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TECHNICAL REPORT

Measuring the Tempo of the Mobility Air Forces

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Prepared for the United States Air Force

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Summary

The analysis described in this report suggests a new metric—the mission-day—to identify and examine the ability of the mobility air forces (MAF) to conduct missions, train its forces, and maintain readiness for new operations. Specifically, the mission-day metric can help the MAF detect and identify problems caused by the operations tempo (OPTEMPO) of MAF personnel.

The mobility OPTEMPO is driven primarily by two categories of missions. The first category is missions that involve maintaining readiness to accomplish the tasks demanded of the mobility forces during major theater operations. These tasks include the delivery of troops and material to combat theaters, providing tanker support to mobility and combat aircraft in transit, and performing other specialized missions such as dropping paratroops. The second category of mobility missions is support of U.S. forces engaged in peacetime operations around the world. These include the support of small-scale contingencies (SSCs), humanitarian relief operations (HUMROs), presidential travel (called BANNERS), and other short-notice and high-priority missions flown on a daily basis.

Historically, the air mobility force is resourced to stay ready for war. Peacetime operations have been supported as a “by-product” of the MAF training for war. During the 1990s, however, there was some concern among the military leadership that the tempo of peacetime engagement missions had become too burdensome on the MAF crews and had started to interfere with maintaining wartime readiness. For the past three years, the MAF has focused its attention upon the wars and continuing operations in Afghanistan and Iraq. These wars have placed large demands upon the MAF.

Thus far, the MAF has proven its ability to meet these demands. However, it is important for the Air Force to ensure that the resources allocated to these mobility operations remain sufficient to meet the continuing high level of demand. Moreover, when (or if) mobility operations in support of Operation Enduring Freedom and Operation Iraqi Freedom eventually wind down, the MAF will go through a period in which deferred education, training, and personnel rotations will need to be addressed. Also, pilots who have remained in the service may take the opportunity to leave once these wars have ended.

The Air Force will need to monitor the effects of these factors on MAF capabilities to ensure that the capabilities are in balance with the operational demands placed on the MAF. What we have found lacking in previous discussions is a way to quantify the workload and OPTEMPO stresses being placed on the MAF. Therefore, we developed the **mission-day** metric, which measures the availability of crewmembers to fly missions while continuing needed training and other activities. It is essentially a person-day analysis of the capacity of the mobility air forces to fly missions, continue essential training, and conduct other activities during peace or war. (See pp. 15–21.)

In this report we describe this metric, apply it to one exemplar airlift wing, and discuss how it might be used in the future by the Air Force to plan operations at the major command and unit levels and to identify OPTEMPO problems.