

D O C U M E N T E D B R I E F I N G

RAND

Deployability in Peacetime

Bruce R. Orvis

*Prepared for the
United States Army*

Arroyo Center

Report Documentation Page		
Report Date xxxx2002	Report Type N/A	Dates Covered (from... to) 2002 - 2002
Title and Subtitle Deployability in Peacetime Documented Briefing		Contract Number
		Grant Number
		Program Element Number
Author(s) Bruce R. Orvis		Project Number
		Task Number
		Work Unit Number
Performing Organization Name(s) and Address(es) RAND's Arroyo Center 1700 Main Street Santa Monica, CA 90407-2138		Performing Organization Report Number
Sponsoring/Monitoring Agency Name(s) and Address(es)		Sponsor/Monitor's Acronym(s)
		Sponsor/Monitor's Report Number(s)
Distribution/Availability Statement Approved for public release, distribution unlimited		
Supplementary Notes		
Abstract This documented briefing provides formal documentation of work previously undertaken on behalf of the then Chief of Staff of the Army, General Dennis Reimer, and the Deputy Chief of Staff for Personnel, Lieutenant General Frederick Vollrath, to examine issues of deployability in peacetime.		
Subject Terms		
Report Classification unclassified		Classification of this page unclassified
Classification of Abstract unclassified		Limitation of Abstract SAR
Number of Pages 31		

PREFACE

This documented briefing provides formal documentation of work previously undertaken on behalf of the then Chief of Staff of the Army, General Dennis Reimer, and the Deputy Chief of Staff for Personnel, Lieutenant General Frederick Vollrath, to examine issues of deployability in peacetime. In spring 1998, the Chief of Staff raised several questions about personnel deployability rates with the Deputy Chief of Staff for Personnel. They requested RAND's help in determining the answers to these questions and, more generally, in looking at the issue of peacetime deployability. The work has served as a basis for discussions of problems relating to peacetime deployments within the offices of the Deputy Chief of Staff for Personnel, the Deputy Chief of Staff for Programs, the Quadrennial Defense Review, the Secretary of Defense (Program Analysis & Evaluation), and the Deputy Chief of Staff for Operations and Plans. The data contained in the report were collected in 1998–1999 and are accurate as of that time. The issues raised remain relevant—particularly in light of the Army's role in combating terrorism—and we thus continue to carry out related work.

The research was conducted within the Manpower and Training Program of RAND's Arroyo Center. The Arroyo Center is a federally funded research and development center sponsored by the United States Army.

SUMMARY

The Army Chief of Staff's initial questions were "What is the non-deployable rate using Unit Status Report [USR, wartime] criteria?" and "How much does this rate change over time?" These questions grew from the general perception that the wartime non-deployable rate is on the order of 4 percent, whereas the peacetime non-deployable rates being reported at the time the questions were raised were substantially higher. That led to a concern about whether the rate changes over time and, in particular, from the point shortly before a unit is notified of the deployment to shortly thereafter.

The research in this documented briefing was conducted in 1998–1999 for Stabilization Forces (SFORs) 4–7. It reflects Army policies and deployment guidelines in effect at that time. Our research indicated that the USR (wartime) non-deployable rate at the deploying installations was indeed in the 4 percent range, and that it did not change much over time. Thus, the higher non-deployable rates reported for SFOR operations were not a matter of unreported medical profiles or other conditions that might have led to a spike in the USR rates. Rather, we quickly determined that a key issue involved the additional criteria that are imposed for peacetime deployments and their very large impact on deployability. One key criterion is related to the requirement to be available for a minimum of 90 days in country. This grows from the goals of minimizing unit turbulence and allowing adequate time for training in country to ensure safety. The guideline of 90 days in country is coupled with the desire to return individuals to their home stations at least 45 days prior to an impending Permanent Change of Station (PCS) or End of Term of Service (ETS) to allow them to undertake the actions required for these events, complete the paperwork, pack, and take leave that they may have accumulated. Together the practice of not deploying soldiers who cannot be in country for at least 90 days plus, when applicable, and returning them to home station at least 45 days before an impending PCS/ETS creates a 135-day window that has a significant impact on the number of deployable soldiers.

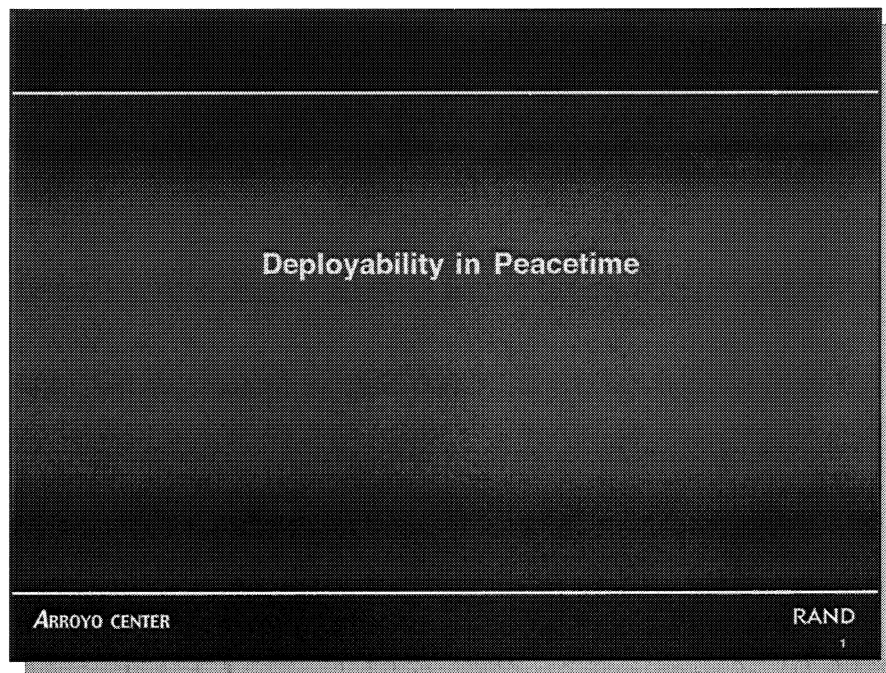
The second key criterion involves the goal of providing a month of stabilization from being deployed for each month of family separation as a matter of equity and quality of life. This is a formal policy in the case of deployments and an informal practice in the case of soldiers returning from unaccompanied tours and, in particular, from Korea. This stabilization also causes a significant increase in the number of non-deployable soldiers.

The 135-day window plus stabilization goals convert the 4 percent wartime non-deployable rate to a non-deployable rate that approaches 40 percent, according to the peacetime criteria. This would be the rate if the Army undertook business as usual. In fact, however, the personnel system responds with actions that are intended to reduce the non-deployable rate and build up the number of deployable soldiers in the division (or installation) responsible for the operation. Those actions involve taking soldiers scheduled to go to other installations off assignment instructions and "fencing" soldiers (leaving them in place) at installations that are going to deploy. These and other such personnel actions are quite successful in reducing the non-deployable rates and increasing the number of soldiers who can be deployed from the targeted installations.

The problem is that the changes that increase the number of deployable soldiers at installations due to participate in deployments have consequences on the rest of the force. These include lowered readiness in other units at the same installations, from whom soldiers must be cross-leveled, and at other installations, where incoming soldiers are now taken off of assignment instructions. There are also effects on the rotation base, which is diminished not only because of soldiers currently deployed overseas, but also because of those who have just returned from overseas deployment (and are now stabilized from PCS) and those who are fenced in preparation for an upcoming deployment.

ACKNOWLEDGMENTS

I am grateful to LTG Frederick Vollrath and LTG David Ohle, the former Deputy Chiefs of Staff for Personnel, our sponsors, and to their staff for their support and insights. I also wish to express my appreciation to the members of the G1 staffs at Ft Hood, Ft Drum, Ft Riley, and Ft Carson for their invaluable assistance with this research. At RAND, credit is due to David Oaks and Charles Kaylor for their thoughtful reviews and to Martha Frieese for her help in preparing this manuscript. Finally, I want to express my deep appreciation to MAJ Denise Haggerty and, in particular, to LTC Danny Pummill (PERSCOM), whose efforts contributed in immeasurable ways to the execution of this research.



This documented briefing describes work undertaken in 1998–1999 on behalf of the then Chief of Staff of the Army, General Dennis Reimer, and the Deputy Chief of Staff for Personnel, Lieutenant General Frederick Vollrath, to examine issues of deployability in peacetime. In the spring of 1998, the Chief of Staff raised several key questions with the Deputy Chief of Staff for Personnel. They requested RAND's help in determining the answers to these questions and, more generally, in looking at the issue of peacetime deployability.

Today's Discussion

Final results from the first phase of work on key peacetime deployability issues (SFORs 4-7: 1st CAV, Ft Riley, 10th MTN, Ft Carson)

- What is the non-deployable rate using USR criteria? How does the rate change over time?
- What additional criteria are imposed for peacetime deployment and with what impact on deployability?
- What personnel actions are taken to lower the ND rate and with what success?
- What are potential implications of deployments for readiness of non-deploying units and other personnel movements?

Next phase of research

ARROYO CENTER RAND

2

The results shown in this presentation are based on examinations of deployability for Stabilization Force operations 4 through 7, supported respectively by the First Cavalry (CAV) Division at Ft Hood (SFOR 4, SFOR 5), Ft Riley and the 10th Mountain (MTN) Division at Ft Drum (SFOR 6), and Ft Carson (SFOR 7), under the Army policies and guidelines for peacetime deployments in effect at that time.

The Chief's questions were "What is the non-deployable rate using Unit Status Report [USR, wartime] criteria?" and "How much does this rate change over time?" These questions grew from the general perception that the wartime non-deployable rate is on the order of 4 percent, whereas the peacetime non-deployable rates being reported at the time were substantially higher. That led to a concern about whether the rate changes over time and, in particular, from the point shortly before a unit is notified of the deployment to shortly thereafter.

Our research indicated that the USR (wartime) non-deployable rate at these installations was indeed in the 4 percent range, and that it did not change much over time. Thus, the higher non-deployable rates reported for SFOR operations were not a matter of unreported medical profiles or other conditions that might have led to a spike in the USR rates. Rather, we quickly determined that a key issue involved the additional criteria that are imposed for peacetime

deployments and their very large impact on deployability. A key criterion has to do with the requirement to be available for a minimum of 90 days in country. This grows from the goals of minimizing unit turbulence and allowing adequate time for training in country to ensure safety. The guideline of 90 days in country is coupled with the desire to return individuals to their home stations at least 45 days prior to an impending Permanent Change of Station (PCS) or End of Term of Service (ETS) to allow them to undertake the actions required for these events, complete the paperwork, pack, and take leave that they may have accumulated. The practice of not deploying soldiers who cannot be in country for at least 90 days in addition to, when applicable, returning soldiers to their home stations at least 45 days before an impending PCS/ETS create a 135-day window that significantly reduces the number of deployable soldiers.

Also, a second key criterion involves a goal of providing a month of stabilization from being deployed for each month of family separation as a matter of equity and quality of life. This is a formal policy in the case of deployments and an informal practice in the case of soldiers returning from unaccompanied tours and, in particular, from Korea. This stabilization also causes a significant increase in the number of non-deployable soldiers.

The 135-day window and the stabilization goals convert the 4 percent wartime non-deployable rate to a non-deployable rate that approaches 40 percent, according to the peacetime criteria. This would be the rate if the Army undertook business as usual. In fact, however, the personnel system responds with actions that are intended to reduce the non-deployable rate and build up the number of deployable soldiers in the division (or installation) responsible for the operation. As we will see, those actions involve taking soldiers scheduled to go to other installations off assignment instructions and “fencing” soldiers (leaving them in place) at installations that are going to deploy. These and other such personnel actions are quite successful in reducing the non-deployable rates and increasing the number of soldiers that can be deployed from the targeted installations.

As we see in the last bullet of the chart above, the problem is that the changes that increase the number of deployable soldiers at installations due to participate in deployments have consequences on the rest of the force. These include lowered readiness in other units at the same installations, from whom soldiers must be cross-leveled, and at other installations, where incoming soldiers are now taken off assignment instructions. There are also impacts on the rotation

base, which is diminished not only because of the soldiers currently deployed overseas, but also because of those who have just returned from overseas deployment (and are now stabilized) and those who are fenced in preparation for an upcoming deployment.

Next, we will look at each of these areas in turn and then conclude with a brief discussion of the next phase of the research.

Overview of Analysis to Date

Conducted jointly by RAND and PERSCOM

Uses the Army's centralized personnel databases

Supplements centralized personnel records with data collected from deploying units

- Multiple visits to Ft Hood, Ft Riley, Ft Drum
- Initial visit to Ft Carson

ARROYO CENTER RAND

The work described here was conducted jointly by RAND and the Army's Personnel Command. It relies heavily on the Army's centralized personnel databases as well as data collected from individual installations. As noted in the earlier chart, those local records from deploying units include data collected during multiple visits to the 1st Cavalry Division (1st CAV) at Ft Hood, to Ft Riley, and to the 10th Mountain Division at Ft Drum, as well as during an initial visit to Ft Carson.

USR Non-Available Rate (1st CAV, July 1998)	
Total strength	
• 16885 assigned	
Non-available	
• Not deployed	676
• Deployed	854
USR non-available rate	
• Without deployed	$676/16885 = 4.0\%$
• With deployed	$1530/16885 = 9.1\%$
ARROYO CENTER	RAND
	4

We begin by examining data from the 1st CAV at the time of our early visit in July 1998. At that point, there were nearly 17,000 soldiers assigned to the 1st CAV. By wartime rules, 676 were non-available for deployment. There were an additional 854 soldiers who were currently deployed elsewhere—not involved in the SFOR operations—and consequently non-available for SFOR deployment. The 676 who were not available represent exactly 4 percent of personnel assigned to the 1st CAV. Thus, the USR non-available rate for the 1st CAV at that time equaled exactly the 4 percent expected wartime value. If we include soldiers deployed elsewhere, then the total non-available rate for SFOR increases to 9 percent.

Change in USR Non-Available Rate (1st CAV, May 1998 vs. July 1998)	
Total strength, 15 May 1998 • 17098 assigned Non-available • Not deployed 644 • Deployed 392 USR non-available rate • Without deployed $644/17098 = 3.8\%$ • With deployed $1036/17098 = 6.1\%$	Total strength, 15 July 1998 • 16885 assigned Non-available • Not deployed 676 • Deployed 854 USR non-available rate • Without deployed $676/16885 = 4.0\%$ • With deployed $1530/16885 = 9.1\%$
ARROYO CENTER	RAND 5

Recall that one of the key issues was not just the wartime rate but how that rate changed from around the time a unit was notified of an upcoming deployment to Bosnia and shortly thereafter. We compared results just after notification in 1998 with those during our visit in July. In both cases, about 17,000 soldiers were assigned to the 1st CAV. Comparing the right side of the chart to the left, we see that the number of non-available soldiers among those not deployed did not change much at all: It increased only slightly, from 644 to 676. There was an increase in the number of deployed personnel, but that was already in the works and was not related to Bosnia. Thus, there is no evidence of a spike in the non-available rate among soldiers not currently deployed after notification of their prospective participation in Bosnia (SFOR) operations. As shown, the non-available (not deployed) rate changed only from 3.8 percent to 4 percent over this period.

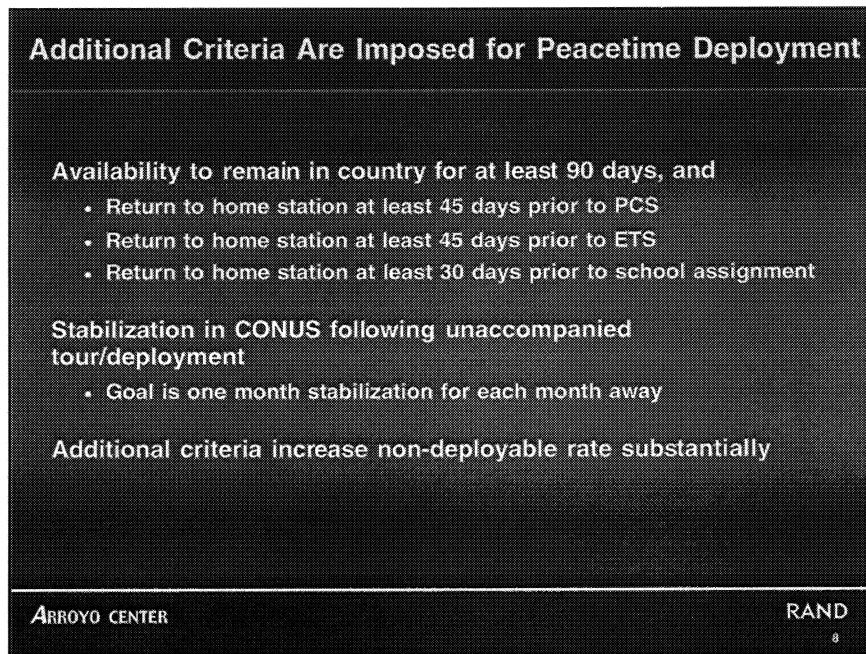
Change in USR Non-Available Rate (Cont.) (Ft Riley, August 1998 vs. May 1999)	
Total strength, 15 August 1998 • 9019 assigned Non-available • Not deployed 337 • Deployed 19 USR non-available rate • Without deployed $337/9019 = 3.7\%$ • With deployed $356/9019 = 3.9\%$	Total strength, 15 May 1999 • 9810 assigned Non-available • Not deployed 326 • Deployed 142 USR non-available rate • Without deployed $326/9810 = 3.3\%$ • With deployed $468/9810 = 4.8\%$
ARROYO CENTER	RAND 6

However, we were concerned that the period of observation at Ft Hood was not very long. We wanted to look at the potential change in USR non-availability over a longer time period, which also included an initial snapshot prior to notification of SFOR participation. Ft Riley and Ft Drum provided that opportunity. Here, we look at results from Ft Riley and compare results over a nine-month period, from August 1998—prior to notification—through May 1999. On the left of the chart, we see that there were about 9,000 soldiers assigned in mid-August 1998, of whom 337 were non-available by USR rules. That translates to a wartime non-available rate of 3.7 percent. In May, nine months later, the number of those who were not available had barely changed; if anything, accounting for the increase in assigned strength, the proportion of those who were not available actually had declined slightly, to 3.3 percent from the initial 3.7 percent. Thus, as was true for Ft Hood, there is no indication of a spike in wartime non-available rates subsequent to notification of upcoming participation in deployments such as those involved in the SFOR operations.

USR Non-Available Rate Is 4% and Changes Little Over Time		
Division/ Installation	Initial USR %Non-Available	Final USR %Non-Available
1 st CAV	3.8	4.0
Ft Riley	3.7	3.3
10 th MTN	3.7	4.8
Ft Carson	4.3	4.2

ARROYO CENTER RAND
7

Indeed, the results at all the installations that we visited as part of this study were highly similar. As shown in the second column of the above chart, the initial USR (wartime) non-available rates at the 1st CAV, Ft Riley, 10th MTN, and Ft Carson were all in the vicinity of 4 percent, and they remained there at the time of our final visits to these installations. There is no evidence of a large increase in non-availability following notification of participation in SFOR operations.



What then accounts for the much higher reported rates of non-deployability for peacetime operations? The answer lies in the additional criteria that are imposed for peacetime deployments as opposed to wartime deployments. Those additional criteria are described in this chart. As we noted at the outset, one criterion is the availability to remain in country for at least 90 days for the purposes of minimizing unit turbulence in the theater, allowing integrated training, and enhancing safety. In addition, the goal is to return a soldier to the home station at least 45 days before an impending PCS or ETS, to allow all the out-processing required, packing, and use of accumulated leave. By analogy, there is also a goal to return soldiers to their home stations at least 30 days prior to a school assignment at another installation; however, this affects few people, whereas the PCS and ETS 45-day restriction affects a considerable number of soldiers. The second criterion is the goal of stabilizing a soldier in the Continental United States (CONUS) following a deployment or an unaccompanied tour. The goal is one month of stabilization from being deployed for each month away; this is prescribed in policy for deployments; it is an informal guideline for unaccompanied tours. This criterion also affects a significant number of soldiers.

As we noted earlier, the joint effect of these two criteria raises the non-deployable rate by an order of magnitude, from about 4 percent for wartime to a number close to 40 percent in peacetime.

Initial Estimate of Personnel Availability for SFOR 6 (Ft Riley, October 1998)			
Non-available personnel			
• USR (non-deployed)	306		
• DA school within 120 days	30		
• PCS/ETS within 135 days	1903		
• Stabilized (Korea)	1296		
Non-available rate			
• Oct USR (without deployed)	306/8847	=	3.5%
• With PCS/ETS/school	2239/8847	=	25.3%
• With stabilization	3535/8847	=	40.0%
• With stabilization, full depl	4435/8847	=	50.1%
ARROYO CENTER		RAND	
		9	

We can see the deployability effects of the additional, peacetime criteria clearly for SFOR 6. We will first consider Ft Riley as an example. We use data from October 1998—the time of our initial visit—to project the non-deployability rate for SFOR 6 during the following summer, given normal personnel assignment and rotation practices. In October 1998, the number of wartime (USR) non-available personnel was 306. The number of those with a Department of the Army (DA) school assignment within 120 days of the deployment date—and thus not available under the peacetime rules—was estimated at 30 soldiers. In contrast, the number of soldiers with a PCS or ETS within 135 days of the scheduled deployment date was estimated at 1,900 soldiers. Similarly, a very large number of soldiers would still have been stabilized at the time of deployment given a month-for-month stabilization policy: Some 1,300 soldiers, largely consisting of arrivals from Korea, would have been stabilized at Ft Riley at the time Ft Riley personnel were due to deploy for SFOR 6 participation.

In the bottom portion of the chart, we examine these numbers in percentage terms. The projected USR non-available rate based on the October USR is only 3.5 percent; again, this is right in the 3 percent to 4 percent expected range. However, the additional 135-day criterion (for 90 days in theater plus return to home station 45 days before a PCS/ETS or 30 days before school) increases the

non-deployable rate to 25 percent. With stabilization also as a consideration, the non-deployable rate increases to 40 percent. In the last row, the chart shows that, in addition, if Ft Riley were to deploy only soldiers available for the entire rotation—which was a little bit longer for SFOR 6 (some eight months, as compared with five to six months for SFOR 4 and 5)—that would have made an additional 10 percent of the soldiers non-deployable, raising the total non-deployable (ND) rate to approximately 50 percent of the personnel at Ft Riley.

Initial Estimate of Personnel Availability for SFOR 6 (Cont.) (10th MTN, October 1998)	
Non-available personnel	
• USR (non-deployed)	383
• DA school within 120 days	30
• PCS/ETS within 135 days	1609
• Stabilized (Korea)	1810
Non-available rate	
• Oct USR (without deployed)	$383/9714 = 3.9\%$
• With PCS/ETS/school	$2022/9714 = 20.8\%$
• With stabilization	$3832/9714 = 39.4\%$
• With stabilization, full depl	$4682/9714 = 48.2\%$
ARROYO CENTER	RAND 10

The results for the 10th MTN Division at Ft Drum are very similar. Again, taking a snapshot at the time of the initial visit in October 1998 and projecting out toward the following summer's deployment, we would project a USR non-deployable number of 383, or just about 4 percent of assigned personnel. There would have been a small additional impact of upcoming school assignments, but, again, a much larger number of soldiers who had impending PCSs or ETSs within 135 days of the deployment date—some 1,600 soldiers. As was true for Ft Riley, there also would be a large number of soldiers who would have been stabilized at Ft Drum at the time of deployment for SFOR 6 because of recent arrival from other deployments or, in particular, from unaccompanied tours in Korea.

As we saw for Ft Riley, the bottom half of the chart shows that the wartime non-deployable rate of 4 percent increases—from just above 20 percent, with the addition of the 135-day restriction, to approximately 40 percent, when the month-for-month stabilization criterion is also imposed. As we also saw for Ft Riley, if we deployed soldiers only available for the entire rotation, the non-deployable rate would be on the order of 50 percent.

Peacetime Non-Deployable Rate from CONUS Is 35%–40%				
Reason for Non-Deployability	Unit/Installation			
	1st CAV	Ft Riley	10th MTN	Ft Carson
USR (non-deployed)	4.0	3.5	3.9	4.2
PCS or ETS (in 90 + 45 days)	20.0	21.8	16.9	25.6
Stabilized (short tour/deployed)	11.6	14.7	18.6	4.7
Total	35.6	40.0	39.4	34.5
ARROYO CENTER		RAND		
		11		

As this chart indicates, peacetime non-deployable rates are highly consistent across the CONUS installations tasked for SFOR 4–7. In each case, the USR (wartime) non-deployable rate is on the order of 4 percent. An additional 20 percent or so are accounted for by soldiers who have impending PCSs or ETSs within 135 days of the scheduled deployment date for Stabilization Force participation. In addition, a somewhat smaller but still significant number are affected by the goal of month-for-month stabilization following a recent deployment or unaccompanied tour. Together, the wartime non-deployable, 135-day, and stabilization criteria result in an overall non-deployable rate on the order of 35 percent to 40 percent.

Personnel Actions Taken to Increase Deployability

Reduction of PCSs to other duty stations

- Deletion of existing assignment instructions
- Fencing of division/installation

Reduction in number of stabilized personnel

- Reduction of % new personnel arriving from unaccompanied tours
- Shortening of post-deployment, post-unaccompanied-tour-stabilization period

ARROYO CENTER

RAND

12

The non-deployable rates we have discussed thus far refer to estimates of the ND rate if the Army carried out normal personnel practices for the deploying divisions/installations. However, in fact, the Personnel Command does not conduct business as usual given an impending deployment; rather, it undertakes a series of actions designed to increase the number of deployable soldiers at the units and installations tapped for upcoming participation in SFOR-type operations. These include, for example, reduction of permanent changes of station to other locations. As shown in the chart, this can consist of deletion of existing assignment instructions that call for soldiers to move; instead, the soldiers remain at the deploying installation. The actions to reduce PCSs also include the fencing of the entire division or installation during the time in which the sorting-out process occurs to determine exactly which soldiers will deploy for Stabilization Force operations. During this time, except for high-priority assignments, soldiers are not put on assignment instructions.

The system also reacts by attempting to reduce the number of stabilized personnel at deploying installations. Part of this effort consists of reducing the percentage of new personnel assigned to the installation following deployments or unaccompanied tours. Instead, they are sent elsewhere. Also, if necessary, it includes decreasing the post-deployment or post-unaccompanied-tour-stabilization period to make more soldiers available.

Personnel Actions Effective in Reducing ND Rate (SFOR 6)					
Installation/ Division	# Assigned, Initial Visit	% ND, Initial Visit	# Assigned, Last Visit	% ND, Last Visit	Gain in Deploy- ables
Ft Riley	8847	40.0	9810	26.2	1932
Ft Drum	9714	39.4	10361	28.4	1532

ARROYO CENTER RAND
13

This chart indicates the substantial effectiveness of these personnel actions for SFOR 6. Beginning in the first row, we see that at Ft Riley at the time of the initial visit in fall 1998, there were some 8,850 soldiers assigned, and the non-deployable rate at that time was estimated at 40 percent. By the time of the last visit the following spring, deletions of assignment instructions and fencing had resulted in a gain of almost 1,000 soldiers (to 9,810). These actions along with the diversion of inbounds from deployments or unaccompanied tours resulted in a decrease in the ND rate of the assigned soldiers to about 26 percent. The total gain in deployables was over 1,900 soldiers.

The second row illustrates the corresponding numbers for the 10th MTN Division at Ft Drum. Initially, there were some 9,700 soldiers assigned to Ft Drum; their estimated ND rate was, again, about 40 percent. Fencing and deletion of assignment instructions resulted in a gain of about 650 soldiers by the last visit. These actions as well as the diversion of inbounds from unaccompanied tours and recent deployments dropped the non-deployable rate among the assigned soldiers to 28.4 percent. The net gain in deployables was in excess of 1,500 soldiers at Ft Drum.

Further Potential Reductions in Non-Deployable Rate						
Decrease in % ND as stabilization or PCS/ETS window decreases						
SFOR6	Stabilization (v. 1 yr)			PCS/ETS (v. 135 days)		
	180	120	60	120	90	60
Ft Riley	3	4	5	1	4	6
10 th MTN	3	4	5	1	3	5

ARROYO CENTER RAND 14

There are additional actions that might be undertaken to effect yet further reductions in the ND rate. This could include reducing the stabilization period or shortening the 135-day post-deployment availability window. Here, we see the estimated impact of such actions for SFOR 6 for both Ft Riley and the 10th MTN Division. For example, shortening the stabilization period for those arriving from Korea from one year to only 180 days would decrease the ND rate by about another 3 percentage points. Were it shortened to only four months, the decrease in the ND rate would be about 4 percentage points. This is not a large decrease in non-deployable soldiers, and it leaves very little time for the returning soldier to spend with his or her family. That is because preparation for SFOR involves two to three months of intensive training, much of it occurring offsite; thus, the apparent four- or six-month stabilization periods actually provide only about one to three months of family time.

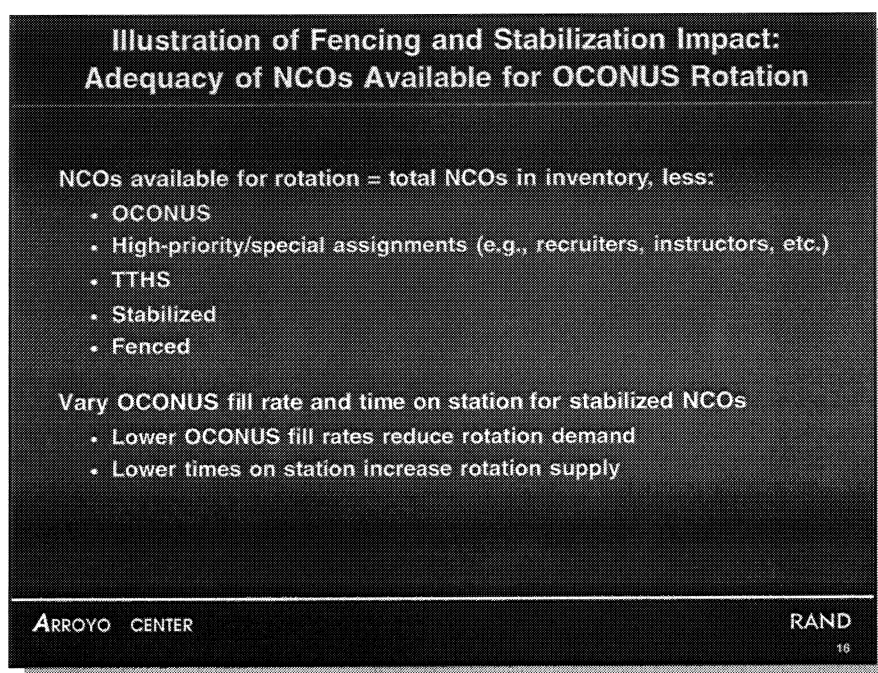
By analogy, there are also good reasons for the 135-day window, which deal both with safety overseas as well as adequate time to out-process upon return to home station. Were that period shortened from 135 days to 90, there would be a reduction of about 3 to 4 percentage points in the non-deployable rate. But, this shorter window translates to only about two months in country and 30 days back

at home station to out process. This increases in-country turbulence, and out-processing upon return to home station could be impeded.

In the end, even together, reducing the stabilization period and shortening the 135-day post-deployment availability window would only drop the ND rate from the mid- to upper 20 percent range to about 20 percent, and they would do so at increased cost and possible adverse consequences to the deploying soldiers.

Personnel Actions to Support Deployments Involve Tradeoffs	
On-station personnel movements	• Lower readiness and increase turbulence in stay-behind units
Reduction of PCSs to other duty stations, reduction of % arrivals from Korea, passbacks	• Lower readiness and increase turbulence at other installations
Reduction of stabilization period	• Reduces quality of life, may decrease retention
Reduction of 135-day availability requirement	• Increases turbulence in deployed units, possible safety reduction
Fencing and post-deployment stabilization	• Reduce rotation base (deployments from CONUS)
ARROYO CENTER	RAND 15

While the personnel actions taken to support deployments are quite effective in lowering the ND rate—from a number between 35 percent and 40 percent to a number closer to 25 percent—they come at the expense of tradeoffs against other Army priorities. For example, on-station personnel movements from non-deploying units to deploying units help boost deployable rates within the units actually going overseas, but they lower readiness and increase turbulence in the stay-behind units, which are then less able to respond if called upon to support further actions. By analogy, the reduction of PCSs to other duty stations associated with the deletion of assignment instructions and fencing, the shunting of arrivals from recent deployments or unaccompanied tours to these other installations, and passbacks of personnel requirements for SFOR operations to non-deploying installations lower readiness and increase turbulence at these other locations. The reduction of the stabilization period, while making more soldiers available, raises issues of quality of life and, in the longer term, may be harmful to retention. The reduction of the 135-day availability requirement increases turbulence in the deployed units and may reduce safety. Last, the fencing actions taken to boost the number of deployable soldiers at installations tapped for upcoming deployments and the stabilization of soldiers returning from such deployments substantially reduce the rotation base. Next we illustrate the effect of this reduction.

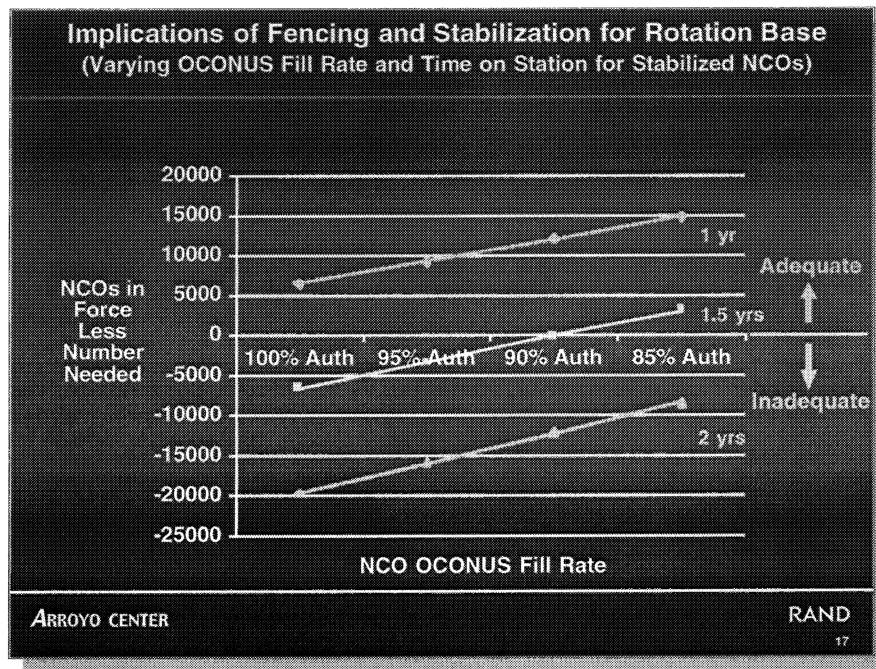


This chart sets the stage to illustrate the effects of fencing, deployment, and stabilization on the NCO rotation base. Here, we consider all the NCOs available for outside CONUS (OCONUS) rotation. As the chart shows, this includes all the NCOs in the inventory, less those already assigned to OCONUS stations, those in high-priority/special assignments who have been promised stabilization in CONUS following those assignments, those in training (TTHS), those stabilized because of recent deployments, and those fenced in preparation for upcoming deployments. The full inventory less the number of soldiers in these categories indicates the number of NCOs actually available for overseas rotation.

Consequently, the impact of SFOR-type deployments on the rotation base involves not just the soldiers deployed overseas at any one time, but additionally those who have been stabilized upon return from such deployments and all of those fenced for an upcoming deployment. Moreover, fencing typically involves all the soldiers in the deploying division/installation, not just those soldiers who eventually deploy.

The leverage that we have in maintaining an adequate number of NCOs to rotate involves either lowering the overall OCONUS fill rate (reduces demand for rotation) or lowering the stabilization time on station in CONUS (increases the

supply for rotation). Neither of these actions—lowering readiness or quality of life—is desirable.



This chart shows the adequacy of the number of NCOs in the inventory as compared to the number needed to satisfy the rotation base requirements, under different assumptions about stabilization time on station in CONUS and about overseas fill rates. The chart is an illustration from a time period in spring 1999, when soldiers from SFOR 4 were stabilized, those in SFOR 5 were deployed, and those in SFOR 6 were fenced in preparation for their upcoming deployment. Thus, it includes the impact of SFOR 4, 5, and 6, but not of fencing for SFOR 7; indeed, the consequences shown here actually worsened as the Army moved toward SFOR 7.

The middle diagonal line shows that maintaining the existing overseas fill rate of approximately 90 percent for NCOs would permit a time on station in CONUS of only approximately 1.5 years. That is well short of the goal of three years time on station, and even short of more recent practices, which provide over two years time on station. The lower diagonal line shows that providing even two years time on station would have required between 10,000 to 20,000 additional NCOs at that time. When the fencing at Ft Carson was initiated in preparation for SFOR 7, the three lines shifted downward. As a result, the feasible time on station in CONUS for NCOs was further reduced to only about 1.25 years to maintain a 90 percent fill rate overseas.

Summary of Findings from Work to Date	
USR non-available rate for deploying units is 4% and changes little over time	
Additional criteria applied for peacetime deployments from CONUS increase ND rate to 35%–40%	
Personnel actions currently taken to improve deployability decrease ND rate by 10–15 percentage points	
These actions or possible changes in deployability criteria involve tradeoffs with other Army priorities	

ARROYO CENTER

RAND

18

To summarize, then, one of the Army Chief of Staff's initial questions concerned whether the wartime USR non-available rate for deploying units was in the 4 percent range, as expected. The results confirm that the rate is uniform across installations at about 4 percent, and that it does not change over time from just before units are notified of participation in Stabilization Force operations until shortly thereafter (the Chief's second question). It is not changes in wartime availability, but rather the additional criteria that apply to peacetime deployments that cause the substantial increase in the ND rate. Indeed, they raise the ND rate by an order of magnitude, from about 4 percent to 35–40 percent. The 35–40 percent ND rate is based on business as usual. As we have indicated, however, the Army's Personnel Command does not undertake business as usual; rather, it embarks on a series of actions designed to increase the number of deployable soldiers in those units and installations tapped for upcoming deployments. As we have seen, those actions can be quite effective, increasing assigned personnel and dropping the ND rate by some 10 to 15 percentage points. While they are highly effective, we have also seen that these actions come with a price: They involve tradeoffs against other Army priorities, which include the readiness of other units and installations, as well as potential tradeoffs with quality of life and adequacy of the rotation base.

Next Phase of Research

Model methods of increasing deployability and reducing adverse impacts of peacetime deployments (e.g., on other units, OCONUS rotation base)

- Criteria for deployment and stabilization policies
- Fencing and deletion of assignment instructions
- Passback practices
- Visibility over deployability in making PCS assignments
- Impact of multiple deployments within same division/organization
- Deployments from CONUS vs. OCONUS

ARROYO CENTER RAND
19

This research was conducted over approximately a one-year period; it concludes work in response to the Chief's question on peacetime deployability rates. In the next research phase, models will be built based on the foregoing work and non-deployable estimates as well on additional information. The purpose of the research is to determine in greater detail the potential leverage and implications of changes in peacetime deployment policies. These policies include the criteria for peacetime deployment and stabilization; policies relating to fencing and deletion of assignment instructions; passback practices (wherein requirements are passed from the deploying installations to other installations); the impact of having better visibility over soldiers' deployability in making assignments of individuals to particular installations to be deployed in the near term; the impact of multiple deployments within the same division or organization; and the impact of deploying from CONUS versus OCONUS. For example, two brigades were successively deployed from the 1st CAV in support of SFOR 4 and SFOR 5. As a result, over 4,000 soldiers who were deployed from Ft Hood for SFOR 4 were not available for SFOR 5. That amounts to approximately one-quarter of the division and resulted in a much higher ND rate for the second operation (SFOR 5). Also, there are some differences, which are small in nature, in the non-deployable rate for soldiers stationed in CONUS versus those stationed OCONUS. More significant, however, when soldiers are deployed from

OCONUS, there is no additional ripple effect on the rotation base. This is because soldiers currently stationed OCONUS would have been stabilized anyway upon their return from overseas. Thus, the stabilization period earned by deployment in these peacekeeping operations does not increase the number of soldiers who are removed from the rotation base.

We are interested in the potential impact of changes in such practices on the readiness of both deploying and non-deploying units, on PERSTEMPO and the soldier, on the rotation base, and on the implications for endstrength. We also are interested in potential differences in the effects of individual versus unit rotation on such factors.