Chapter One
INTRODUCTION

BACKGROUND

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. These concerns encompass not only near-term force readiness and morale, but also longer-term force capability and the military’s continued ability to recruit and retain high-quality personnel. Many of these issues were brought to prominence during the Quadrennial Defense Review in 1997 and have remained important in official deliberations about military posture.\(^1\) Meanwhile, the continuing public debate and congressional interest resulted in legislation governing additional compensation for military personnel who are deployed for extensive periods of time.

Embedded in these issues is an overall sense that the military services are experiencing higher unit activity levels (often termed OPTEMPO) and higher rates of personnel movement (often termed PERSTEMPO). The increased tempo is frequently ascribed to new types of deployments (e.g., Bosnia, Kosovo, Haiti, Somalia, and Kuwait). For the Army, these deployments have been particularly demanding because they have involved new missions and the deployment of partial units, thus disrupting established units and collective training schedules designed to maintain warfighting readiness. The deployments, however, are but one source of the demand on units and soldiers. They are in addition to other activities that in-

clude regular unit training cycles (e.g., preparation for exercises at Combat Training Centers); joint or combined readiness exercises, often conducted overseas; support for other national goals (such as Reserve Component training, humanitarian relief operations, and disaster assistance); and local installation support activities.

RAND Arroyo Center’s initial investigations showed that empirical data and analysis were lacking to adequately assess the extent or causes of the perceived increase in Army tempo. This report attempts to make such an assessment, using personnel data files and newly instituted reports of unit deployment rates derived from the official readiness reporting system. We set out 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.

TURBULENCE, OPTEMPO, AND PERSTEMPO: WHAT ARE THEY, AND WHY DO THEY MATTER?

The underlying hypothesis of many is that rising OPTEMPO and PERSTEMPO have increased turbulence in units, to the point where they are likely to exert negative effects in the long run if not the short run. However, there is no definition of tempo that enjoys universal acceptance or that adequately captures all of the phenomena underlying these concerns.

OPTEMPO, for example, has taken on different meanings over the course of only a few years. Not long ago, OPTEMPO in the Army meant the rate of activity for major weapon systems, defined by metrics such as tank miles or helicopter flying hours. OPTEMPO was used to plan and budget dollars for training. In that context, most military personnel viewed “more OPTEMPO” as good; it would have been difficult to find soldiers who could perceive negative effects of increased OPTEMPO. Recently, however, OPTEMPO has taken on a broader meaning and includes activities such as small-scale contingencies (SSCs), humanitarian assistance missions, and operational...

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2This report only addresses tempo for the Active Component of the Army. While the Reserve Components have also experienced an increase in tempo for overseas operations, they were beyond the scope of this study.
deployments in addition to training activities. In this context, OPTEMPO is often viewed as “too high.” Implicitly, the objection is that the pace of activities may be too high for Army units to conduct the full range of training activities needed to maintain readiness for immediate deployment to a distant combat theater and, at the same time, provide soldiers with a reasonable quality of life.

Similarly, PERSTEMPO has also had a number of definitions and meanings, some of them mutually inconsistent. To obtain a consistent measure among the services, DoD has defined PERSTEMPO as the number of days that military personnel spend away from home base. For the Army, that means the pace and frequency of deployments and field training exercises that take soldiers away from home overnight. Senior Army officials have suggested a goal of not more than 120 days away from home each year. The “time away from home” criterion has also been written into law: Recent congressional action would require the services to provide substantial compensation to members who spend more than 250 days deployed in any 365-day period.

In addition, turbulence has causes other than the pace of unit activities or absences from home station. Soldiers must regularly rotate among units and positions (for example, to return to the United States after a tour in Europe or Korea or to replace personnel who have left the service). The resulting turbulence is sometimes cited by those who perceive detrimental effects on readiness. These varying usages have complicated the debate about how tempo has increased and what its effects have been.

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3These multiple meanings are explicit in Army Field Manual FM 101-5-1, which defines OPTEMPO as encompassing both the pace of operations (all the activities of a unit) and the mileage allowed for a vehicle or aircraft (based on a budgetary allowance).

4See Levy et al. (2001) for a discussion of the various definitions and meanings in circulation in the late 1990s.


7See Hix et al. (1998).
ANALYSIS OF ARMY TEMPO

Recognizing concerns about tempo and the need for improved measures to reflect it, in 1997 the Army began collecting data for a unit-level measure called DEPTEMPO (deployment tempo), defined in terms of the number of “unit” days away from home.8 Those data are included in official readiness reports each month and are aimed at describing the aggregate impact of deployments on units. In this document we shall analyze DEPTEMPO data in detail to describe trends and patterns of “time away from home” over the past several years.

In addition, the Army’s personnel data system has long incorporated indicators of individual soldiers’ deployments to major operations and exercises. Although the personnel system does not capture all the same activities as DEPTEMPO, it provides a unique mechanism for disaggregating major deployments and seeing their effects at the level of the individual soldier. We have used the personnel data to determine how often individual soldiers deploy and to estimate how long they are away from their home station over the course of several years.

The analysis below shows that tempo, defined as “time away from home,” has risen appreciably since the early 1990s. For example, average DEPTEMPO—a measure of units’ time deployed—has increased by 30 percent 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.

Still, the average soldier in a unit spends only 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. This impact, of course, is quite uneven and hits some soldiers quite hard for a period of time. For example, those deployed to Bosnia and Kosovo are away for up to six months at a time. Later, however, they are back at home station, and others replace them on long deployments. Over time, therefore, the

8See Army Regulation AR-220-1, Unit Status Reporting, 1997.
amount of time that a soldier is deployed tends to even out among personnel in like-type units. We believe it is a combination of the increased deployment time coupled with other factors that is responsible for the problems often attributed to “tempo” alone. These other factors, which often have more subtle effects, are discussed later in this report.

ORGANIZATION OF THIS REPORT

First, we look at the empirical data to see what the two existing sources of data say about commonly held perceptions and concerns related to tempo. In Chapter Two we examine DEPTEMPO data, measured in terms of unit averages and reported in the readiness system each month since 1997. In Chapter Three we examine data on individual soldiers, drawn from the Army personnel data system and describing deployments to major operations and exercises back to 1994. In Chapter Four we turn to some of the dynamic aspects of deployments, which shed further light on the problems attributed to tempo in general and help illuminate the full burden of increased SSC operations.