

National Security and  
International Affairs Division  
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June 1, 1992

The Honorable Patricia Schroeder  
Chairwoman, Subcommittee on Military  
Installations and Facilities  
Committee on Armed Services  
House of Representatives

Dear Madam Chairwoman:

At your request, we have been examining the Army's past and present use of force rotations to determine the feasibility of expanding this approach in the future as a means of reducing permanently stationed forces overseas. As part of this review, we analyzed past Department of Defense (DOD) and Army evaluations of force rotation programs to identify the major factors cited as contributing to the cancellation of past programs and as limiting the potential for expanded use of rotations. On May 18, 1992, we briefed your staff on the status of our work to date. As requested at that meeting, this letter provides our preliminary observations on the factors DOD and the Army cited in the studies.

RESULTS IN BRIEF

The key drawbacks of past force rotation programs that the various DOD and Army studies pointed to were the (1) relatively higher cost of the rotations versus permanent stationing of troops, (2) reduced combat readiness created by the rotations, (3) increase in personal and family problems created when soldiers were rotated without their families, and (4) inadequate force structure in the United States to support overseas rotations.

Our on-going review indicates that

- past cost comparisons have not covered all relevant cost factors and considered a full range of rotation options,
- some decline in readiness routinely occurs whenever units prepare for rotation--both going to a new location and returning from it--regardless of whether such

GAO/NSIAD-92-237R Army Force Rotations

054534 / 146766

rotations are within the continental United States or overseas in peacetime or wartime,

- past studies have not examined what actions other services may have taken to overcome the problems of family separation that are associated with unaccompanied tours, and
- the Army's assessments that its force structure could not sustain force rotation were made prior to recent force reduction actions and did not consider alternatives to a full rotation of forces.

#### RELATIVELY HIGHER COST OF ROTATIONS

Several of the DOD and Army studies have concluded that force rotation is not cost-effective when compared with the permanent stationing of forces and their dependents. We found, however, that these cost comparisons had not always included all relevant costs and had not considered a full range of rotation options. In addition, we found that problems arose in one major rotation program to Europe because some rotation-related costs were not covered and funds had to be diverted from other programs.

In most cases, the studies did not consider the cost of dependent-related infrastructure in making cost comparisons. For example, two studies did not include the costs of operating and maintaining such facilities as dependent schools, day care centers, and family housing, because DOD assumed that these costs would be incurred whether the dependents were overseas or in the United States. This assumption ignores the relative costs of maintaining and operating facilities in the United States and abroad as well as the relative cost of expanding U.S. facilities versus keeping like facilities open in both locations.

With respect to rotation options, the studies generally only compared the costs of rotating personnel on Temporary Duty (TDY) orders for 179-day unaccompanied tours with the costs of stationing troops on an accompanied permanent-change-of-station (PCS) basis. Two studies showed this TDY rotation option to be more expensive when compared with permanent stationing. For example, a 1989 Army study showed the annual cost of rotating an armored battalion to Europe to be from 36 percent to 149 percent higher than the annual cost of the permanent stationing of like forces,

depending on whether an austere or more reasonable TDY option was compared.<sup>1</sup>

Although Members of Congress have generally asked DOD to consider a 6-month TDY rotation option, other lower cost alternatives could have been compared. For example, the relatively higher cost of the 179-day rotation option is attributable to the fact that it entails TDY costs that do not apply to a permanent-change-of-station assignment of 180 days or more. Also, if forces were rotated overseas under garrison conditions, such as the current rotation of troops to Honduras,<sup>2</sup> costs would be significantly reduced. Under garrison conditions, soldiers receive only a modest daily per diem allowance because they are generally housed and fed in military facilities and do not receive such TDY entitlements as lodging, daily bus fare, and the family separation allowance. The lowest cost alternative might be to rotate units under field conditions, in which soldiers rely on a field kitchen and other field services rather than on existing facilities. Under these conditions, the soldier receives no additional benefits during the tour. This alternative would only be feasible for short training rotations.

One study pointed out that problems arose in one major unit rotation program to Europe when not all costs associated with the rotations were funded. This underfunding placed extra burdens on facilities and services of the receiving communities, which were unable to adequately service the increased population without diverting funds from other community programs. Another study assessing this same program noted that installations had difficulty absorbing these additional personnel once the units were disbanded. This program might have been considered more successful had the full cost of the rotations been covered and had there been better planning for the reassignment of the associated personnel.

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<sup>1</sup>The study's reasonable TDY rotational option included all costs in the austere option plus bus transportation to and from the airport and the work site, lodging costs, and meals on the local economy for personnel at the E-7 level and above.

<sup>2</sup>Rotations to Honduras involve such activities as securing telecommunication sites and providing security at airfields.

ADVERSE IMPACTS ON READINESS

Almost every study cited an inability to maintain combat readiness as a significant drawback to rotation programs. Two studies stated that the need to prepare for deployment and redeployment and a period of adjustment required once units were in place negatively affected combat readiness. It should be noted, however, that this adjustment process is not unique to rotational personnel but is probably more noticeable due to the shorter tour of duty for the rotation--6 months--as compared with longer 3-year permanent-change-of-station assignments. In fact, such a period of adjustment would occur whenever a unit deployed for any reason--even those being deployed to a conflict or major training exercise. Our past work examining unit rotations to the National Training Center, for example, has shown this same decline in readiness as units prepare for the rotations as well as upon their return.

One Army official noted readiness problems associated with the Cohesion, Operational Readiness, and Training (COHORT) rotation program to Korea--a program in which forces were formed into units for a 3-year period and rotated as a unit to promote unit cohesiveness. One source of the problems was that unit leaders--unlike the rest of the unit's personnel--were not required to remain with the unit for the duration of the unit's existence. In addition to their frequent turnover, these leaders were also often taken away from their units to attend training courses.

One study also noted that being a member of a cohesive unit adversely impacted a soldier's promotional opportunities, because remaining within the same unit for a 3-year period prevented the soldier from gaining more diversified experiences. According to the Army, these factors led to morale problems that had an adverse effect on readiness. In our opinion, the Army could examine what incentives might be offered to maintain continuity in leadership and to ensure that members of such rotational units were not discriminated against in their promotional opportunities.

Readiness was also cited as a problem with rotations filled by individual replacements. A Forces Command historian noted that the high degree of personnel turnover particularly affected readiness in the Vietnam conflict, in which DOD relied heavily on an individual replacement system. As we continue our review, we will be examining the recent COHORT unit and individual replacement rotations to Korea and assess what could be done to overcome the associated adverse impacts to readiness.

FAMILY PROBLEMS ASSOCIATED WITH UNACCOMPANIED TOURS

According to one DOD study, the families of soldiers assigned to unaccompanied tours became markedly dissatisfied with military life when the tours exceeded about 120 days. The most frequently reported problems involved parent/child relationships; the need to make all major decisions alone, including those related to family finances and relocation arrangements; and feelings of loneliness, isolation, and boredom. One study also noted that it generally took about 45 to 60 days for the family to readjust after the soldier returned home. In view of these drawbacks, the Army believes that an interval of 18 to 24 months between rotations is the minimum needed to maintain family harmony--a factor that it believes is strongly correlated with soldier retention.

One study identified various actions that might be taken to strengthen family support programs and lessen the stress associated with separations. These included expanded counseling and community services and increased administrative support to assist with financial and legal problems. Although the other services also have some overseas assignments that must be accepted on an unaccompanied basis--particularly the Navy--none of the studies we examined compared family support programs or incentives among the services to identify what actions were effective in dealing with the associated problems. Also, some of the problems noted in the studies, such as dissatisfaction created by inadequate prior notice of an unaccompanied tour assignment and poor living conditions, might be significantly reduced through better planning and more installation support in locating acceptable housing.

INADEQUATE FORCE STRUCTURE TO SUPPORT ROTATIONS

The length of time permitted between rotations has an important bearing on the extent to which force rotations can be sustained. This is because the number of like units needed to sustain the rotation rises directly with the interval permitted between rotations. Past studies noted that there were insufficient numbers of like units in the United States to permit a full rotation of forces to Europe, assuming 18 to 24 months were permitted between overseas tours. This shortage of units has been cited in the past as a major reason why rotations to Europe were not possible.

Although such rotations might be more feasible in the future, given the fact that the number of forces in Europe

is expected to be cut in half by the end of fiscal year 1993, an Army official told us that the Army's remaining force structure would still be insufficient to sustain a 100-percent rotation of this residual force. This conclusion is based on the officials' assumption that none of the forces in the Army's 5-division contingency force and none of its forward deployed forces could be made available for rotations, because of their contingency missions. However, this assumption is not consistent with some current practices. For example, battalions from the XVIII Airborne Corps, which the Army says would be unavailable for rotation, are currently being used in rotations to the Sinai as part of the Multinational Force of Observers. Also, during Desert Storm, the Army rotated a battalion from the 25th Light Infantry Division--currently deployed in Hawaii--to the Sinai.

Our preliminary work indicates that even if all active Army units were made available for rotation, only a portion of the forces remaining in Europe could be rotated on a sustained basis, given the number of like units in the force structure. The extent to which rotation of forces could be used depends on a number of factors, such as (1) whether the residual force in Europe could be further reduced, (2) the length of the rotations, and/or (3) the interval between rotations. Force rotation might also become more feasible if it could be determined that certain forces did not need to be in place 365 days a year, and rotations on an intermittent basis could be instituted. Finally, if insufficient units exist to support a rotation program, one option might be to offer incentives for volunteers to participate in a rotation program supported through individual replacements rather than units.

#### SCOPE AND METHODOLOGY

The observations in this letter are based on our initial examination of past DOD and Army studies of rotation programs and limited discussions with Department of the Army Headquarters and U.S. Forces Command personnel. The enclosure to this letter lists the DOD and Army evaluations that we examined.


Because dramatic changes have occurred since these programs were in existence and since the studies themselves were conducted, more study is needed to determine the continued relevance of the obstacles to force rotation pointed out in this letter as well as possible actions to overcome them. We expect to be able to report more definitively on the

B-248861

feasibility of expanding the use of rotational programs in early 1993, after we have completed our detailed review.

Please call me on (202) 275-4141 if you have questions concerning the information contained in this letter.

Sincerely yours,

  
Richard Davis  
Director, Army Issues

Enclosure

ENCLOSURE

ENCLOSURE

SELECTED DOD AND ARMY DOCUMENTS ASSESSING  
PAST FORCE ROTATION PROGRAMS

Army, Battalion Rotation After Action Report, 1987.

Army, Rotation of Ground Combat Units to Europe  
and the Pacific, 1989.

Department of the Army, OCONUS Unit Rotations, 1989.

Department of Defense, Permanent Change of Station Program,  
Report to Congress, 1986.

Department of Defense, Cost of Dependents Overseas, Report to  
Congress, 1990.

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GAO/NSIAD-92-237R Army Force Rotations