reiterated the Navy's position that \$32 million in added construction would be needed to provide new barracks of similar design to existing barracks and to provide some extra capacity needed for assignment flexibility. While maintaining similar construction designs and permitting flexibility would be desirable, we believe it would be wasteful to spend additional funds on facilities that, in fact, are not required, simply for the purposes of conformity and flexibility.

DOD also stated that while our analysis of Air Force barracks spaces is technically correct, it assumed that all barracks would be used for housing recruits. As such, DOD stated that the analysis did not consider that the Air Force plans to keep one barracks closed at any given time to provide for renovations. If all barracks were used for housing, the planned renovations would have to be terminated and there would also be some increase in costs to operate and maintain the additional building. We have

modified our report to reflect this comment. However, the Air Force's recruit housing capacity numbers 7,000 and its peak recruit housing requirement numbers 5,684. With the extra housing capacity, we believe that, as an alternative to halting planned renovations, the Air Force could perform the renovation work in phases by closing sections of a barracks instead of an entire barracks at a time.

Notwithstanding its support for separate male and female barracks in the Marine Corps, DOD stated it supported Army, Navy, and Air Force views that male and female recruits should continue to be housed in separate areas of the same barracks.

DOD also provided some technical comments, which we have incorporated as appropriate.

We are sending copies of this report to other interested congressional committees; the Secretaries of Defense, the Army, the Navy, and the Air Force; and the Commandant of the Marine Corps. We will also make copies available to other interested parties on request.

Please contact me at (202) 512-5140 if you or your staff have any questions about this report. Major contributors to this report are listed in appendix VII.



Mark E. Gebicke
Director, Military Operations
and Capabilities Issues

Contents

Letter		1
Appendix I		8
Separate Barracks in the Army	Separate Barracks at Fort Leonard Wood	8
	Separate Barracks at Fort Jackson	10
	Separate Barracks at Fort Sill	11
	Army Estimates of Additional Barracks Costs	12
	Army Concerns About Separate Barracks	12
Appendix II		14
Separate Barracks in the Navy	Costs of Separate Barracks	14
	Navy Concerns About Separate Barracks	15
	Compliance With Separate and Secure Provisions	15
Appendix III		17
Separate Barracks in the Air Force	Costs of Separate Barracks	17
	Air Force Concerns About Separate Barracks	18
	Compliance With Separate and Secure Provisions	18
Appendix IV		20
Separate Barracks in the Marine Corps	Costs of Separate Barracks	20
	Marine Corps Comments About Separate Barracks	20
	Compliance With Separate and Secure Provisions	20
Appendix V		22
Comparison of Peak Recruit Barracks Requirements and Costs for Fiscal Year 2003		
Appendix VI		23
Objectives, Scope, and Methodology		

Appendix VII Major Contributors to This Report	25
Table	Table V:1 Comparison of Barracks Requirements and Costs 22

Abbreviations

DOD Department of Defense

Separate Barracks in the Army

The Army conducts gender-integrated basic training at Fort Leonard Wood, Missouri; Fort Jackson, South Carolina; and Fort McClellan, Alabama.¹ Because the Army is transferring Fort McClellan's gender-integrated training to Fort Leonard Wood in fiscal year 1999, we included Fort McClellan's trainee population as part of our analysis of facilities at Fort Leonard Wood. The Army also plans to begin gender-integrated basic training at Fort Sill, Oklahoma, in May 1999.

Separate Barracks at Fort Leonard Wood

Fort Leonard Wood has 30 similar, three-story barracks. With a maximum capacity of 290 recruits in each building, Fort Leonard Wood's total recruit housing capacity is 8,700 trainees.² Females are assigned to the first floor and males normally are assigned to the second and third floors.

During fiscal year 1998, the peak recruit population at Fort Leonard Wood numbered 5,267, including 3,922 males and 1,345 females. If Fort McClellan's fiscal year 1998 training load had also been conducted at Fort Leonard Wood, the peak recruit population would have increased to 7,601, consisting of 5,674 males and 1,927 females. On the basis of this peak population and the capacity of the existing barracks inventory, our analysis showed that Fort Leonard Wood could provide housing for males and females in separate buildings with no additional barracks construction costs. Assigning male and female recruits to separate barracks would no longer allow for all members of a training company to be housed in the same barracks. Our analysis assumed that male and female barracks would house recruits from more than one training company although each company could be provided a separate floor for housing its members.

Over the next 5 years, the Army projects a substantial increase—about 21 percent—in its annual recruit training load. On the basis of this projected increase, we estimated that Fort Leonard Wood's fiscal year 2003 peak recruit training population would be 9,292 recruits, consisting of 6,725 males and 2,567 females. To meet the housing needs for these recruits, Fort Leonard Wood would need additional barracks capacity, even if males and females continued to be housed in the same barracks. Although plans have not been finalized, the Army recognizes the

¹For the purposes of this report, we included in basic training the Army's One Station Unit Training. This training combines basic training and advanced individual training into one continuous course.

²Because of several factors, including limited latrine and laundry facilities in the barracks, Fort Leonard Wood usually assigns one training unit, called a company, with 240 recruits to each barracks. However, headquarters officials responsible for the Army's barracks facilities confirmed that each of the barracks can adequately house 290 recruits. For this reason, in our analysis we used 290 as the capacity of each barracks.

need to construct additional barracks to meet future recruit housing requirements.

Our analysis showed that Fort Leonard Wood would need 592 additional barracks spaces to meet the projected recruit housing requirement in fiscal year 2003 if males and females are housed in the same barracks. The analysis showed that if males and females are housed in separate barracks, Fort Leonard Wood would need 635 additional barracks spaces. In either case, three new barracks each housing 290 recruits would be needed to meet the housing requirement. For this reason, construction costs would be the same whether males and females are housed in the same or in separate barracks.

Our estimate of the cost to construct three recruit barracks similar to Fort Leonard Wood's existing barracks is about \$22 million in fiscal year 2000 dollars. However, the Army's current concept for new recruit barracks calls for the construction of a larger complex consisting of barracks and other facilities for dining, administration, training, and support functions. The Army's standard plan for this barracks complex includes housing for 1,200 recruits, company operations and training spaces, a battalion headquarters, classrooms, a dining hall, a central energy plant, and an outdoor running track. The Army estimated that such a complex, which would meet the projected additional recruit housing requirements at Fort Leonard Wood, would cost about \$56 million. Regardless of how the Army decides to meet the projected recruit housing requirement, no additional barracks construction costs would be required if male and female recruits were housed in separate barracks. Appendix V contains additional details of our analysis.

Compliance With Separate and Secure Provisions

Army officials stated that the barracks at Fort Leonard Wood are in compliance with the requirement for separate and secure housing for males and females. In barracks that house both males and females, males normally occupy the second and third floors and females occupy the first floor. Each floor contains sleeping and latrine areas and is separated by permanent walls from other floors. Separate entrances are used for the male and female areas and a security watch is maintained on each floor when recruits are in the sleeping areas. In addition, locked doors separating male and female areas are alarmed and centrally monitored 24 hours a day.

During our visit to Fort Leonard Wood in January 1999, we toured three barracks. These barracks provided separate and secure sleeping and latrine areas for males and females.

Separate Barracks at Fort Jackson

Fort Jackson has 16 recruit barracks with a total housing capacity of 9,320 recruits. Six of these barracks are of the Army's "starship" design each with a housing capacity of 1,100 recruits.³ Ten barracks are the older three-story design, with a housing capacity of 272 recruits each. Males and females in starship barracks are assigned to separate bays of the buildings, and males and females in the older three-story barracks are assigned either to separate floors or to separate areas on the same floor of the buildings.

During fiscal year 1998, the peak recruit population at Fort Jackson numbered 7,047, consisting of 4,580 males and 2,467 females. On the basis of this peak population and the existing barracks inventory, our analysis showed that Fort Jackson could provide housing for males and females in separate buildings with no additional barracks construction costs. Similar to Fort Leonard Wood, assigning male and female recruits to separate barracks would no longer allow for all members of a training company to be housed in the same barracks although members of the same company could be assigned to a separate floor or area in the barracks.

On the basis of the Army's projected increase in its annual recruit training load over the next 5 years, we estimated that Fort Jackson's fiscal year 2003 peak recruit training population would number 8,715, consisting of 5,429 males and 3,286 females. On the basis of this peak population and the existing barracks inventory, our analysis showed that Fort Jackson could provide housing for males and females in separate buildings with no additional barracks construction costs. Appendix V contains additional details of our analysis.

Compliance With Separate and Secure Provisions

Army officials stated that the barracks at Fort Jackson require some modifications to be in complete compliance with the recruit housing provisions of the National Defense Authorization Act for Fiscal Year 1999. In some of the older barracks at Fort Jackson, males and females were assigned to separate areas on the same floors. The areas have separate entrances and provide separate sleeping and latrine areas. However, a

³A starship-designed barracks normally has three stories and five separate wings. The first floor is used for operations and training, and the second and third floors are used for recruit housing.

temporary wall separates the male and female areas. The wall is designed so that it can be knocked down in an emergency to provide an alternative exit from the area. If the wall is knocked down, an alarm sounds. Army officials stated that the temporary walls will be replaced with permanent walls with metal doors. Each door will have a concealed magnetic switch wired to an alarm monitored 24 hours a day. The Army estimated that the modifications would cost about \$314,000 and would be completed by March 30, 1999. To provide increased security, the Army also planned modifications in the starship barracks, where males and females are assigned to separate bays each containing sleeping and latrine areas. Each bay has an entry door and a fire escape door. A watch is posted at the entry door when recruits occupy the bay, and the fire escape door is kept locked to the outside. Army officials stated that they plan to install monitored security alarms on each entry door. The estimated cost for the alarms was about \$300,000, and the work was expected to be completed by June 7, 1999.

During our visit to Fort Jackson in January 1999, we toured two barracks: one of the starship design and one of the older design. The barracks provided separate and secure sleeping and latrine areas for males and females. However, as discussed above, an alarmed temporary wall separated the male and female areas in the older barracks.

Separate Barracks at Fort Sill

Fort Sill has five recruit barracks with a total housing capacity of 5,500 recruits. Each of these barracks is of the newer starship design with a housing capacity of 1,100 recruits. Gender-integrated basic training at Fort Sill is scheduled to start in May 1999.

During fiscal year 1998, the peak recruit population at Fort Sill numbered 3,460 males. On the basis of the Army's projected increase in its annual recruit training load, we estimated that Fort Sill's fiscal year 2003 peak male recruit training population would number 4,101. The Army estimated that Fort Sill's peak female recruit population over the next 5 years would number 1,023, providing a total peak population of 5,124 recruits. On the basis of these estimated numbers and the existing barracks inventory, our analysis showed that Fort Sill could provide housing for males and females in separate buildings with no additional barracks construction costs. Appendix V contains additional details of our analysis.

Army officials stated that Fort Sill's barracks are designed so that male and female recruits can be housed in compliance with the separate and

secure recruit housing provisions of the National Defense Authorization Act for Fiscal Year 1999. We did not visit Fort Sill during our review.

Army Estimates of Additional Barracks Costs

The Army previously estimated that \$271 million would be required to provide housing for male and female recruits in separate buildings at Forts Leonard Wood, Jackson, and Sill. This estimate included construction of five new and modification of two existing starship design barracks complexes. In preparing the estimate, the Army assumed that unit integrity would be maintained in barracks assignments and that only one training company would be housed in a barracks or barracks wing. Under this assumption, significant new barracks construction would be required because most barracks space vacated when females moved out would remain vacant, requiring new barracks to be built to house the females. To illustrate, consider a single recruit training company that occupies a three-story barracks, with females assigned to the first floor and males assigned to the second and third floors. Under the Army's assumption, if the females moved out, spaces on the first floor would not be reassigned to male trainees from another company. With no consolidation of male recruits into fewer barracks, females would have no barracks to move to, requiring construction of new barracks to house nearly the entire female recruit population.

Maintaining unit integrity is an important element of the Army's training doctrine, and we believe that different training companies could share a barracks without sacrificing unit integrity by occupying separate floors or areas. Such sharing already occurs in the newer starship design recruit barracks. Further, assuming continuation of gender-integrated training, all recruits in a training company would not be housed in the same barracks if male and female recruits were required to be housed in separate buildings. We believe that effective leadership and management oversight could overcome problems in sharing barracks space and that the added cost of new construction could thereby be avoided. Our estimates, as discussed above, assumed that recruit barracks would be shared by more than one training company, although each company could be provided a separate floor for housing its members.

Army Concerns About Separate Barracks

Army officials stated that they opposed housing male and female recruits in separate barracks. According to the officials, gender-integrated training is important to the Army in order to train recruits in a fashion mirroring the way they will operate and fight in their operational units, and this

training can be conducted most effectively and efficiently when male and female recruits are assigned to separate areas of the same barracks. In their opinion, keeping male and female recruits in the same barracks enhances unit integrity and command and control of the training units.

Army officials also stated that the current recruit housing practices provide separate and secure housing for males and females and that little, if any, additional security would be achieved if males and females were housed in separate buildings. The officials also stated that placing males and females in separate barracks would (1) require an increase in the number of enlisted female supervisors needed to manage the buildings and (2) reduce training effectiveness because of the additional coordination required and the time lost to provide for travel between barracks whenever males and females attended the same training event.

Separate Barracks in the Navy

The Navy's sole installation for conducting recruit basic training is the Navy Recruit Training Command at Great Lakes, Illinois. The Navy has no plans to conduct basic training at any other location. Recruit basic training at Great Lakes is gender-integrated and housing for males and females is provided on separate floors of the same barracks.

Costs of Separate Barracks

Great Lakes operates its barracks under a waiver from the Department of Defense (DOD) recruit barracks standard, which allows each occupant 72 net square feet of living area. Under the waiver, Great Lakes provides each barracks occupant with 50 net square feet of living area. This provides Great Lakes with a maximum capacity of 16,168 recruits in 15 barracks. Each barracks has three floors, and each floor has four separate sections, called compartments, for a total of 12 compartments. Each compartment includes sleeping and latrine areas and normally houses a training unit, called a division, consisting of 88 to 94 recruits. Eight compartments of one barracks are used to house recruits removed from the normal training sequence for medical reasons or for remedial training needs.

During fiscal year 1998, the peak recruit population at Great Lakes numbered 14,515, consisting of 11,718 males and 2,797 females. With this peak training population and the existing barracks inventory, Great Lakes could provide housing for males and females in separate buildings with no additional barracks construction. This assumes that Great Lakes continues to operate under the waiver allowing 50 net square feet of living area for each recruit.

The Navy forecasts an increase in its recruit training load over the next 5 years. Between fiscal year 1999 and 2003, the Navy forecasts a peak recruit training population of 17,217 recruits, consisting of 14,634 males and 2,583 females. The Navy was considering options for meeting the expected increase in recruit housing requirements. Although plans have not been finalized, Great Lakes officials stated that one additional barracks with three floors and 12 compartments would be needed, providing that males and females continued to occupy separate floors of the same barracks. Using standard DOD estimating methods and allowing 72 net square feet of living area for each recruit, we estimated that this new barracks, with a maximum capacity of 1,128 recruits, would cost about \$32 million in fiscal year 2000 dollars.

We estimated that if males and females were housed in separate buildings, the same amount of additional housing, 1,128 spaces in 12 compartments, would be required to meet the projected peak recruit populations for males and females. However, instead of one building, two barracks would be required—one with 752 spaces in eight compartments and one with 376 spaces in four compartments. Assuming that the Navy would construct an eight-compartment barracks and a four-compartment barracks, the cost of the two barracks would be about the same as the cost to meet the increased training population with males and females in the same barracks—\$32 million. Thus, we concluded that no additional construction costs would be required if males and females were housed in separate barracks. Appendix V contains additional details of our analysis.

Officials at Great Lakes stated that they would prefer that any new barracks constructed at Great Lakes be similar to the existing 12-compartment barracks. They stated that, instead of an eight-compartment and a four-compartment barracks, two 12-compartment barracks would be needed to meet the projected peak recruit populations if males and females were housed separately. The officials stated that although this approach could result in excess barracks capacity, recruit population projections are uncertain and some housing flexibility should be included in any building plans. Constructing an additional barracks would require another \$32 million.

Navy Concerns About Separate Barracks

Navy officials at Great Lakes stated that they opposed housing male and female recruits in separate barracks. They stated that current practices provide separate and secure housing for males and females and that little, if any, additional security would be gained if males and females were in separate buildings. The officials also stated that placing females in separate barracks would require an increase in the number of enlisted female supervisors needed to manage the buildings. According to the officials, this would present a problem because the Navy already has a shortage of females in this skill area.

Compliance With Separate and Secure Provisions

Navy officials stated that the barracks at Great Lakes are in compliance with the recruit housing provisions of the National Defense Authorization Act for Fiscal Year 1999. In barracks that house both males and females, males occupy the first and second floors and females occupy the third floor. Each of the four compartments on each floor contains sleeping and latrine areas and is separated by permanent walls from other

Appendix II
Separate Barracks in the Navy

compartments. Each compartment has three entrances. The front and rear entrances are kept locked and only training supervisors have keys. The third entrance is an emergency exit in the latrine area. This entrance is locked to the outside and is centrally monitored with an alarm system. Also, a security watch monitors access to each compartment 24 hours a day, and each barracks has a security watch at the main entrance to the building on the first floor 24 hours a day.

During our visit to Great Lakes in January 1999, we toured one barracks. The barracks provided separate and secure sleeping and latrine areas for males and females.

Separate Barracks in the Air Force

The Air Force's sole installation for conducting recruit basic training is Lackland Air Force Base in San Antonio, Texas. The Air Force has no plans to conduct basic training at any other location. Recruit basic training at Lackland is gender-integrated and housing for males and females is provided in separate, discrete areas of the same barracks.

Costs of Separate Barracks

Lackland has seven similar, three-story barracks. Each building provides recruit housing on the second and third floors. Each floor includes 10 separate dormitories, and each dormitory contains sleeping and latrine areas for one training unit, called a flight. Although the standard size of a training unit is 48 trainees, 50 to 60 trainees are often assigned to each unit. Using 50 trainees as a typical unit size, each barracks at Lackland has a capacity of 1,000 trainees and Lackland's total recruit capacity numbers 7,000.

During fiscal year 1998, the peak recruit population at Lackland numbered 5,684, consisting of 4,178 males and 1,506 females. Air Force officials projected that the recruit training load at Lackland would remain constant over the next 5 years. Therefore, no significant change in the peak number of male and female recruits was expected.

With the existing barracks inventory and on the basis of the fiscal year 1998 and projected peak male and female recruit populations, our analysis showed that Lackland could provide housing for males and females in separate buildings with no additional barracks construction costs. Air Force officials said that while our analysis is technically correct, it assumed that all barracks would be used for housing recruits. As such, the analysis did not consider that the Air Force plans to keep one barracks closed at any given time to provide for renovations. If all barracks were used for housing, the officials said the planned renovations would have to be terminated and there would also be some increase in costs to operate and maintain the additional building. The Air Force estimated that about \$1.4 million would be required to initially open the additional building and that \$1.3 million would be required annually to operate and maintain the building. Because Lackland's housing capacity exceeds peak recruit requirements by over 1,300 spaces, we believe that, as an alternative to halting planned renovations, the Air Force could perform the renovation work in phases by closing sections of a barracks instead of an entire barracks at a time. Appendix V contains additional details of our analysis.

Air Force Concerns About Separate Barracks

Air Force officials stated that they oppose housing males and females in separate barracks during recruit basic training. First, they noted that because male and female recruits are already assigned to physically separate and secure areas, little, if any, additional security would be achieved if males and females were in separate buildings. Second, they stated that assigning females to separate buildings would increase requirements for female training supervisors and thereby increase training costs. Third, they noted that Lackland's barracks are not all located in the same area—a distance of nearly a mile separates some of the buildings. The separation is not currently a problem because males and females that train together are housed in the same building. However, if housed in separate buildings, travel time would be required whenever males and females attended the same training event. The officials estimated that up to 3 hours a day could be spent in needless travel between barracks and gender-integrated training events, making it extremely difficult to continue gender-integrated training. Finally, the officials stated that gender-integrated training is essential to the Air Force and that segregating males and females into separate barracks would adversely affect gender-integrated training effectiveness and in the long run degrade operational unit readiness.

Compliance With Separate and Secure Provisions

Air Force officials stated that the barracks at Lackland are in compliance with the recruit housing provisions of the National Defense Authorization Act for Fiscal Year 1999. Male and female recruits are housed separately in discrete dormitories, each of which contains sleeping and latrine areas. Each dormitory has a separate entrance, and access is controlled by a watch posted at the door. The main entrance to each barracks also has a security watch 24 hours a day and all entryways and fire exits are monitored by surveillance cameras.

Air Force officials stated that one modification is planned for Lackland's barracks to increase security. Currently, a door connects the dormitories in each barracks. The doors are solid wood, 2 inches thick, and are alarmed and kept locked at all times. Keys to the doors are controlled by training supervisors. The doors were included in the original construction of the barracks because the buildings were designed for use as emergency shelters, if needed. To obtain increased security, Lackland plans to remove the doors and have the passageways sealed with cinder block walls. This work will be done during planned renovations of the barracks, and all work is expected to be completed by March 2001. The Air Force estimated that this work will cost about \$87,500.

Appendix III
Separate Barracks in the Air Force

During our visit to Lackland in January 1999, we toured one barracks. The barracks provided separate and secure sleeping and latrine areas for males and females.

Separate Barracks in the Marine Corps

The Marine Corps conducts recruit basic training for males and females at only one installation—the Marine Corps Recruit Depot, Parris Island, South Carolina. The Marine Corps has no plans to conduct basic training for females at any other location. Recruit basic training at Parris Island is gender separate and housing for male and female recruits is primarily provided in separate barracks.

Costs of Separate Barracks

Parris Island has 25 barracks with a total housing capacity for 8,324 recruits. Normally, 18 buildings with a capacity of 6,772 trainees are available for male recruits, and 6 buildings with a capacity of 1,152 trainees are available for female recruits. One building is used for male and female recruits assigned to the Support Battalion for medical rehabilitation, physical conditioning, or remedial swim training. This building has eight separate bays, and females are assigned to one of these bays.

During fiscal year 1998, the peak recruit population at Parris Island numbered 6,505, consisting of 5,708 males and 797 females. Marine Corps officials projected that the recruit training load at Parris Island would remain constant over the next 5 years. Therefore, no significant change in the peak number of male and female recruits was expected.

With one exception, the Marine Corps already houses male and female recruits in separate barracks. If required, Parris Island has sufficient barracks capacity to move the females in the one shared barracks to a separate building. Thus, Parris Island would need no additional barracks construction if the services were required to house males and females in separate buildings.

Marine Corps Comments About Separate Barracks

The Marine Corps does not conduct gender-integrated basic training similar to the other services. Marine Corps officials stated that they support separate barracks for males and females during Marine Corps recruit basic training.

Compliance With Separate and Secure Provisions

Marine Corps officials stated that Parris Island is in compliance with the Fiscal Year 1999 National Defense Authorization Act's requirements for separate and secure housing for males and females. Only 1 of the 25 barracks at Parris Island houses both males and females. In this building, males and females are assigned to separate bays with separate entrances and separate sleeping and latrine areas. The bays are separated by

Appendix IV
Separate Barracks in the Marine Corps

permanent walls, and the female bay has alarmed doors and a security watch posted when occupied. During our visit to Parris Island in January 1999, we toured five barracks, including the barracks that houses males and females. The barracks provided separate and secure sleeping and latrine areas for males and females.

Comparison of Peak Recruit Barracks Requirements and Costs for Fiscal Year 2003

In our analysis of each installation conducting gender-integrated training, we determined the costs of providing housing for male and female recruits in the same barracks and in separate barracks. The analysis matched the peak number of barracks spaces required over the next 5 years with the number of barracks spaces available. If additional spaces would be needed to meet housing needs, we estimated the costs to construct the barracks. As shown in the following table, the analysis showed that the amount of new construction and the associated costs would be the same whether male and female recruits are housed in the same or in separate barracks.

Table V:1 Comparison of Barracks Requirements and Costs

Dollars in millions

Installation	Barracks space	Males and females in the same barracks	Males and females in separate barracks		
			Males	Females	Total
Fort Leonard Wood	Required	9,292	6,725	2,567	9,292
	Available	8,700	6,090	2,610	8,700
	Additional needed	592	635	0	635
	GAO estimated cost	\$22	\$22	\$0	\$22
Fort Jackson	Required	8,715	5,429	3,286	8,715
	Available	9,320	6,020	3,300	9,320
	Additional needed	0	0	0	0
	GAO estimated cost	\$0	\$0	\$0	\$0
Fort Sill	Required	5,124	4,101	1,023	5,124
	Available	5,500	4,400	1,100	5,500
	Additional needed	0	0	0	0
	GAO estimated cost	\$0	\$0	\$0	\$0
Great Lakes Naval Training Command ^a	Required	17,217	14,634	2,583	17,217
	Available	16,168	13,912	2,256	16,168
	Additional needed	1,049	722	327	1,049
	GAO estimated cost	\$32	\$21	\$11	\$32
Lackland Air Force Base	Required	5,684	4,178	1,506	5,684
	Available	7,000	5,000	2,000	7,000
	Additional needed	0	0	0	0
	GAO estimated cost	\$0	\$0	\$0	\$0

Note: The Marine Corps is not included in the table because male and female recruits are already in separate barracks.

^aGreat Lakes data is fiscal year 2002, its projected peak year.

Objectives, Scope, and Methodology

As directed by the National Defense Authorization Act for Fiscal Year 1999, we determined each military service's costs if required to provide housing for male and female recruits during basic training in separate structures. We also (1) obtained the services' views on housing male and female recruits in separate barracks and (2) reviewed the services' compliance with the act's requirement to provide separate and secure areas for male and female recruits if they are housed in the same barracks.

We performed work at the Office of the Secretary of Defense and the headquarters of each military service. We also visited each military installation, except Fort McClellan, that conducts recruit basic training concurrently for males and females—Fort Leonard Wood, Missouri; Fort Jackson, South Carolina; Great Lakes Naval Recruit Training Command, Illinois; Lackland Air Force Base, Texas; and Marine Corps Recruit Depot, Parris Island, South Carolina. We did not visit Fort McClellan because the Army plans to transfer its gender-integrated basic training function to Fort Leonard Wood during the summer of 1999. We also did not visit Fort Sill, which is scheduled to begin gender-integrated training in 1999, but we did obtain and review applicable information from the installation. For the purposes of this report, we included in basic training the Army's One Station Unit Training. This training combines basic training with advanced individual training into one continuous course.

To determine the costs of providing housing for male and female recruits in separate buildings, we interviewed responsible agency personnel and reviewed information from each service pertaining to (1) male and female peak recruit training populations for fiscal year 1998 and projected male and female peak recruit populations for fiscal years 1999-2003; (2) existing and planned recruit barracks inventories, capacities, and assignment practices; and (3) military construction costs for recruit barracks. At each installation visited, we discussed with local officials how the recruit training population could be matched with the existing barracks inventory to provide separate housing for males and females and whether additional barracks construction would be required. If additional barracks were required, we independently estimated construction costs using DOD's standard methods for estimating costs of military construction projects.¹

¹We estimated barracks construction costs on the basis of the square footage of each required barracks. First, to determine square footage, we multiplied our estimate of the number of required additional barracks spaces by the DOD maximum gross building square feet allowed for each recruit barracks space. Then, to determine construction costs, we multiplied the square footage by the DOD standard recruit barracks construction cost per square foot for fiscal year 2000. Finally, using DOD and service data, we adjusted this amount for geographic area cost differences and added cost allowances for support facilities; contingencies; and supervision, inspections, and overhead.

Appendix VI
Objectives, Scope, and Methodology

To obtain the services' views on housing male and female recruits in separate barracks and to review the services' compliance with the act's provisions requiring separate and secure housing, we discussed the issues with officials at service headquarters and at the installations conducting basic training concurrently for males and females. Also, during our visits to the basic training installations, we toured barracks to observe how the provisions were being met. If compliance had not been achieved, we obtained information concerning the installation's plans for meeting the provisions.

We conducted our review between December 1998 and February 1999 in accordance with generally accepted government auditing standards.

Major Contributors to This Report

**National Security and
International Affairs
Division, Washington,
D.C.**

Carol Schuster, Associate Director
William Solis, Assistant Director

Norfolk Field Office

Gary Phillips, Evaluator in Charge
James Ellis, Senior Evaluator
Sharon Reid, Senior Evaluator