Over the past decade, numerous observers have expressed concerns that the U.S. armed forces have been stressed by the increased pace of overseas operations. Usually centered on a discussion of “increased tempo,” these concerns focus on deployments and their possible effects on force readiness and morale. Many of these issues were brought to prominence during previous reviews of U.S. defense posture and the impact of “small-scale contingencies” (SSCs) such as the operations in Bosnia, Kosovo, Haiti, and Somalia. Those issues continue as topics of debate today; in fact, continuing public and congressional interest recently resulted in legislation requiring additional compensation for military personnel who are deployed for extensive periods.

RAND Arroyo Center undertook several empirical analyses to better understand the nature of these tempo concerns. We aimed to derive quantitative measures of unit and individual deployments over the past several years, which we could then use to create an empirically grounded description of tempo and its possible effects. In addition, we made many visits to operational units as well as headquarters to provide insights about tempo’s possible effects on personnel and unit readiness.

This report provides the results. It is based primarily on two sets of data collected by the Army to measure tempo: (1) unit DEPTempo (deployment tempo) data from the official readiness reporting system, documenting deployment rates for units, and (2) individual data from the personnel system, documenting the deployment histo-
The report also discusses other factors, such as unit workload and the dynamic aspects of deployments, which shed further light on the problems attributed to tempo and help illuminate the full burden of SSCs.

The analysis shows that, over time, Army deployment levels have increased appreciably. DEPTEMPO data indicate that for soldiers in operational units, the average time deployed rose nearly 30 percent between 1997 and 2000. The number of units with lengthy periods away from home was also up sharply. For example, the number of units deployed 120 days or more per year doubled since reporting began in 1997. Similarly, the Army’s individual personnel data show that the number of soldier-days deployed to major operations and exercises—a measure of total burden on the Army—doubled between 1994 and 1999.

The impact, of course, is uneven and hits some soldiers quite hard for a period of time. For example, the average soldier in an Armor unit was away almost 10 days per month, compared with less than 5 days for members of some other unit types. In addition, a deployment, when it occurs, is sometimes a disruptive and unplanned event in a soldier’s life. Moreover, the recent deployments, dominated by Bosnia and Kosovo, were for lengthy periods—6 months in most cases, and up to 12 months in others (e.g., division staff).

However, the fraction of the force affected remains relatively small. Out of 1,400 units reporting DEPTEMPO, only 222 units had 120 days or more away from home station in the year ending October 2000; only 89 units were away for 180 days or more. According to DEPTEMPO data, the average soldier in a unit spends about 7 days away from home each month, or about 85 days per year. If we look only at deployments for operations and overseas exercises, the impact is smaller: Those types of deployments take the average soldier away about 30 days out of each year.

The personnel data, which allow us to trace the deployment history for an individual soldier over a period of years, confirm this picture. During a given year, most soldiers do not deploy at all. Those who do

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1The analysis focuses on the Active Component; similar issues arise with the Reserve Components, but they go beyond the scope of our data.
deploy may be away for long periods, but fewer than 4 percent are subject to repeat deployments. Thus, repeated contingency deployments are experienced by only a small fraction of the force.

A similar picture emerged when we examined the total amount of time that a soldier was deployed over a period of several years. We analyzed three-year periods during the 1990s and found that less than 10 percent of the force was away for major deployments more than one-sixth of the time. Less than 1 percent was away more than one-third of the time—the equivalent of 120 days per year. In part, this reflects the regular rotation of career soldiers across different units and positions, many of which are not subject to deployment.

Those results led us to conclude that a simple look at static measures of tempo and deployment does not by itself explain a “tempo” problem. How, then, does one explain the widely felt concerns about tempo? We believe that there is a problem, and that it results from two sources that are hard to measure using traditional military record-keeping systems. The first source, in our view, is the overall workload, generated by the combination of the warfighting mission, the new missions, and the day-to-day demands of operating a unit and installation in peacetime. The workload strain is felt acutely when the unit faces personnel shortages. To date, however, there has been no mechanism for collecting systematic information on workload in units.

The second source is more subtle, arising from the dynamics of the entire system that must sustain the peacetime force, prepare and train for SSC deployments, and adhere to various peacetime operational and personnel policy constraints. We observed repeatedly in unit visits that other factors often play an important role in the degree of stress and disruption caused by deployments. Even relatively small operations require large amounts of leadership time, cause turbulence from cross-leveling and tailoring of the force, and require specialized training. Those effects are felt in other units, which must supply the filler personnel and support the training and deployment of the deploying force. Our analysis of Bosnia deployments, for example, highlighted the personnel turbulence associated with SSC deployments, arising from fundamental features of military service and peacetime personnel policies. That turbulence con-
tributes to the uncertainty surrounding deployments and probably increases the sense of disruption soldiers associate with SSCs.

The effects of tempo may not be due, therefore, to the pace of deployments by themselves. Rather, it is likely that tempo is coupled with other factors to place stress on the military system. To begin with, Army units have often been filled to less than 100 percent of their stated wartime personnel requirement. Although the Army has long operated with this personnel shortfall, its existence becomes an acute problem when commanders must scramble to deploy a unit at full strength.\(^2\) Second, as shown by our analysis of Bosnia, even small deployments have larger ripple effects across the force, creating extensive personnel turbulence and disrupting unit training cycles. Third, SSC operations generate much additional workload for planning, split operations, and continued support for the home station. Finally, these SSC deployments must be conducted in the context of a force that has experienced reductions in personnel strength and related resources while still attempting to achieve other paramount goals (i.e., maintaining readiness for a major theater war and training the future soldiers and leaders in warfighting skills).

This picture leads us to conclude that the major focus of Army concern about deployments should probably be not on the individual soldier effects, but on overall force management, to evenly distribute the burden, minimize short-term readiness impacts, and ensure that longer-term skill development and warfighting capability are sustained.

\(^2\)Near the end of the study period, the Army announced a new policy aimed at filling divisional units to 100 percent of their authorized strength. If sustained, that policy would ameliorate the fill problem in TOE units.