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Military Readiness, Operations Tempo (OPTEMPO) and Personnel Tempo (PERSTEMPO): Are U.S. Forces Doing Too Much?

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Military Readiness, Operations Tempo and Personnel Tempo: Are U.S. Forces Doing Too Much?

Summary

Are U.S. forces doing too much? Arguably. Although the armed forces of the United States are meeting mission requirements while maintaining an acceptable level of readiness, indications are that under the current strategy, with existing forces postured and organized for high intensity conflict, the sustainment of both high levels of activity and high readiness will be difficult. Whether or not U.S. forces can continue to sustain the current level of effort is an open question. With either the addition of new global commitments, a reduction in available forces, or a decrease in funding, readiness may be in jeopardy. Under different strategies, readiness could be more sustainable but the level of risk to U.S. interests may increase. Reductions in force structure or funding without commensurate reductions in assigned missions may, regardless of the overall strategy, jeopardize readiness and operations.

This issue is in a new context for U.S. forces: peacetime operations are larger, longer, more intense, and more complex than ever; the stockpiled capacity of the global-war-based force is diminished; high levels of activity may no longer equate to high readiness; and the force structure has decreased more than the infrastructure. With the size of current commitments larger than anticipated in the Bottom Up Review, workloads on the smaller force are demonstrably higher. U.S. military power designed to react to threats is now more often a proactive tool of foreign policy. Competition for resources between new missions and standing requirements is heightened by open-ended operations and the needs of regional commanders. *It is difficult to assess the stress in this new context as measurements of both activity and readiness need improvement; there is no "Opportunity Cost" evaluation; and no clear picture of what constitutes a sustainable level of effort.*

Understanding the new demands is the first step toward resolution. Measures are OPTEMPO for the rate of unit activity, and PERSTEMPO for the sum of all individual absences and activity. Tempos are too high/low if they are causing forces to lose their capacity to sustain operations and meet crises. Tempos affect the dynamic relationship of budget, readiness, and force structure decisions and bear attention in these areas: readiness, quality of life, modernization, personnel, and retention. The most significant negative impact of tempos that are too high is the reduction in time and resources for relevant, necessary training, the basis of readiness and long-term effectiveness. Over time, the continual wear on personnel and their families may result in difficulties retaining and recruiting high quality volunteers.

Areas of congressional action bearing on readiness concern the National Guard and Reserve, military infrastructure, military end-strength, specialized units and equipment, incentives, increased reporting to Congress by DoD, and the option of ending operations that are not moving toward a predefined "Exit." Oversight areas include validating employment concepts, considering resources for training while deployed, reviewing and setting minimum training time guidelines, prioritization of, and early determination of, exercise requirements, determining the number and duration of required inspections, and ascertaining and allowing appropriate "down time" for units following deployments.

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Introduction and Major Findings

Introduction

In order to meet the challenges confronting the United States, the nation's leaders seek to strike a balance between (a) the military's capability, as an instrument of national power, to prepare to meet both large and small-scale challenges to vital interests and (b) its ability to deal with important but lesser interests. With finite resources, peacetime militaries can only sustain a finite level of activity beyond that required to maintain military readiness and effectiveness through training, exercises, and maintenance. In a force that is too busy, the cumulative effects of lost training time, missed exercises, unprogrammed expenditures, and extended deployments can degrade the overall capability of the force. In a force that is not busy enough, however, a lack of training and experience in exercises and actual operations may also be detrimental.

In testimony before the Congress, the Joint Chiefs assess that the armed forces of the United States, as currently postured, are meeting mission requirements while maintaining an acceptable level of readiness. This level of effort is not without cost. How long U.S. forces can continue to sustain this level of effort is a question worth asking. Reductions in force structure or funding without commensurate reductions in assigned missions may upset the balance between readiness and current operations.

This paper will define the scope and implications of the armed service's challenge of sustaining the current level of operations, identify the dynamic relationship between congressional action and military activity levels as it relates to budget, readiness, and force structure decisions, and discuss options for Congress. Using information from the Congressional Research Service (CRS), the Department of Defense (DoD), the General Accounting Office (GAO), testimony before the Congress, and other sources, this paper will examine the level of military activity, its likely repercussions, and the relationship of this level to options for congressional action. Many CRS and GAO reports provide detailed background information on issues related to the high

OPTEMPO/PERSTEMPO phenomenon. These reports will be referenced and, where possible, summarized.¹

Major Findings

The nature of operations other than war has changed. Operations other than war (OOTW) are now larger, longer, more intense, and more complex than their Cold-War predecessors; some are open-ended with no clear exit strategy; varied operations run concurrently and require a broad range of capabilities. The forward-deployed force dispositions used to support these operations are now smaller, albeit, in most cases, better equipped.

Forces decreased while requirements increased. The cumulative effects of the drawdown coupled with a more proactive use of the military in a greater range of international crises has led to a sustained high level of operations. With a much reduced force, the resultant high activity may be hampering DoD's ability to execute some short and long-range plans, programs, and obligations.

High activity doesn't always equal high readiness. During the Cold War high unit activity generally equated to high readiness. Today's reality comprises a smaller force structure supporting a wider variety of missions at a time when resources are constrained. With today's missions, high unit activity may, but does not necessarily, equate to high readiness and may in some cases, be detrimental to readiness for combat.

Reductions not commensurate. Operational missions increased 300 percent during the 1989-1997 period that Army and Air Force force structure was reduced by 45 percent each, Navy by 38 percent, and the Marines by 12 percent. During this period, DoD infrastructure, bases for example, was reduced by 21 percent. To increase operationally available manpower and improve efficiencies, many believe further infrastructure cuts are necessary. The extra burdens are not evenly distributed within and across the services. Some units may be more heavily tasked while others remain relatively untasked. Service actions to level the load are underway.

Current operations are larger and more extensive than expected.

One Major Regional Contingency? The level of effort to support currently ongoing operations is estimated by some senior DoD officials to be equivalent to executing one Major Regional Contingency (MRC).² This estimate includes forces that have been extensively engaged in ongoing operations for four to five years, including the National Guard and Reserve, whose support is approaching Desert Storm levels. The percentage of deployable combat and combat support forces

¹The House National Security Committee issued a report on April 9, 1997 titled "Military Readiness 1997: Rhetoric and Reality" which addresses issues similar to those in this report. The House report is available on the World Wide Web at <http://www.house.gov/nsc/pubs.htm>

²Deputy Under Secretary of Defense Louis Finch among others, interview with the author.

committed to operations is higher than the percentage of troops deployed publicized by DoD. In its estimates, DoD quotes a percentage of the total force to indicate the current level of effort, which, for example, equals roughly 8 percent for the Air Force. Calculating the Army level of effort from only those eligible to participate shows that up to 45 percent of the “deployable active Army” may be committed to current operations as either deployed, preparing to deploy, or recovering from deployment; excluding soldiers assigned to Korea, the percentage is 36 percent. In contrast, as a percentage of the Army total force of 1.1 million, the percentage of “deployed soldiers” (excluding Korea) is 3 percent and of the active Army, the percentage is 6 percent. The Air Force requires 13 of its 20 Fighter Wing Equivalents to support current operations or 65 percent of the combat fighter force. On an average day, 50 percent of Navy ships are out of homeport of which roughly 30 percent are deployed.

Smaller forces and increased commitments equal higher workloads.

According to the Chief of Staff of the Army, General Dennis Reimer, the Army reduced manpower by 36 percent while increasing the number of deployed operations by 300 percent. In testimony before the House National Security Committee in March 1997, the Army estimated that its officers and senior non-commissioned officers from deployable units now spend 180-190 days away from home annually, while junior soldiers spend 140-155 days away. Understanding how the Army and the other services absorbed the increased load during the drawdown to reach today’s level of effort is essential to planning for the future. This raises question: What has DoD stopped doing, what is DoD doing less of, is this an increase in efficiency, and do these reductions compromise readiness?

Causes of high levels of military activity.

Competing strategies. The current National Military Strategy was developed prior to the current National Security Strategy of Engagement. The latter strategy envisioned a more proactive U.S. foreign policy while the former strategy, developed soon after the Persian Gulf War, embraced a more reactive approach with a military force designed to defeat, in conventional combat, the greatest potential threats to U.S. vital interests. The reality of the last five years is that the military is heavily engaged in advancing U.S. interests without conflict while trying to fully prepare to defend them in conflicts. The dual requirements of two strategies are taxing the force.

Operations, exercises, and military culture. Regional Commanders-in-Chief (CINCs), tasked with the day-to-day security of U.S. interests, wield great influence in requesting forces to support their exercises and operations. They do not, however, have the fiscal responsibility of supplying these forces or the service responsibility of training them. This disconnect may result in “overspending” the force. “We never met a deployment we didn’t like” is indicative of the can-do attitude that is usually at odds with demanding relief from excessive work. Careerism may inhibit officers from turning down work no matter how valid the complaint. Competition for resources within and between the services can contribute to military “volunteerism”.

Useful assessments of readiness and stress needed.

Measurements need improvement. Tempos are difficult to assess because current systems were not designed to indicate peacetime activity; reliable indicators

of unit and individual activity and stress are only now being developed. Some analysis may be misleading because averages of large groups do not adequately reflect burdens on discrete elements. The current DoD Status of Resources and Training System (SORTS), does not measure levels of effort required of units to attain high readiness or the extent to which units are committed to operations; it produces only snapshots of: personnel, training, and supply/equipment. SORTS is not predictive nor does it reflect a unit's capacity to "turn-up" the level of effort. Measuring both the level of effort and the extent of a unit's commitments would improve the assessment.

No "Opportunity Cost" evaluation. Assuming adequate funding, acceptable readiness levels can be maintained indefinitely at a certain OPTEMPO/PERSTEMPO levels. These levels have not yet been identified. There is no "Opportunity Cost" system for evaluating the relative worth of DoD actions. In other words, there is no way to know the price, in non-monetary terms, such as readiness, for current operations. "What didn't we do because we did Operation X?" is a question that can now be answered only in specific instances, anecdotally and non-quantitatively.

Importance of understanding OPTEMPO/PERSTEMPO measurements. Measuring OPTEMPO, the rate of unit activity, and PERSTEMPO, an individual's absences and activity level, and comparing them with other factors like readiness levels, personnel retention statistics, and unit evaluations should indicate what level of activity U.S. forces can sustain. Understanding OPTEMPO or PERSTEMPO does not provide insight into the validity of either the current two-MRC strategy or the policy of pursuing broader military engagement in the world at-large. Understanding OPTEMPO/PERSTEMPO should, however, suggest the degree to which U.S. forces are capable of meeting current and proposed obligations and in what areas change and/or innovation may be required. High OPTEMPO/PERSTEMPO can be an indicator that U.S. forces may be exceeding designed capabilities in some areas and failing to meet planned objectives in others. On the other hand, low OPTEMPO/PERSTEMPO may be an indicator that a unit's readiness might be at risk due to insufficient training, exercises, manpower, or resources or it could indicate a unit that is capable of contributing more to current operations.

Impacts and implications are significant.

Training: Time and resources for effective training lacking. There are minimum resources and a minimum time required for basic military preparedness so that units may retain the capabilities required of them. For many units, the minimums established by their services are not currently available.

Concerns. The effects on units and personnel with current high levels of activity are of increasing concern to defense officials and senior officers. The major concerns voiced during testimony before the Congress are these:

- **Readiness:** As activity levels increase, time for realistic combat training is lost, equipment requires more maintenance, supply stocks are diminished, and personnel are displaced.
- **Modernization:** Time and money spent on operations is not available for other priorities. The man-power intensive maintenance of aging systems, systems

which are under increased stress, is increasing the workload and the cost to maintain equipment resulting in even higher activity levels.

- **Quality of Life:** Commanders are increasingly forced to choose between spending scant resources on either training or “quality of life” improvements such as base support facilities or family-oriented programs.
- **Personnel:** Fatigue and disillusionment may afflict some as they perceive a future full of family separations, limited opportunities, and reduced benefits. Reenlistments and recruitment: although both remain strong, commanders testify that the dedicated all-volunteer force is growing weary, dampening enthusiasm for military service. Surveys reveal that pilot retention is dropping rapidly due to high OPTEMPO, which decreases individual flying proficiency and increases family separations, and due to a forecast long-term hiring surge by the Airlines. Although most pilots say they prefer military aviation, the pull of family and a stable lifestyle is significant.

Internal DoD actions to ease the pace of activity. The Global Military Force Policy (GMFP) is a DoD step toward managing both short-term requirements and the long-term sustainability of U.S. forces. The policy effectively reduced commitments for high demand units to the point where most can now accomplish their required training. The Navy has reoriented the way it does pre-deployment training and reorganized its force to reduce unit activity levels. The Air Force now fills its requirements from organizations world-wide. The reserve component, mostly through volunteers, is carrying part of the load. Such actions demonstrate the ability of DoD to accommodate to new realities without increased spending.

Modernization Issues are Dynamic. New weapons systems and technologies may enable DoD to posture fewer, more capable forces. In some cases, new systems can lower the pace and the cost of operations. In theory, this effort would free forces to train for and engage in operations other than war. In a fiscally strained environment however, the resultant force structure may be subject to dollar-driven cuts that could well recreate a condition the modernization sought to relieve: too few people doing too many things. Also, better capability often creates the impression that military forces can now do more than was previously possible. Many new technologies complement rather than supplant older technologies. For example, the Air Force’s new J-STARS (Joint Surveillance Target Attack Radar System) does for the ground war what the AWACS (Airborne Warning and Control System) does for the air war. Even these systems need to be supplemented. Due to the effect terrain has on J-STARS in Bosnia, new unmanned aerial vehicles are working with J-STARS to provide a more complete picture. There is no overlap and both systems are in great demand. In operational terms, increasing capability increases mission effectiveness but does not necessarily mean that fewer forces are required to complete a military mission. It does mean that the forces involved can accomplish the mission with lower risk, fewer casualties, or less collateral damage, or that they can do so more expeditiously.

Force Structure: Dangers and dynamics. The dangers involved in not balancing force structure with commitments are many. Too few forces prepared for high-intensity combat could result in local defeat, higher casualties, and longer

conflicts. Too few forces capable of a wide range of operations results in high OPTEMPO/PERSTEMPO for those qualified units, and missed opportunities for the nation. Force structure options under consideration by DoD and the Congress center on practical ways to reduce the forces required for major contingencies; to reduce the time and effort required to prepare for them; to increase the number of units capable of executing multiple types of non-combat operations; and to increase the participation of the reserve components. Force structure actions benefit from taking into account both OPTEMPO and PERSTEMPO limits, and budget and readiness considerations. The following relationships are pertinent (assuming demand remains constant or increases):

- As force size decreases, OPTEMPO generally increases.
- As active force size decreases in favor of the reserve components, OPTEMPO tends to increase due to the limitations on the availability of the Guard and Reserve.
- As the number of specialized units increases, OPTEMPO for those types of units decreases; however, with a finite force structure, the increase in such units is at the expense of other types of units.
- New units with missions similar to high OPTEMPO units might reduce the latter's overall OPTEMPO; however, recent experience with both the Joint Stars ground surveillance aircraft and the Predator UAV suggests that this is not inevitable.
- As new weapons and capabilities that reduce manpower and support requirements come on line, PERSTEMPO decreases.
- As long as very high demand for deployments of military force exists, whether for military or foreign policy purposes, efforts to reduce OPTEMPO and PERSTEMPO will be difficult.
- Increasing the size of the National Guard and Reserve at the expense of the active force will generally result in higher tempos, as the reserve components are generally less available than the active force. Many defense observers see support and specialized functions in the reserve components as a key building block in developing the affordable force, operating at acceptable OPTEMPOs, that is required. Some movement in this area is underway. At the same time, there is a widely held perception that the reserve component should “never be viewed as the key building block”³ because its near-term warfighting capability cannot match that of the active force.

The Quadrennial Defense Review debate may help. The debate over the Quadrennial Defense Review (QDR) will help clarify the problem and the range of options. Real solutions may be difficult to divine as the specifics of measuring the

³According to the planning staff of the National Guard Bureau in response to a draft of this report.

workload on U.S. forces, the actual costs to the treasury, and the opportunity costs are elusive. Although DoD is aggressively implementing management and procedural solutions, this approach has its limits. DoD has little control over external requirements. The quandary facing QDR planners is how to organize, train, and equip U.S. forces to meet the requirements of both the two-MRC scenario and the unpredictability of other operations in support of national objectives. Given current demands, say military advocates, any decision that reduces funding, manpower, or equipment can have immediate negative repercussions unless commensurate reductions in unit obligations are made. Others are not convinced. Until the demand issue is deliberated, understood, and dealt with, discussion of strategic resource tradeoffs to balance the defense budget under the guise of the QDR may be premature. Because DoD and the Congress are just beginning to understand the implications of operating in the current environment, premature action may be counterproductive and may even exacerbate the current situation.

To many observers and to some in Congress, the great promise of the QDR lies in the potential to redefine defense requirements. There is little debate in Congress over the current stress on DoD. The debate surrounds the future posture of U.S. forces and the resources that may be available to support them. The strategy of the Bottom-Up review levied certain requirements on the military. If those requirements are viewed differently in the QDR debate, U.S. forces could then be reorganized, repostured, and possibly repositioned in such a way as to extensively mitigate the negative aspects of current and projected demands.

Although many in Congress strongly support a “strategy-driven” approach to the QDR, the current fiscal realities may force some “budget-driven” decisions. This latter emphasis is viewed by many as a return to historical patterns of force hollowness following major conflicts. In either case, it is apparent that the QDR must deal effectively with the competing demands of increased military deployments, reduced forces, and constrained budgets to ensure that the force is capable of meeting the nations needs now and into the early 21st century.

Background and Analysis

There is little disagreement that U.S. forces are very busy. Although assessed levels of readiness are high, there is growing concern that the current pace of operations may not be sustainable. In addition to maintaining a robust warfighting capability, the military is now heavily engaged in executing the National Security Strategy of Engagement. How best to fulfill these dual requirements is the subject of the Quadrennial Defense Review debate. Based on current requirements and commitments, U.S. forces are under some strain; however, should requirements, commitments, or capabilities change significantly after the QDR debate, the force could be in a better position to meet today's challenges or it could be in a worse position. Congressional interest in either scenario is keen. Many views expressed in Congress are comparable to those of Representative Sisisky and Representative Dellums speaking to the Service Secretaries (House National Security Committee Hearing on the FY 1998 Defense Budget, March 12, 1997).

SPENCE: Mr. Sisisky.

SISISKY: But let me tell you what the real problem is and why our concern. All we've heard, we've heard it from the Defense Department, we've heard it from you, we've heard it from the chiefs of staff, that we're as ready as we've ever been. Readiness, number one priority. And I believe that. But let me tell you, the things that we've heard in the last few weeks is that we're not going to be that ready in 18 months. The morale is low.

And then I keep reading these things: two Army divisions may go, two carrier battle groups may go, things like that, some more wings in the Air Force may go. I saw some interesting figures yesterday...The Army across this world had 33,000 people deployed plus 100,000 deployed in regular stations. The 33 were just in Bosnia and other places. As I understand it, only 20 percent of the Army is combat forces. Now that may be a sliding figure. And obviously, the other people are over there, too. But that's 100,000. You take two divisions out of there, I don't know where we'd go. And I doubt very seriously whether you'd have an Army that you'd be very proud of.

DELLUMS: The reason why I raised the issue of the Quadrennial Review to all of you, is that if indeed the Quadrennial Review is a serious process, all of these distinguished witnesses are an integral part of it. And (if) what is on the table is a total re-look with potential for change, then all of these prognostications about the future, what future are (we) talking about? You can only be extrapolating based on present strategies, present doctrine, present force structure based on present requirements.

If the Quadrennial Review changes all of that, then how can you predict something you've not figured out as yet? We don't have the Quadrennial Review before us. So all these alarming statements about readiness shortfalls, modernizations shortfalls, strategy problems, force structure implications, you can't — you can't get there from here until we finally have the Quadrennial Review document before us. That will frame the budget for fiscal year 1999.

So you cannot extrapolate based on fiscal year 1998 what's going to happen several years down the road...And I would caution my colleagues that talking

about where all these dangers are at this point is not appropriate and not relevant until such time as we determine the Quadrennial Review. If the Quadrennial Review simply underscores the status quo, then maybe everybody's right. But if it is a substantive point of departure, then everything then has to be framed in that new paradigm, not the old paradigm.

The bottom line for Congress is how to fund, under resource-constraints, short-term demands for military forces, long-term needs to maintain effective forces, and commitments to service personnel. Notwithstanding substantial force cuts, the U.S. military is by far the most capable on earth. There is a perception that threats to the nation are much reduced from those of 1950-1990. There is also a perception that U.S. military force can play a deterrent, decisive or a pacifying role in most conflicts. Both views, whether right or wrong, affect the debate surrounding the Pentagon's budget. Unfortunately, during the transition from a high threat / low activity to a low threat / high activity military posture, an attempt to satisfy both old and new requirements may have occurred. As a result, some military advocates today hold that any reduction in resources, without a commensurate reduction in commitments, will likely result in increases in OPTEMPO/PERSTEMPO that take DoD above "the breaking point". General Richard E. Hawley, Commander of Air Combat Command, summed up his analysis of the current situation:

Then, of course, there is the Quadrennial Defense Review and the potential that it will lead to further reductions in our already heavily committed force structure. As a primary provider of air combat forces to our joint warfighters, I advise caution as we contemplate this course. Our nation's strategy of global engagement is a sound one. But it is one that is imposing heavy strains on our already much-reduced force structure. Many of the men and women whom I meet as I travel around Air Combat Command are tired. We are testing their commitment to "service before self" and, so far, they have not been found wanting. But there are limits on how much we can ask these wonderful people to give. It is my sense that we are close to that limit. Once we cross that fine line, the exodus will be devastating and difficult to reverse. We must find a way to keep our force structure and our commitments in balance. I believe we can do that.⁴

General Hawley has taken action within his command to significantly reduce the strain on his force through internal management practices and he has done so without increases in either funding or resources. Time will tell if these changes are sufficient. In any case, innovation in a time of resource constraints may prove to be the most useful approach as DoD learns to operate in a high demand environment.

One Force, Two Strategies: The QDR and Greater Demand

The Quadrennial Defense Review (QDR) mandated by the 104th Congress reviewed the structure and mission of the nation's armed forces. The report, out in May 1997, will, if implemented, replace the last review conducted in 1993. Then Secretary of Defense Les Aspin's Bottom-Up Review established the requirement to fight two nearly-simultaneous major regional contingencies (MRC) as the overarching

⁴From a speech to the Air Force Association Symposium, January 30, 1997, in Orlando, Florida. Accessible on the World Wide Web at <http://www.aef.org/ol7.html>

requirement for the National Military Strategy. In statements before leaving office, former Secretary of Defense Perry clearly restated the two MRC scenario as the primary consideration for posturing the nation's defense. In establishing a base-line force structure capable of engaging in a two-MRC conflict, defense planners in 1993 assumed a peacetime activity level for U.S. forces that would enable the vast majority of combat and combat-support units to quickly swing into action. The intervening years have seen a dramatic increase in the activity of U.S. forces in non-MRC operations while at the same time the size of the armed forces has decreased significantly. These smaller forces are now engaging in military operations that are larger, longer, more intense, and more complex than those anticipated in 1993. The result is that some combat forces earmarked to transition to MRC duty in the Bottom-Up Review (BUR) may not be available as predicted. Further, the high activity levels are straining some military budgets, curtailing training opportunities for deployed units, increasing wear and tear on some equipment, and depleting some wartime stockpiles. The task facing defense planners is how to organize, train, and equip U.S. forces to meet the requirements of both the two-MRC scenario and the unpredictability of other operations in support of national objectives.

With no apparent threat, the QDR debate will not necessarily reemphasize the two-MRC scenario as the guiding principle of the National Military Strategy because defense planners now contend with a non-Cold War National Security Strategy in which military forces play a significant peacetime role. The BUR was completed prior to the administration's announcement of the National Security Strategy of Engagement and Enlargement; therefore, the BUR force structure focused primarily on the requirements of high-intensity combat and did not anticipate the additional requirements which would be levied on U.S. forces (See figures 1 and 2 below). Although its main purpose remains the defense of the nation, the military's role as an element of national power is expanding. Maintaining the equilibrium between an expanded peacetime role, which may prevent conflict, and the required wartime role, which is to win conflict quickly, is the key challenge.

A peacetime Major Regional Contingency equivalent. Figure 1, from the Bottom Up Review, displays the anticipated "Conflict Dynamics" upon which the current force structure was based. According to DoD officials who worked on this analysis, the requirements for Peacekeeping/Peace Enforcement and Humanitarian Operations were, in retrospect, understated.⁵ These same officials characterize DoD's current level of effort as equivalent to one major regional contingency (MRC). Figure 2 adjusts the original "Conflict Dynamics" based on this assessment. The original plan was for U.S. forces to quickly win the first MRC in order to prepare for the possibility of a second MRC occurring nearly simultaneously. The effects on U.S. forces of a prolonged first MRC and the associated risk that would follow in the second were a major concern. Sustained operations over the last five years, assessed as equivalent to one MRC, are therefore, cause for concern. These same DoD officials have testified before Congress that we may be going through an exceptional time and that the current level of effort will probably subside. Without clear strategies for withdrawing from operations in Northern and Southern Iraq, Macedonia, Bosnia and

⁵According to Deputy Under Secretary of Defense Louis C. Finch who worked on the BUR proposals. Interview with the author.

elsewhere, and with the ever-present dangers of potential flash points like Rwanda, Zaire, the assertion of an “exceptional time” comes into question. For example, the final withdrawal date for U.S. forces in Bosnia is not certain now and will remain so if the prospects for renewed civil war are not reduced.⁶

Understanding the current and projected demand on U.S. forces is an important early step in developing a National Military Strategy and a force structure capable of meeting these compelling obligations. Key measures of that demand are the pace or tempo of military operations and the demands for duty away from home that such operations place on individual service members. It is important to measure and understand these demands in order to make appropriate strategy, force structure, and readiness decisions.

⁶For more on the future debate over the withdrawal from Bosnia, see NATO and Bosnia: A Looming Transatlantic Debate. CRS Report 97-480 F by (name redacted) (April 22, 1997).

Figure 1. Anticipated nature of military requirements or “Conflict Dynamics” as published in the Bottom Up Review. Column one indicates the anticipated level of peacetime activity; column two, the level of activity associated with one MRC.

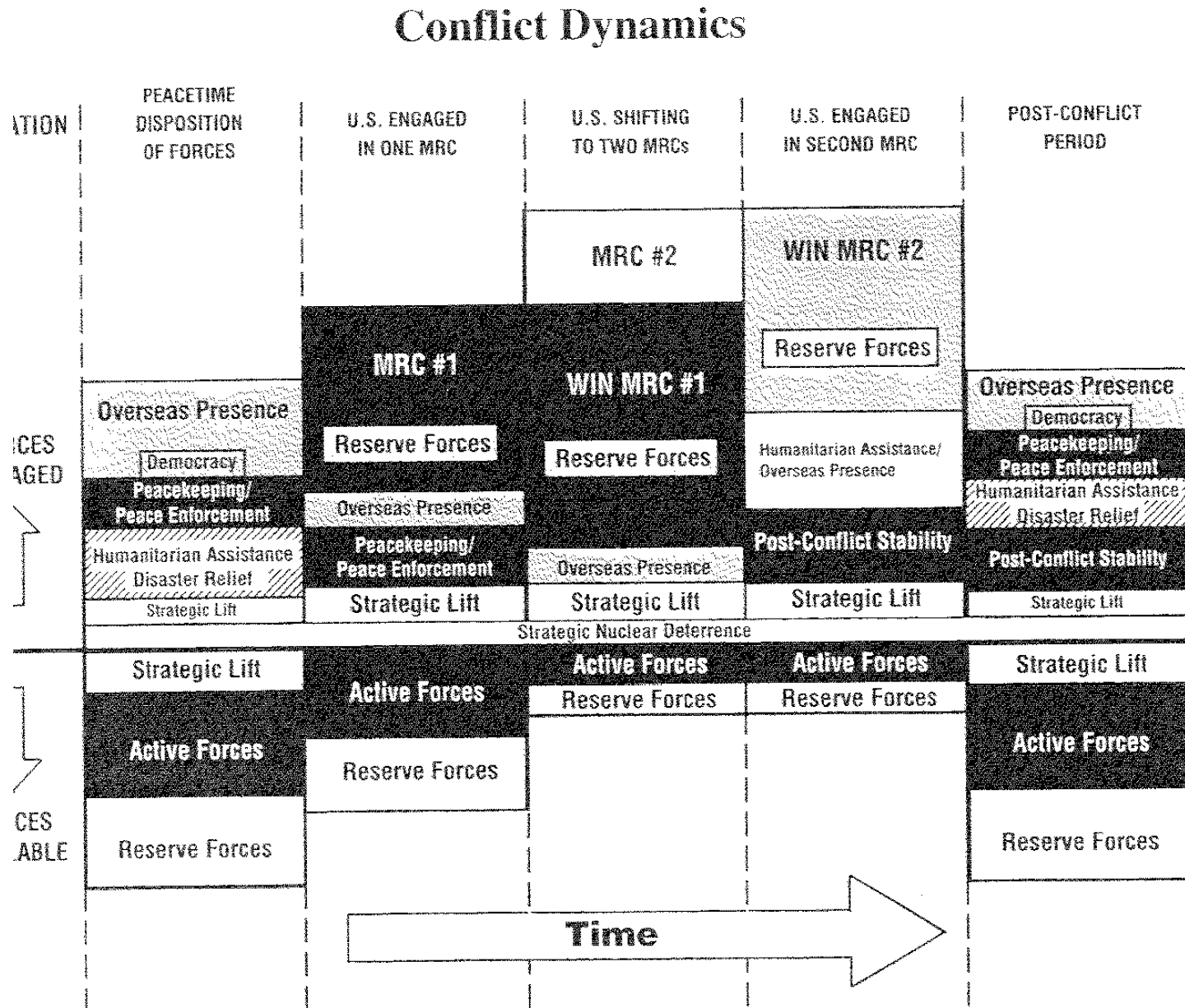
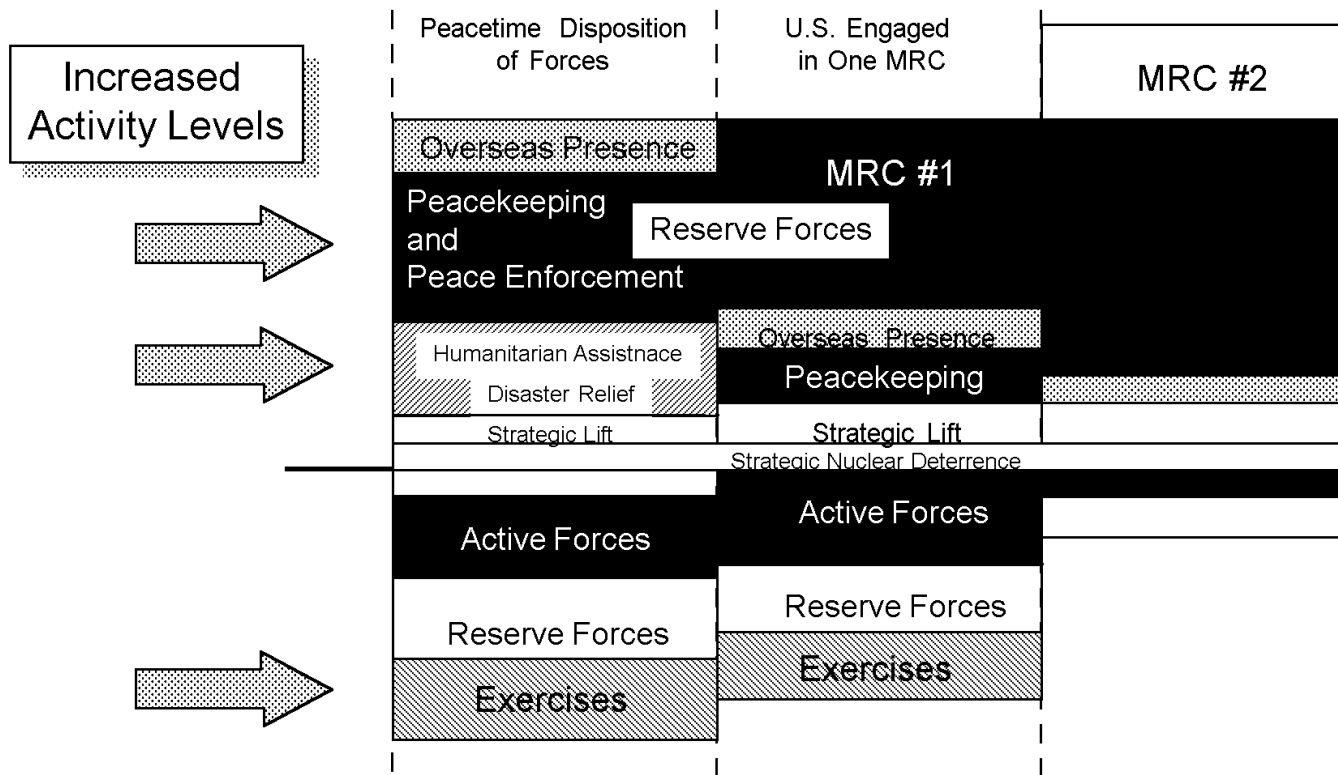


Figure 2. Bottom Up Review analysis of “Conflict Dynamics” adjusted for actual operations from 1992-1997 which may equate to 1 MRC. The “Exercises” added to each column indicate the effort required to prepare for the missions depicted.

Conflict Dynamics 1992-1997



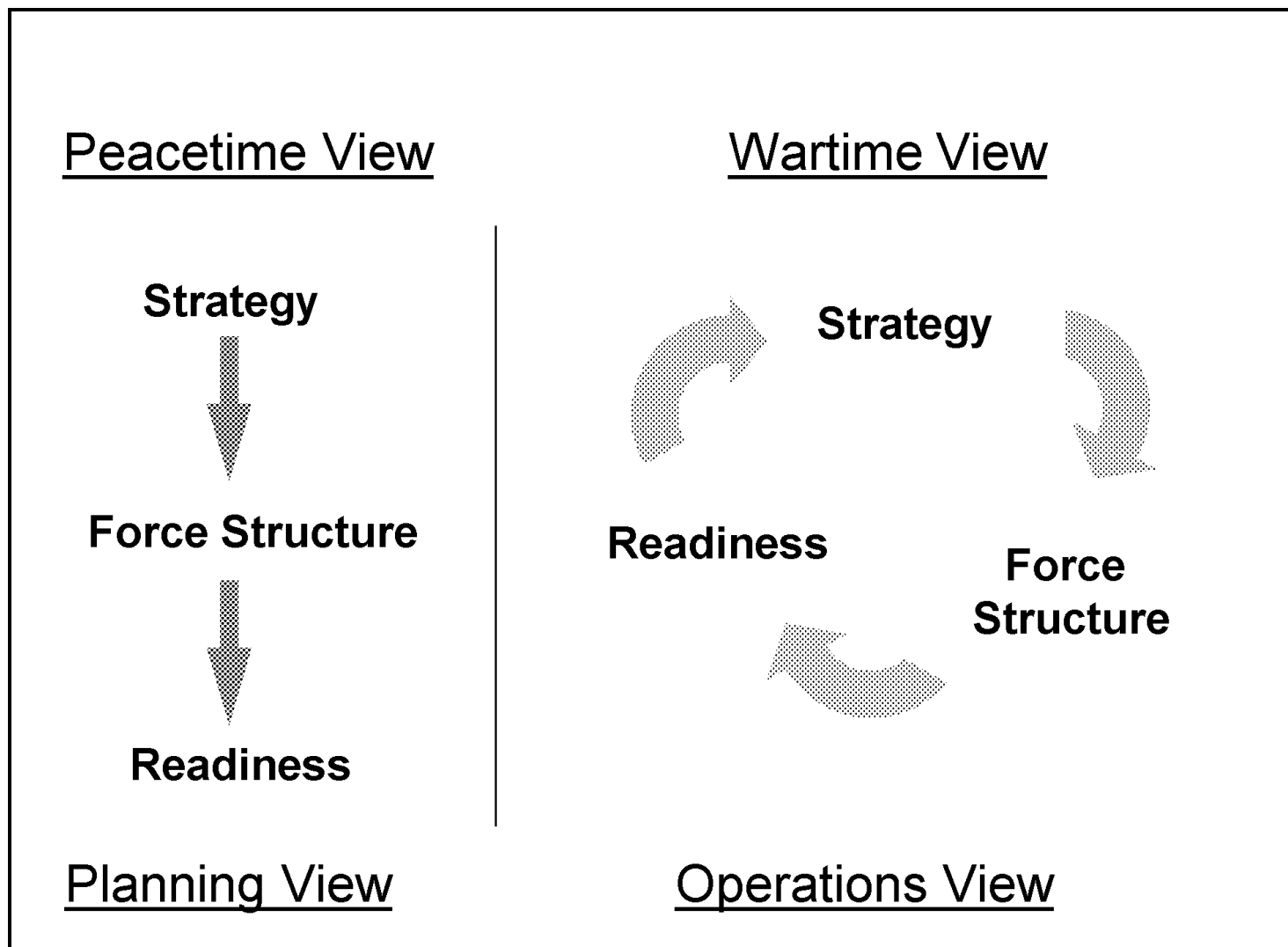
Capacity vs Commitments: A dynamic relationship

The assessment of current and projected demands enables planners to understand the capability available for any new National Military Strategy. The strategy, once derived, will determine the force structure required. Force structure decisions influence readiness determinations. To preclude surprise and to react quickly to aggression, a certain amount of the force must be in a high state of readiness. The remaining readiness decisions are based on the projected requirements of military plans written to implement the National Military Strategy (e.g. Days available prior to deployment). The required readiness levels of units determine their training, equipment, and personnel needs and priorities. It is in these areas, training, equipment, and personnel, that high demands create the most turbulence. Therefore, in understanding the turbulence created within the force by higher than planned levels of activity, one can understand the impact on readiness and the efforts required to maintain that readiness; the impact of readiness requirements on force structure decisions; and the impact of force structure decisions on the ability of the military to meet the requirements of the strategy. In summary, planning to execute the strategy must account for current and projected demands on the force in order to posture a viable military to meet the nation's needs.

The left side of figure 3 below illustrates this sequence. The strategy, devised to meet the challenges to national interests, is the framework for force structure decisions; based on the force structure, readiness levels are determined that ensure the forces can execute the strategy. This static process is typical of peacetime planning. As long as forces maintain their required readiness levels, execution of the strategy is assured. In a dynamic environment characterized by high demands on portions of the force, readiness levels and a unit's capacity to operate are constantly in flux because units are preparing for, engaging in, and recovering from operations. In this case, the relationship is circular in that changing readiness levels, which should indicate a unit's capacity to engage in operations, affect the military's ability to execute the strategy. To understand the extent to which the military's ability to execute the strategy is affected, it is important to not only know the capability of the unit but also the unit's capacity to engage in and sustain operations. Current readiness measurements show a snapshot of capability. Clearer assessments of capacity are required in a fast paced environment because, with the surplus capacity of the Cold-War force diminished, the ability of U.S. forces to quickly "surge" up to a high intensity level and/or their ability to sustain operations over an extended period are important considerations. Issues surrounding readiness levels and the combat role of the Army National Guard are key aspects of this debate.

"How busy are U.S. forces?" and "Can they do more?" or "Should they do less?" are pertinent questions framing the current debate over the role of U.S. forces in the world today. To answer these questions requires an understanding of the relationship between capacity and commitments. Although capacity is beginning to stabilize following the drawdown of U.S. forces, commitments are anticipated to fluctuate at high levels. As commitments increase and run concurrently, there theoretically comes a point where capacity is degraded. Finding this point in order to achieve balance between the requirements of the National Military Strategy and the new missions inherent in the National Security Strategy is the challenge confronting defense planners. Further force structure cuts to combat and combat

Figure 3. Strategy, force structure, readiness dynamic for planning or “peacetime” and operations or “wartime”



support forces engaged in current operations should be closely analyzed to ensure the United States retains the capacity to meet probable threats and obligations.

Measuring Commitments and Capacity. The current DoD system, the Status of Resources and Training System (SORTS), measures training, personnel, and supplies and includes a commander's assessment. SORTS does not measure the level of effort required of the unit to attain high ratings or the extent to which the unit is committed to operations. It does, however, use a "Commander's Assessment" to gauge the overall readiness of the unit. According to DoD officials testifying before Congress, this assessment was used in 10 percent of SORTS reporting to increase the readiness rating of units and it was used in a fraction of one percent of the reporting to lower a unit's readiness rating.⁷ This system, long the subject of congressional and GAO scrutiny, reflects a snapshot of capability based on objective standards. It is not predictive nor does it reflect a unit's capacity to "turn-up" the level of effort. Measurement of both the ongoing level of effort, indicated by hours and days worked for example, and the extent of a unit's commitments away from home station would improve the assessment of a unit's capacity for increased activity.

The measurements available to indicate the activity of U.S. forces are OPTEMPO and PERSTEMPO. Operations Tempo (OPTEMPO) is the rate of U.S. forces involvement in all military activities. OPTEMPO in this report refers to this general meaning of the term. The services also use OPTEMPO as a programming/budgeting term that indicates, for example, steaming hours for the Navy and combat vehicle usage for the Army. The Air Force's flying hour program is one gauge of the "OPTEMPO" of its combat units. Further, OPTEMPO is often used to describe only the pace of contingency deployments excluding other unit activities such as exercises and training deployments. Units are affected in varying degrees by all these activities and so, for OPTEMPO to be a meaningful measurement of unit operations it should include all unit activities.

Personnel Tempo (PERSTEMPO) is a subset of OPTEMPO and is the amount of time spent away from home, usually measured in the number of nights service members spend away combined with all activities in which a service member is engaged. The post-Cold War drawdown of the U.S. armed forces coupled with increased use of the military has led to a much higher than planned rate of activity, OPTEMPO, for many military units and significantly increased the time spent away from home, PERSTEMPO, for the military personnel involved.

Measuring OPTEMPO/PERSTEMPO

In order to discuss policy options and implications, the general terms OPTEMPO and PERSTEMPO will be used in this report as defined above. Service definitions may vary; therefore, where important differences exist, they will be noted.

⁷Gebicke, Mark, Director, Military Operations and Capabilities, General Accounting Office. Testimony before the Military Readiness Subcommittee of the House National Security Committee March 11, 1997.

Since measuring OPTEMPO indicates actual unit activity levels, which encompass everything the unit does, with the purpose of gauging unit capacity to accomplish proposed missions, the sum of all endeavors, regardless of purpose, provides the most accurate assessment. All the services use a variety of OPTEMPO categories to measure specific activities. These “OPTEMPO” measures do not clearly indicate the overall pace of the unit. Naval OPTEMPO measurements provide the clearest picture of unit activity because the ship is not only the weapon system, it also defines the unit and provides the platform for conducting operations, training, and exercises. Steaming hours in the Naval definition generally equates to a surface unit’s rate of activity; however, in port activities and temporary duties away from home port also contribute to the rate of activity and are not reflected in ship OPTEMPO. Similarly, embarked Marine Corps units can define part of their OPTEMPO in Naval terms. The Army and Air Force OPTEMPO considerations are less clear-cut and therefore harder to measure. The Army refers to vehicle mileage, in budgetary terms, as OPTEMPO. Again, this is a sub-category of a units activity, not a complete measurement.

The scope of tempo-related problems is difficult to measure as data collection by the services was not designed to indicate the impact of OPTEMPO/PERSTEMPO; consequently, reliable indicators of unit and individual repercussions are only now being developed. In addition, some data analysis may be misleading because averages of large groups do not adequately reflect the burdens on discrete elements.

Why measure OPTEMPO? OPTEMPO measurements are important because they aid planners in predicting requirements and managing commitments. Understanding current and projected demands enables the military to sustain readiness by quantifying the obligations to engage in operations, train and exercise the force, develop personnel, and maintain and acquire the requisite equipment to do so. In today’s resource-limited defense environment, such an understanding should contribute to maximizing efficiency and avoiding wasteful, redundant, or potentially damaging practices.

Why measure PERSTEMPO? In general, personnel tempo or PERSTEMPO is the amount of time spent away from home for DoD personnel. PERSTEMPO, which is different for each person, indicates the time spent in all professional activities and reflects the remaining time available for personal and professional development activities. Service members can have a high PERSTEMPO while never leaving their home base due to, for example, extended shifts over long periods. Individual tempos may differ from those of the unit because individuals may have official travel, professional education, or change-of-station requirements above those required by their unit obligations. Even so, the primary factor contributing to the significant recent increases in PERSTEMPO is unit deployments for operations and exercises.⁸

⁸For a thorough discussion of PERSTEMPO issues including recent data, effects on readiness, and DoD actions to mitigate the impact of high PERSTEMPO, see U.S. General Accounting Office. *Military Readiness: A Clear Policy is Needed to Guide Management of Frequently Deployed Units*. Report Nos B-271135 and GAO/NSIAD-96-105. April 8, 1996.

No single standard for PERSTEMPO exists within DoD. Difficulties arise in evaluating PERSTEMPO measurements because each service defines levels of unit and individual activity differently and they each have a different definition of what constitutes high activity. Deployments are also defined differently by each service; for example, training rotations to the National Training Center do not figure in the Army’s measurement of deployments yet they are clearly an activity that contributes to PERSTEMPO. According to a 1996 GAO report *Military Readiness: A Clear Policy is Needed to Guide Management of Frequently Deployed Units*:

It is difficult for DoD to determine the actual time that either military personnel or their units are deployed. This information is important to planning and managing contingency operations. Although all services now have systems to measure PERSTEMPO, each service has different (1) definitions of what constitutes a deployment, (2) policies or guidance for the length of time units or personnel should be deployed, and (3) systems for tracking deployments.⁹ (See Table 1 below)

GAO, and others, have recommended a single formula for measuring time away from home: one day away equals one day deployed. DoD has not established a comprehensive definition and DoD’s management of PERSTEMPO-related issues will continue to be difficult. Service cultures, mission characteristics, deployment timelines, and sustainment requirements account for most of the differences in service definitions and hamper efforts at establishing a universal definition. Even so, the Joint Staff, at the direction of the Chairman, Joint Chiefs of Staff (CJCS), is working toward a common definition and an accurate measurement system.

Table 1. Service-specific Deployment Definitions and Policies

Measurement	Army	Navy	Air Force	Marine Corps
Definition of Deployment	7 days or more	56 days or more	1 day or more	10 days or more away from home station
Policy or regulation limiting deployments	No policy, but goal of no single deployment over 179 days	Yes, policy limits deployments to 180 days/6 months	No policy, but maximum desired level of 120 days per year	No policy, but goal of no single deployment over 6 months
System tracking capabilities	Unit and individual	Unit only	Major weapon systems and individual	Unit only

Source: GAO¹⁰

⁹Ibid.

¹⁰Ibid.

Comparing Navy and Air Force approaches. Each service necessarily tailors its respective forces and deployment guidelines to the requirements of the missions it performs and the levels of readiness required of its forces. The Navy, which rotates forces forward to overcome the lagtime involved in deploying forces to a fast-breaking crisis by sea, keeps forward-stationed forces at high readiness while units in home-port are in varying states of readiness. The Air Force, whose forces deploy into combat within 48 hours of notification maintains high levels of readiness across the force. These differing requirements are reflected in the OPTEMPO and PERSTEMPO of each service.

Navy PERSTEMPO Rules. The Navy has stringent rules regarding PERSTEMPO but an individual measurement system is not employed. There are three tenets of the Navy policy:

- Deployments will be no more than six months from the time they depart homeport until the time they return to homeport.
- The turn-around ratio, that is, the number of days at home compared to the number of days on a deployment, will not exceed 2.0/1. (Note: the Navy defines a deployment as 56 days or more at sea.)
- 50% of a sailor's time over the past three years must have been spent in homeport.

Waivers to this policy require approval of the Chief of Naval Operations. In 1996, according to the Navy staff, there were only 5 waivers granted Navy-wide and these were to take ships for required maintenance to facilities away from homeport. In 1997, there has only been one waiver, again for maintenance.

According to Navy officials who track PERSTEMPO, the Navy's turn-around ratio that is, the time between deployments must more than double the time spent on the last deployment averages between 2.4-2.6 to 1 although some aviation units may be closer to the 2.0 limit. While it is true that the turn-around ratio has diminished in recent years, it still remains well-above the Navy goal for most units.

Individual sailors may, at times, experience higher PERSTEMPO if reassignments occur between deployments. A sailor coming off a deployment that is reassigned to a ship preparing for a deployment is likely to be hard pressed. The Navy does not track individual PERSTEMPO, but, based on the rules for unit deployments, the maximum three-year average for most sailors should be around 180 days.

Air Force PERSTEMPO Policy. The Air Force has no specific rule regarding PERSTEMPO. Air Force policy is that, as a goal, individual PERSTEMPO should not exceed 120 days per year. This policy is consistent with the Navy's more stringent 2.0:1 turnaround ratio in that 120 days away plus 240 days at home roughly equals one calendar year (See figure 4 below). The Navy uses deployments, any continuous sea duty that exceeds 56 days away, to measure the 2.0:1 ratio. Figure 5 shows the effect of additional activities away from home station on Navy PERSTEMPO. The Navy policy of 50 percent of one's time spent at home over the three preceding years ensures that additional activities don't take sailors beyond a

PERSTEMPO of 182-183 days per year. The Air Force policy of 120 days per year, one-third lower than the Navy requirement, is based on readiness requirements. Deployed naval forces maintain a high state of readiness while stationed in potential hot spots. Non-deployed naval forces, their missions covered by deployed naval forces, cycle through stages of refurbishment and retraining as they prepare for their next deployment. Periods of unreadiness are planned into this cycle as Naval personnel and equipment “standdown” from deployed operations. Figure 6 shows this cycle. Air Force units, on the other hand, maintain high levels of readiness at all times because of the potential need to deploy worldwide on short notice. This continually higher state of readiness, compared to non-deployed naval forces, requires more dedicated training time at home station to maintain. Therefore, the Air Force 120 day policy affords units the time to train in order to maintain continually high readiness ratings. The policies of both services are designed to support the nature of their unique contributions to joint operations and are tailored to their specific needs.

Figure 4. Theoretical comparison of the OPTEMPO of a Navy carrier air wing versus an Air Force fighter wing showing an equal “deployment” load. Compares a three-year Navy deployment cycle with the Air Force policy of 120 days away per year. In both cases, the PERSTEMPO burden appears to be 360 days in 3 years as depicted in the center. Source Air Combat Command

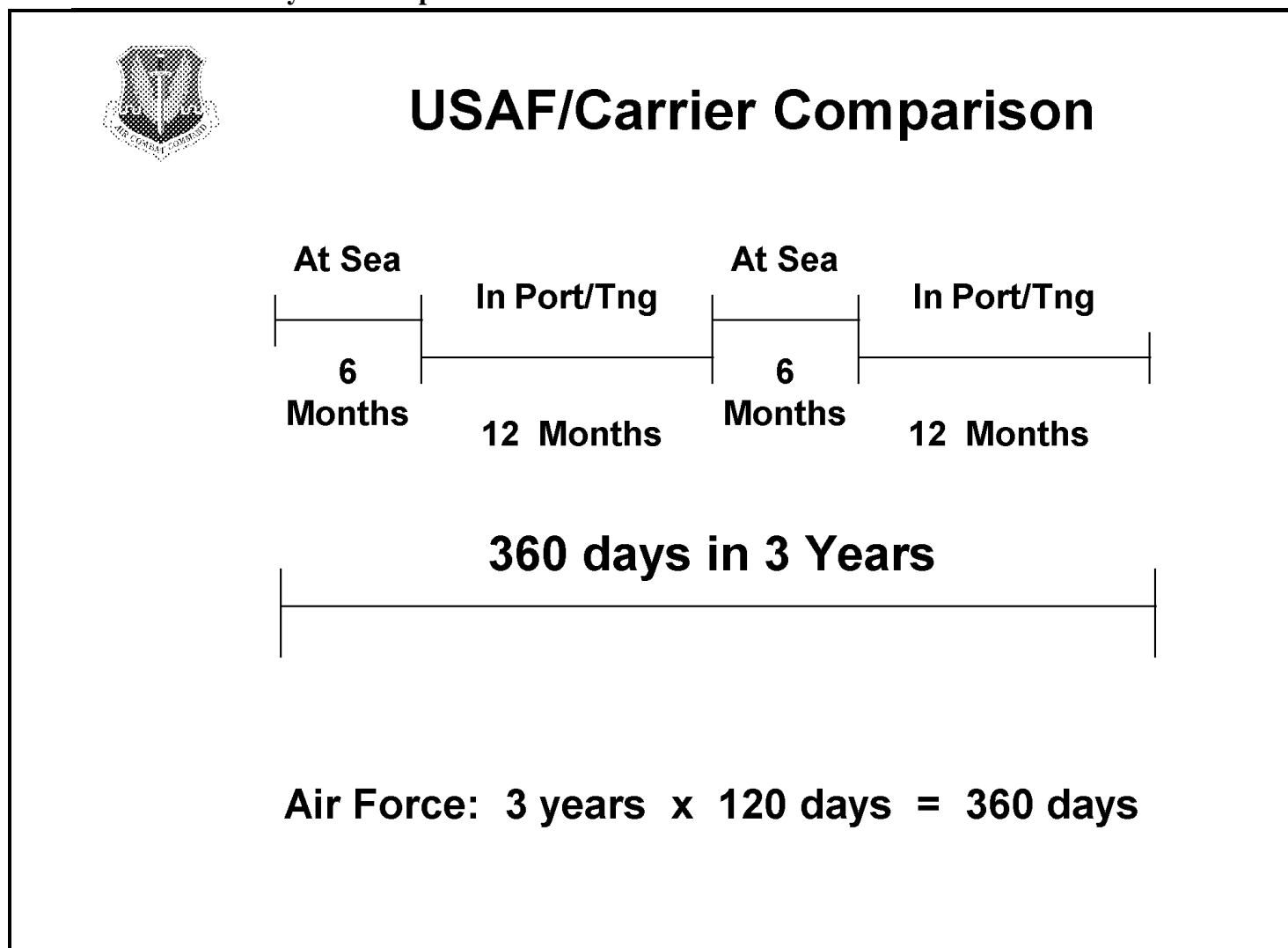


Figure 5. Many Naval aviation units also train at Fallon NAS, NV beyond 6-month deployments at sea. In this case, the depicted aviation unit's three-year PERSTEMPO is 460 days vice 360 days. Source Air Combat Command.

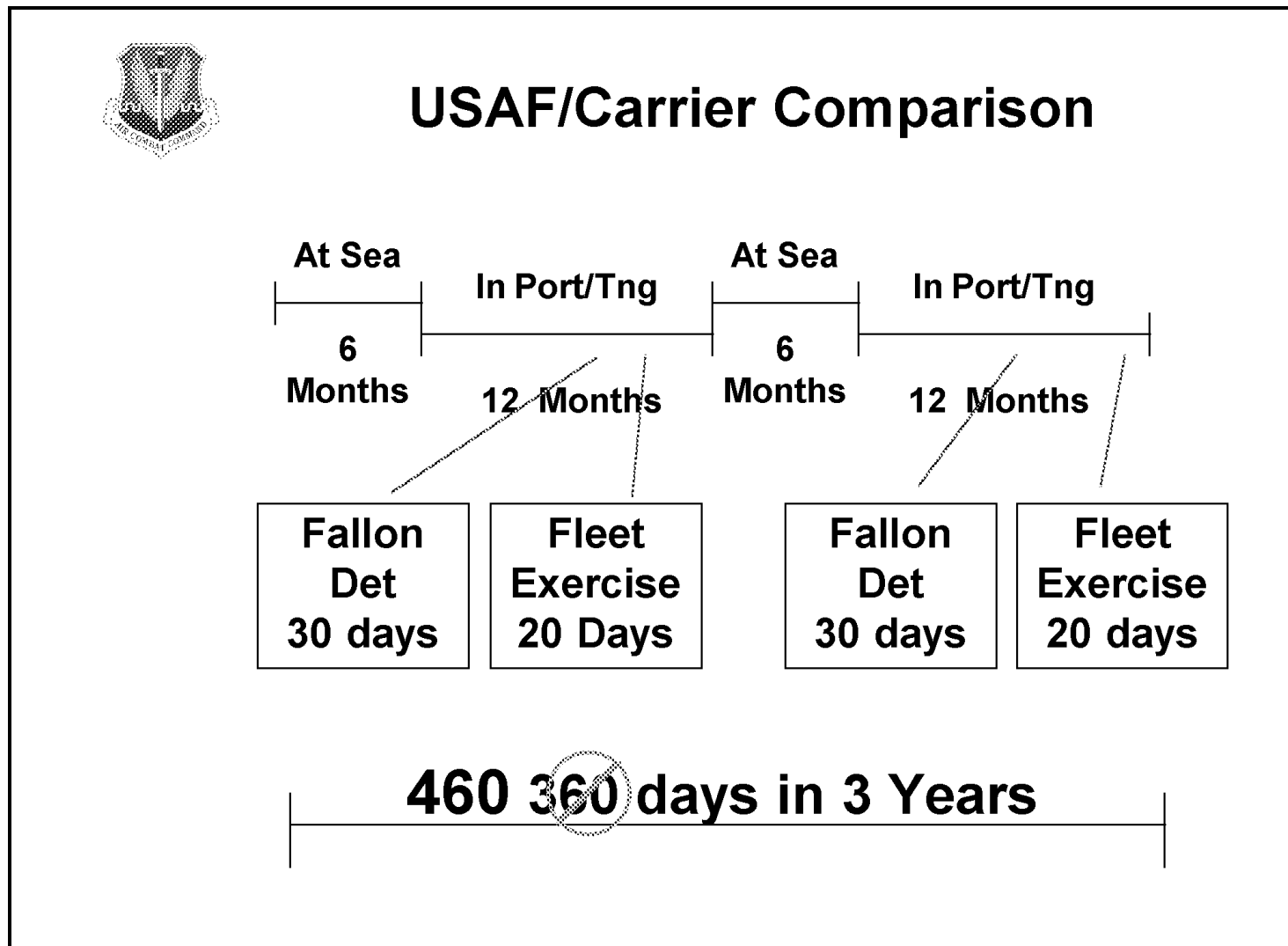
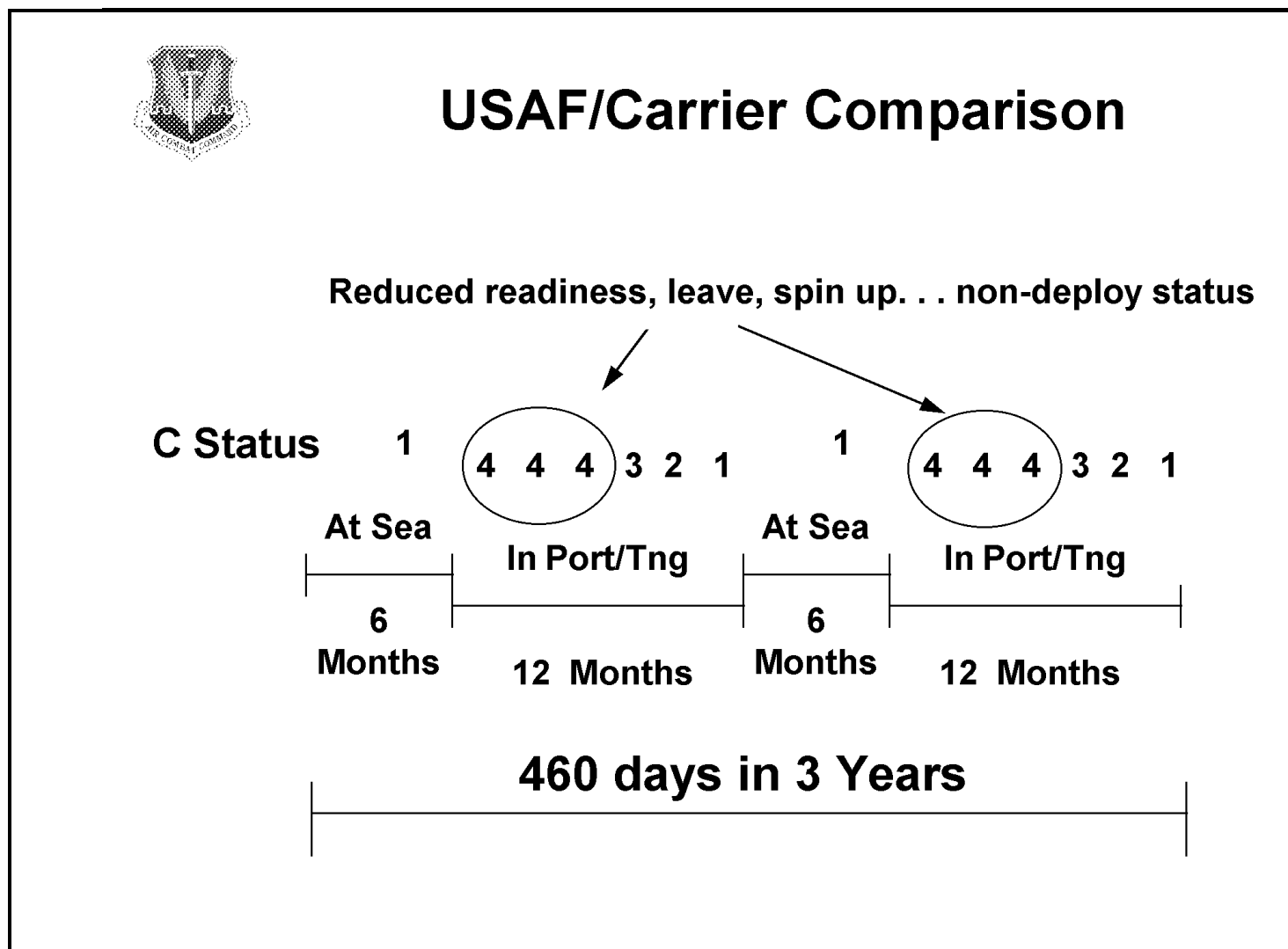


Figure 6. Cyclical readiness levels of a Navy carrier deployment rotation. During the 460-day Navy PERSTEMPO period in this example, readiness levels are reduced while preparing for the next deployment. The Air Force, with a more rapid response commitment from homestation, maintains readiness at C-1/C-2 for all units. Source Air Combat Command



Measuring Readiness in OPTEMPO Terms

NO “Opportunity Cost” evaluation. Theoretically, assuming adequate funding, acceptable readiness levels can be maintained indefinitely at certain OPTEMPO and PERSTEMPO levels. These levels have not yet been identified making it difficult to assess how long readiness can be sustained under certain conditions. Further, there is no “Opportunity Cost” system for evaluating the relative worth of DoD actions. In other words, there is no way to know the price, in non-monetary terms, such as readiness, for current operations thereby making quantitative assessments difficult. “What didn’t we do because we did Operation X?” is a question that can now be answered only in specific instances, anecdotally and non-quantitatively.

Future readiness measurements should be able to predict, based on OPTEMPO and PERSTEMPO, how long the current level of effort can be prudently sustained. An effective system for estimating an acceptable OPTEMPO and PERSTEMPO limit would be unit-specific, would be tied closely to the unit’s training program, and would depend on several factors including personnel experience, equipment capabilities, weapon system age, and mission type.

PERSTEMPO measures cannot drive unit deployment decisions. Any system of measurement should account for continuous personnel rotations between units that can exacerbate the PERSTEMPO problem. A unit’s OPTEMPO is the major portion of an individual’s PERSTEMPO. When individuals are reassigned, their PERSTEMPO includes the previous unit’s deployed time. Were they to stay in the original unit, service management practices would ensure they were given a break. After they move, the breaks accrued by the former unit do not carry over with them. Often times, individuals returning from a deployment will transfer to a unit preparing to go on a deployment. Assignments to remote locations, where the PERSTEMPO is 365 days a year, that precede or follow an assignment to a unit with a high OPTEMPO strain individuals the most. This drain on individual readiness should be a key concern of an effective management system. Certainly, the reverse also happens where individuals miss deployments due to reassignments. The number of units currently involved in operations and exercises makes the former problem more common than the latter condition. Although it is important to identify high PERSTEMPO individuals, units must be able to deploy with all their assigned personnel in order to maintain the unit integrity and cohesion that are essential to successful operations. Leaving soldiers behind because they have exceeded a PERSTEMPO ceiling is not considered a workable alternative.

Readiness and OPTEMPO/PERSTEMPO. The important aspect of OPTEMPO/PERSTEMPO analysis is in the indication of capacity. As noted, SORTS reporting does not indicate capacity. Highly stressed units and individuals cannot perform as well, or for as long, as well-rested ones. Under SORTS, a commander assesses the unit’s ability to “go to war” today not its ability to sustain or to increase a high level of activity. Capacity, whether a unit or an individual “probably” can do more or whether they should rest and/or reconstitute, needs to be a part of the overall readiness evaluation of U.S. forces because of the combination of smaller forces and higher workloads. The current situation for many units approaches comparison to

combat where fresh units are rotated to the front allowing forward units the opportunity to rest and to reconstitute.

The services are working to develop new ways to measure stress on units. Air Force Studies and Analysis (AFSAA), working closely with highly stressed units in the Air Force, developed the following list of personnel and equipment indicators in order to evaluate the stress effects of sustained high workloads.

Unit Indicators of High Stress

(Acronyms are defined at the bottom of the list)

Table 2. Indicators of Personnel Stress

	Level of Stress Produced		
	Low	Medium	High
Avg Ops TDY days per year	<90	90-120	>120
Highest TDY AFSCs in Ops	<90	90-120	>120
Avg duty week for Ops*	40-45hrs	45-55hrs	> 55hrs
Avg Mx TDY days per year	<90	90-120	>120
Highest TDY AFSCs in Mx	<90	90-120	>120
Avg duty week for Mx*	40-45hrs	45-55hrs	> 55hrs
Aircrew flying time waivers	0	<5%	>5%

* Includes work done at home such as answering emails, reading reports, etc.

	Level of Stress Produced		
	Low	Medium	High
Statics/Demos/Capabilities per 1 PAA	<2/yr	2-5/yr	>5/yr
Major exercises participation per year	2-3	1	0
Number of personnel NMR	<10%	10-20%	>20%
Aircrew/personnel training waivers	0	<5%	>5%
Delays in upgrade training/qual.	0	<10%	>10%
Avg Specialty experience: officers	>4 yr	4-1 yr.	<1 yr
Avg Specialty experience: Ops enlisted	>4 yr	4-1 yrs	<1 yr
Avg Specialty experience: Mx enlisted	>4 yr	4-1 yrs	<1 yr
Manning of critical Ops AFSC's	105-95%	95-85%	<85%
Manning of critical Mx AFSC's	105-95%	95-85%	<85%

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Balance of field grade officers assigned*	5-15%	15-25%	5<>25%
Officer Separation rates	<10%	10-20%	>20%
Enlisted Separation rates	<10%	10-20%	>20%
1st Term Reenlistment rates	>75%	75-50%	<50%

* In addition to unit leadership. This may not apply to non-flying units

	Level of Stress Produced		
	Low	Medium	High
Career broadening assignments *	>50%	50-30%	<30%
Selection Rates for SOS	>70%	70-40%	<40%
Pursuing college degrees: enlisted **	>35%	35-25%	<25%
Pursuing advance degrees: officers ***	>50%	50-30%	<30%
Disenrollment from course work	<10%	10-25%	>25%
Field conditions &/or min per diem TDYs	No	One	Both

* For senior Captains & Majors. Career broadening as defined by Unit leadership. That is, doing a job in other than one's specialty.

** Include E-4's and higher

*** % of Promotable O-3's thru O-4's w/o master's degrees

	Level of Stress Produced		
	Low	Medium	High
Accrued leave exceeding 60 days	0	1-25%	> 25%
Fathers missing child's birth due to TDY	0	1-3	> 3
TDY within 30 days of child's birth	0	1-3	> 3
Taking leave at a desired time period/yr *	100%	99-60%	< 60%
Working Thanksgiving or Christmas **	<20%/1	>20%/1	20%/>2
Family Maltreatment Incidents	0	1-2%	> 2%

* Given 3 "1 week" choices of leave/year, could the member take leave during one of these choices

** Includes New Years. Avg per person for an average tour length of 3 years

Table 3. Indicators of Equipment Stress

	Level of Stress Produced		
	Low	Medium	High
Fix Rate (Code 3 breaks)*	>75%	75-70%	<70%
Avg Delayed Discrepancies per A/C	<30	30-35	>35
Repeat Reoccurrence Rate	<2%	2-4%	>4%
Cannibalization Rate	<8%	8-12%	>12%
NMC due to Supply	<15%	15-20%	>20%
NMC due to Maintenance	<10%	10-15%	>15%
Availability of Depot Support	<1 mos	1-2 mos	>2 mos
Delay of Major Upgrades	<3 mos	3-6 mos	>6mos
Delayed Scheduled Inspections	0	1-5	>5
Delayed Depot Inputs	0	1 A/C	>2 A/C
Spare Engines per Mobility Package	>2	1	0

* Code 3 means an aircraft is not fully mission capable

Notes:

“Ops” refers to individuals who operate or support the operation of aircraft.

“Mx” refers to maintenance personnel who prepare, repair, and maintain aircraft.

“TDY” refers to “Temporary Duty” or days away from home.

“AFSC,” Air Force Specialty Code, refers to one’s career field.

“Statics/Demos” are requirements to take airplanes to airshows and open houses

“PAA” is “primary aircraft assigned,” so that 24 PAA means that a unit owns 24 mission aircraft.

“NMR” and “NMC” stand for “Non-Mission Ready” for individuals and “Non-Mission Capable” for aircraft (A/C) respectively, and indicate those not available for combat operations.

“SOS” is “Squadron Officer’s School;” the career-enhancing professional military education for Air Force Captains.

A New Readiness Paradigm Emerging

For most units, high levels of OPTEMPO/PERSTEMPO are currently brought about by the combination of the military drawdown and the unanticipated rise in peacetime obligations. A DoD-wide system for measuring OPTEMPO/PERSTEMPO was never previously undertaken. The strategic focus of the Cold War worked to minimize the current problem. The military capacity of the Cold War era, which was usually large enough to minimize detrimental impacts of unit operations and repetitive personnel deployments, obviated the need to measure OPTEMPO and PERSTEMPO. In addition, units with high deployment rates spent a significant portion of their time away from home training and exercising their primary capabilities. The resulting

common understanding that high unit activity equated to high readiness reflected the reality of the time. Today's emerging reality reflects fewer forces engaged in a wider variety of missions at a time when resources are constrained. With today's missions, high unit activity does not necessarily equate to high readiness and may, some assert, be detrimental to readiness for combat. As understanding of current experience increases, measurements of OPTEMPO, PERSTEMPO, and their effects, while not yet sufficient, are improving rapidly.

Counting Capability: The Best Way to Assess Capacity

What can we do with the forces we have available? And

What part of our capability is not currently available? These are difficult questions to answer under the current approach to understanding OPTEMPO, PERSTEMPO, and readiness. By counting only the number of personnel deployed, and by making distinctions between deployments, operations, exercises, and other duties, the total effect on U.S. forces is not apparent. Any activity that takes service members away from their units affects, to some degree, that unit's capability. Any sub-unit removed from a larger unit, has a significant impact on the larger unit's capability to execute its assigned mission.

It is important to capture the ebb and flow of U.S. capacity to execute warplans and to sustain military strategies; a system that indicates current U.S. capacity to perform military assignments, which is dynamic, is needed. The current system indicates only the readiness of forces postured for static warplans and not whether those forces can effectively sustain the planned operations. To do this, some senior military officers interviewed for this study suggest referring to any activity that takes a unit away from home station as an "Operation." Since the effort that goes into planning, executing, and returning from these events is akin to that for operations, and since the unit is "not available" while off station, classifying activities in this way yields meaningful data. The smallest unit that should be assessed in this way is also the building block of military capability; the unit that can operate as an independent entity.

Battalions, squadrons, and ships. These officers suggest counting Army battalions and Air Force squadrons deployed to "operations" as the measure of commitment and the indicator of capacity. The "building block" units would report as preparing to deploy, deployed, recovering from deployment, ready, or non-mission capable. Since the services have a finite number of battalions and squadrons, this is a quick indicator of the "Status of the Army" or the "Status of the Air Force" and is akin to the Navy's daily reporting on ships. In addition, "cannibalized" units, that is, units that were required to provide assets to another deploying unit might be listed as "non-mission capable."

Estimating time and effort to extricate and redeploy as C-1. One of the key assumptions of the Bottom Up Review was that units involved in peacekeeping, humanitarian operations and exercises could be quickly extricated and redeployed to combat. The experience of the last five years, coupled with known limitations of strategic lift assets, indicate that taking a unit out of Bosnia, for example, and directly inserting it into a combat environment is not as simple as previously suggested. The

degradation of combat skills is the most significant limiting factor in this approach. The time required to regain high combat status prior to re-engaging in operations should be a key consideration in estimating U.S. capacity to execute warplans.

Therefore, counting forces off-station in terms of the smallest effective independent combat element, that is, battalion, squadron, or ship, and realistically evaluating the time required to return the unit to combat-ready status following its redeployment, assuming it can be objectively and soundly done, is considered to be an improvement over simply reporting a “snapshot” of personnel, supplies, and training under SORTS. This approach, similar to the Navy’s, takes into account the vagaries and uncertainties involved in fast-paced operations.

Why OPTEMPO Is High

The causes of high OPTEMPO are numerous. The drawdown of U.S. forces and the necessary demands of maintaining a force ready to fight two Major Regional Contingencies (MRC), which includes a demanding exercise schedule, are significant challenges but were foreseen by defense planners. The increased length, size, intensity, and complexity of recent military operations other than war (OOTW), and the military’s expanded role in carrying out the National Security Strategy were unforeseen at the time of the 1993 Bottom-Up Review and have combined to drive OPTEMPO and PERSTEMPO well beyond envisioned levels.

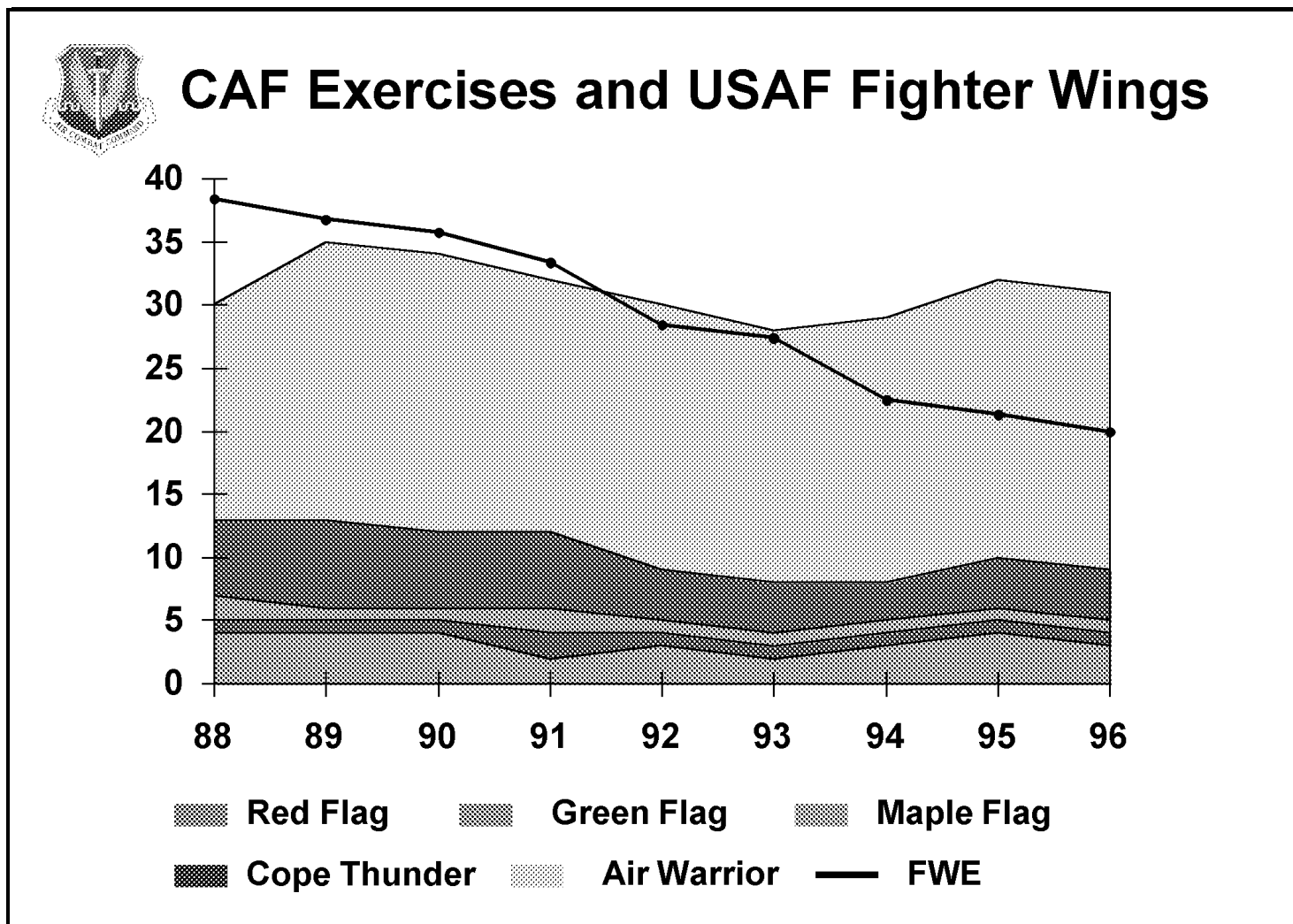
Overseas presence down = fewer forces for more tasks. The reduction of overseas presence requires fewer forward-based forces to perform more tasks thereby raising both the workloads on the forces and the costs of the operations. CONUS-based forces must travel farther and longer to reach deployment areas. Of the 674 Army facilities closed world-wide since 1989, 593 were overseas. U.S. Air Forces Europe (USAFE) reduced from 16 main and 37 minor operating bases to 6 and 14 bases respectively. Nine USAFE fighter wings totaling 636 aircraft were reduced to 3 wings with 168 fighters total. Commensurate personnel reductions from 62,000 down to 27,000 were made while the U.S. Army now counts only 125,000 soldiers in Europe, Panama, and the Pacific combined. Naval and Marine Corps contributions to ongoing operations are usually included as part of pre-planned deployments. Here too, PERSTEMPO complications arise when forces returning from duty are quickly returned to deployed-status for new operations.

Specifically, concurrent complex operations continue to challenge the Pentagon; among them are operations in Bosnia, extended 18 months to June 1998 and perhaps longer, northern and southern Iraq, and counter-drug operations. At the same time, the increased use of military forces in support of the Clinton Administration’s National Security Policy of Engagement has contributed significantly to the increase. For example, Partnership for Peace (PFP), the engagement of the countries of central and eastern Europe along with those of the former Soviet Union, has entailed a significant increase in commitments of U.S. forces to bilateral and multilateral exercises and international events. PFP builds closer relations and the ability to work together with NATO by committing military forces to combined exercises, military exchanges, and international training. Events are held as far east as Kazakstan in Central Asia to Norway in the north and Spain in the south. USAFE’s participation in PFP in 1996 totaled over 400 such instances, up from only 65 in 1993. Army

forces in Europe face an even tougher PFP challenge as ground participation requires more coordination and a greater commitment of resources. In addition, dividing units for these small “exercises” interrupts their training schedules.

Exercises, as illustrated in Figure 7, are a key aspect of the military readiness program and therefore, consume a large amount of time and resources. At the end of the Cold War, the Joint Chiefs of Staff maintained a comprehensive five-year exercise plan which, during the drawdown years, was not appreciably altered to account for the reductions in available forces. This schedule, planned to exercise a global-war-based force, contributed to high OPTEMPO and PERSTEMPO. Recently, DoD has taken significant steps to lessen the strain of exercise demands by reducing the number of exercises, combining similar exercises, and eliminating some redundancies. Work still needs to be done on managing the force requirements of regional Commanders-In-Chief as they plan their annual readiness exercises in order to balance these demands with the requirements of an expanded foreign policy. While exercises are a large part of current operations, they are within the control of DoD; many real world operations are less so.

Figure 7. Combat Air Force (CAF) training exercises in the U.S. and the decreasing number of Fighter-Wing Equivalents (FWE) on the same chart. (COPE THUNDER is held in Alaska) The number and type of exercises contribute to OPTEMPO. Source: Air Combat Command.



Some critics of the President attribute the Clinton Administration's willingness to use military forces in an ever-widening range of operations to a combination of available military competence and White House inexperience (the experience of Secretaries Perry and Christopher notwithstanding). This view holds that the new administration, beset by international crises and determined to pursue a domestic agenda, "discovered" that the military was a highly efficient and very successful organization that would "carry out orders." Despite a "professed aversion" to the military, the pace of international events, coupled with a general disinterest in them, led to quick action to "send in the troops." Initial successes led to even more use of U.S. forces as the administration learned the political value of "keeping a lid on events."

Others see the increased use of military units in peacekeeping and humanitarian operations as the natural outgrowth of victory in the Cold War. This view holds that intervening to prevent or contain conflict is wiser than waiting for conflict to grow and that the moral imperatives of preventing starvation and genocide outweigh the actual costs. While still others see a U.S. military force that is supported more substantially with resources than any other in the world, that does not face a large critical threat, and see no reason to protect it from useful proactive employment.

Regardless of perspective, the military itself is also responsible for the increases. Military culture and military imperatives are contributing factors in high levels of OPTEMPO and PERSTEMPO.¹¹ The statement "We never met a deployment we didn't like" is indicative of the military's willingness to "fight any foe, bear any burden". The can-do attitude of the military culture prevents many in the services from demanding relief from excessive tasking. Further, careerism, especially in the command structure, may inhibit ambitious officers from turning down additional work no matter how valid the complaint. Competition for resources within and between the services can contribute to military "volunteerism". The business adage, "you get what you reward" holds true in the military and the military rewards operational success. The need for decisive victory is an oft re-learned military lesson that compels commanders to maintain the best capability against potential adversaries and to engage with the most forces possible. The military culture contributes to high OPTEMPO/PERSTEMPO. Given direction, the military culture can work to lower it.

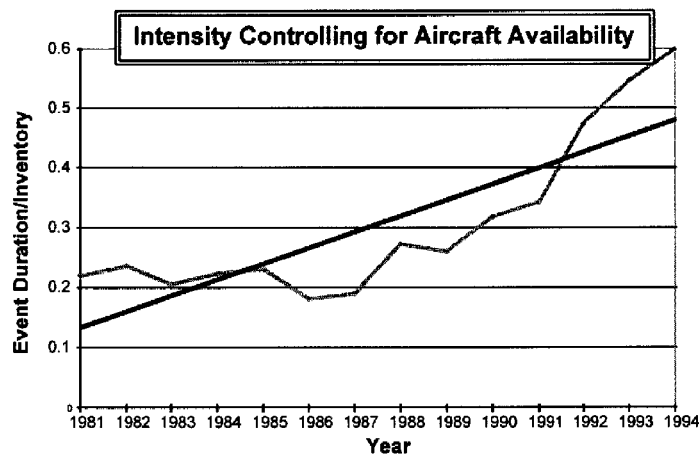
The changing nature of military operations. Increased use of the military in the post-Cold War era entails more than just the number of major operations involving U.S. forces. The nature of post-Cold War operations has changed as these efforts tend to be larger, more intense, more complex, and of longer duration (See figures 8 through 12) In addition, many of these large, complex operations are running concurrently in widespread locations creating new challenges for all aspects of military operations. An internal Air Force study describes the context of the new environment:

The increase in demand for USAF assets and personnel has come at a time when USAF inventory, personnel, operating locations, and budgets have experienced

¹¹GAO Report Nos B-271135 and GAO/NSIAD-96-105. April 8, 1996. page 11

dramatic downsizing. The USAF aircraft inventory has declined 31 percent during the past five years. USAF active uniformed personnel have also steadily declined since 1990, from 535,233 to 400,409 in 1995, while personnel permanently based overseas have decreased at a faster pace, almost 40 percent since 1990 - most of these reductions from forces based in Europe, which have fallen from 63,000 to 27,000 in the last six years. Even with DoD wide resources falling nearly 13 percent since 1989, USAF budgets have declined nearly 22 percent over the same period. Taken in sum, this increase in operational tempo against the backdrop of declining inventory reveals a three-fold increase in the intensity of USAF operations since 1989.¹²

Figure 8: Intensity of USAF operations is increasing due to increased commitments and a reduced number of aircraft..



¹²Final draft of "Today's Air Force: The Use of Air and Space Power Across the Spectrum of Peace and Conflict" prepared by DFI International, January 1997. Includes Figures 8, 9, and 10.

While the intensity and duration of events are increasing, Figures 8 and 9, the total number of overseas events is decreasing, Figure 10, due to the inability of forces engaged in operations to conduct large-scale exercises. This makes sense as more forces are tied up in operations for longer periods, less time and fewer resources are available for training exercises. Figures 11 and 12 show specific examples of these trends.

Figure 9. Operations involving USAF assets are becoming longer

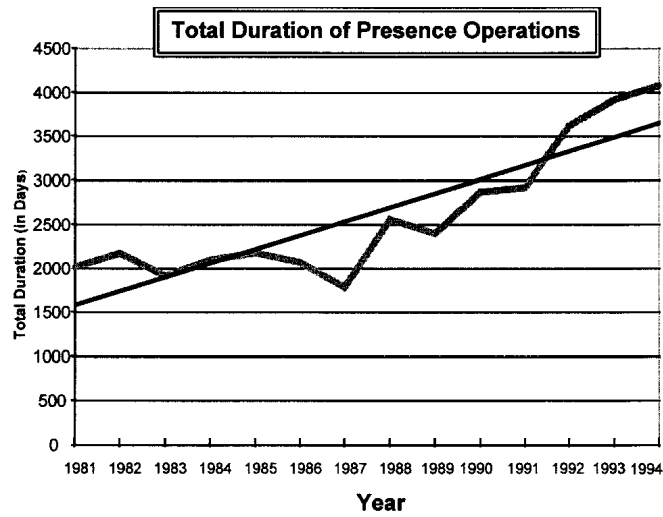
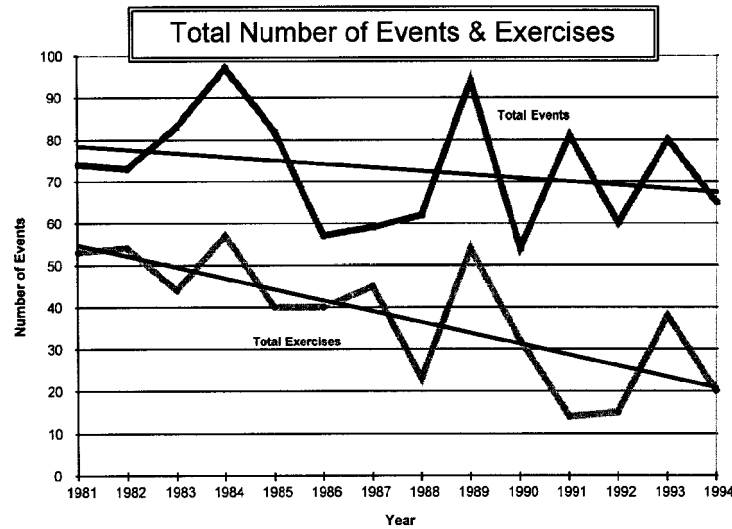


Figure 10. As commitments to operations increase and lengthen, total number of events and participation in exercises decrease



Why High Optempo Is a Problem

The cumulative effects of the post-Cold War drawdown coupled with an increased use of the military in a greater range of international crises has led to a sustained high level of operations for many units and critical personnel. In the past, large military forces provided the capacity for the U.S. to engage in operations other than war with little degradation to readiness or effectiveness. Minor commitments were met using a large pool of resources so that most units did not suffer the effects of repetitive deployments or continuous interruptions to their training cycles. Now with the capacity of the global-war-based force diminished, the continuing use of forces dedicated to the National Military Strategy in operations other than war (OOTW), that is, in operations other than those for which they are organized, trained, and equipped, may be hampering DoD's ability to execute its short and long-range plans and programs in support of its many fixed obligations.

However important operations other than war may be to U.S. security in the post-Cold War world, a sustained high tempo of military operations may have detrimental affects on short-term readiness and long-term military effectiveness. For

example, temporary reductions in readiness, temporary loss of finely-honed combat skills, increased depreciation rates of some military hardware, and delays in modernization and acquisition programs can all be tied to a higher than planned rate of activity. Units returning from deployments often require extensive periods to recover their pre-deployment level of readiness. The 1st Armored Division, upon completing its Implementation Force (IFOR) duties in Bosnia was put on a 100-day recovery program by its commander.¹³ In this case, the ability to maneuver as a complete unit and to coordinate its maneuvers with other large ground forces, was the essential task in which it was the least proficient. Air Force pilots attending Red Flag exercises following long peacekeeping deployments are showing reduced abilities compared to their “stateside” counterparts. After each deployment, Marine maintenance units are working significantly harder and longer to maintain their aging equipment. This higher than planned rate of activity has interrupted and may continue to interrupt the funding streams for other DoD programs as the Pentagon is forced to pay for unplanned operations from existing accounts.

As the capacity to absorb these unforeseen operations is reduced, competition for resources within DoD and within the federal budget will increase. There is concern that long-term, the cumulative stress associated with open-ended operations may lead to chronic and insidious problems such as declines in morale and retention. These declines would increase costs as replacements must be recruited and trained. For example, to replace a combat-ready pilot with 8 years experience, costs, on average, \$4.3 million and takes several years. Other problems are reductions in overall proficiency and experience levels, delays in routine and depot maintenance, depleted or dislocated logistics, and premature fatigue in some weapon systems. Replacing weapon systems sooner than planned can lead to major disruptions in long-term acquisition strategies.

Congressional understanding key to successful innovation. Congress is keenly interested in the readiness of U.S. forces, in the quality of life of U.S. military personnel, the size and shape of the military’s forces, and in the annual review of the defense budget. OPTEMPO/PERSTEMPO issues facing all the services have significant implications in these areas. Congressional action on key military issues can either positively or negatively affect the armed forces’ capacity to sustain its current pace. A clear understanding of the new dynamics of operating the Department of Defense with smaller forces and budgets and increasing demands is a key focus for Congress and the debate on the Quadrennial Defense Review.¹⁴

¹³From a speech by Major General Nash, commander of IFOR and the 1st Armored Division to the NATO-Russia IFOR Lessons Learned Conference, April, 1997.

¹⁴For a further discussion of these issues, see Goldich, Robert L. and (name redacted), *Defense Policy: Threats, Force Structure, and Budget Issues*. CRS Report 96-729 F, Updated September 9, 1996.

Figure 11. Decreasing end-strength and increasing deployments by personnel. Source: Air Combat Command

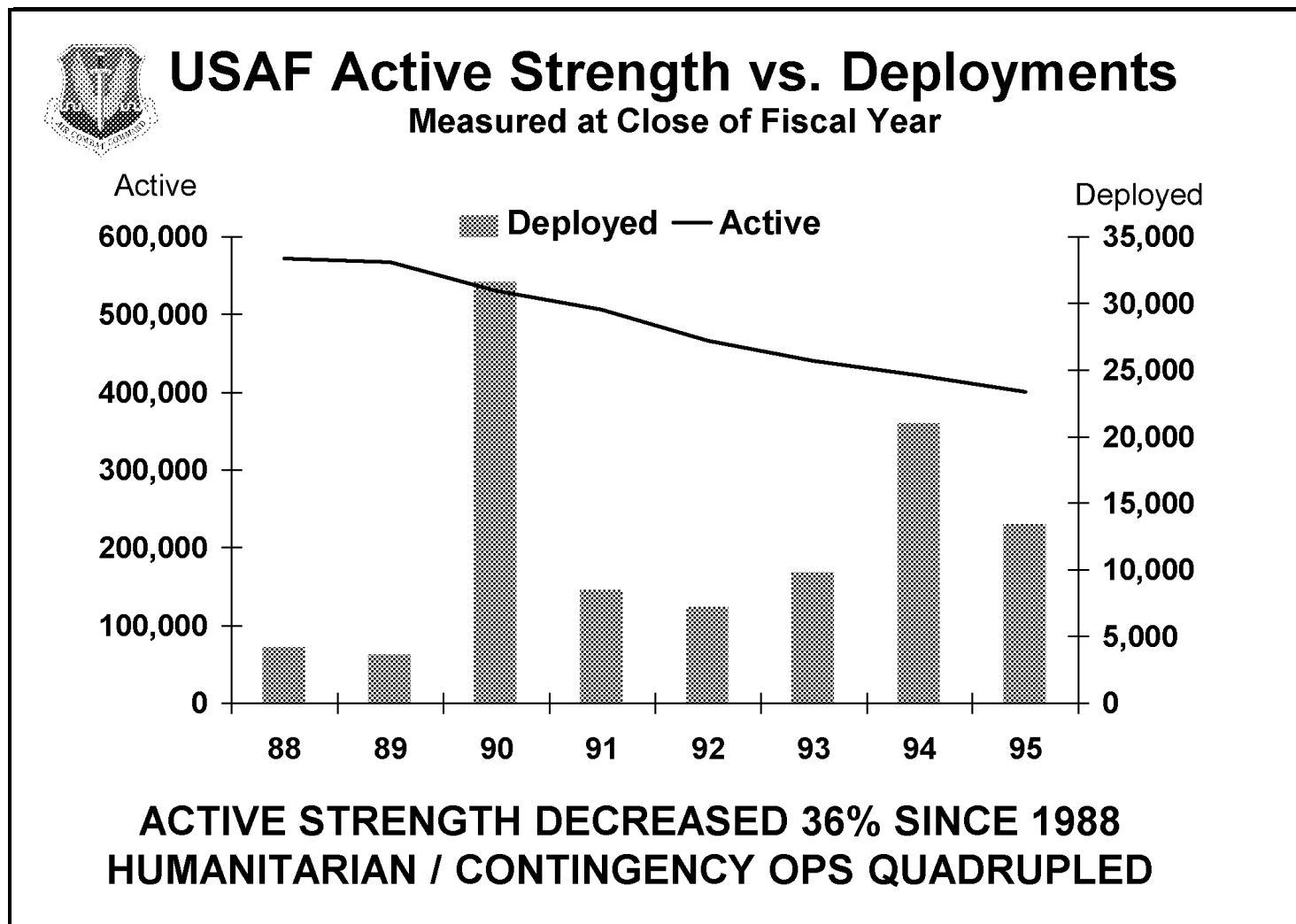
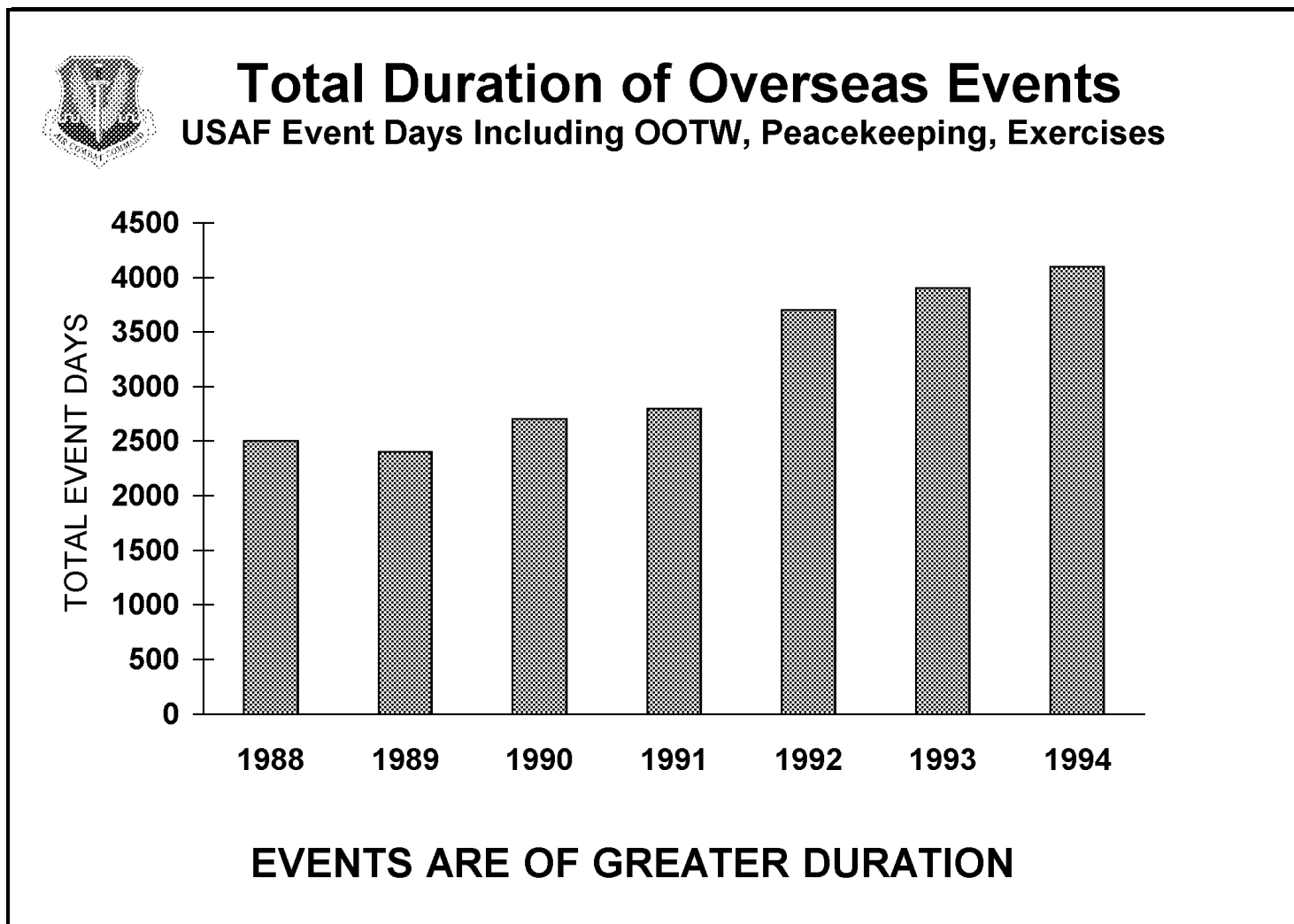


Figure 12. Increasing commitment to overseas operations by Air Combat Command Forces. Source: Air Combat Command



Maintaining a Viable Force

Continuity in Training. A key to the long-term well being of U.S. forces is continuity of training. Too high OPTEMPO/PERSTEMPO has implications for military effectiveness in that it interrupts individual and unit training cycles. In order to maintain a force capable of meeting the demands of high-intensity combat, the individual military services develop short and long-term training and exercise plans for their forces. At the same time, they blend these requirements with their peacetime commitments around the world. The services budget to pay for these ongoing training and exercise activities as well as to develop and acquire modern equipment to replace existing systems. All of these requirements are planned for and programmed into the Defense Budget. Forces not engaged in required training, exercises, or ongoing commitments are available and can engage in other activities with little detrimental impact on their readiness. Unplanned operations or other activities that repeatedly interrupt the training cycles or that reduce the time available to maintain combat readiness, can have adverse effects. In other words, there are minimum resources and a minimum time required for basic military preparedness so that units may retain the capabilities required of them. For many units, the minimums established by their services are not currently available.

A comparison of Figures 13 and 14 (below), provided by the Air Force's Air Combat Command (ACC), shows the effect of high activity levels on unit training time. Figure 13 shows the planned 160 days for readiness training while currently, there may be only 80-120 days available. Figure 14 shows the effect of unplanned additional contingency days and exercise days. These additional contingency and exercise days violated the Air Force's own 120-day limit resulting in 136 days "off station". Figure 14 shows the added burden of inspections and local exercises which reduces the actual training days available number to 80-120 days. "Surge days" are those days when a unit flies almost double its daily flying load in order to "catch-up" to either its flying-hour requirements, its training requirements, or to make up for flying lost due to inclement weather. These days are an extra burden on maintenance crews and minimize the time pilots have for thorough preparation and post-mission analysis and therefore are not suitable for in-depth combat training. "Productivity days" are days off accorded by the commander for meeting flying goals. These down days are an important part of a unit's rest/recovery cycle and are used as a positive motivator by operational commanders.

Figure 13. Theoretical annual schedule of an Air Force F-15 squadron given a deployment commitment of 120 days per year. A comparison of figures 13 and 14, provided by the Air Force's Air Combat Command (ACC), shows high activity levels reducing available unit training time.

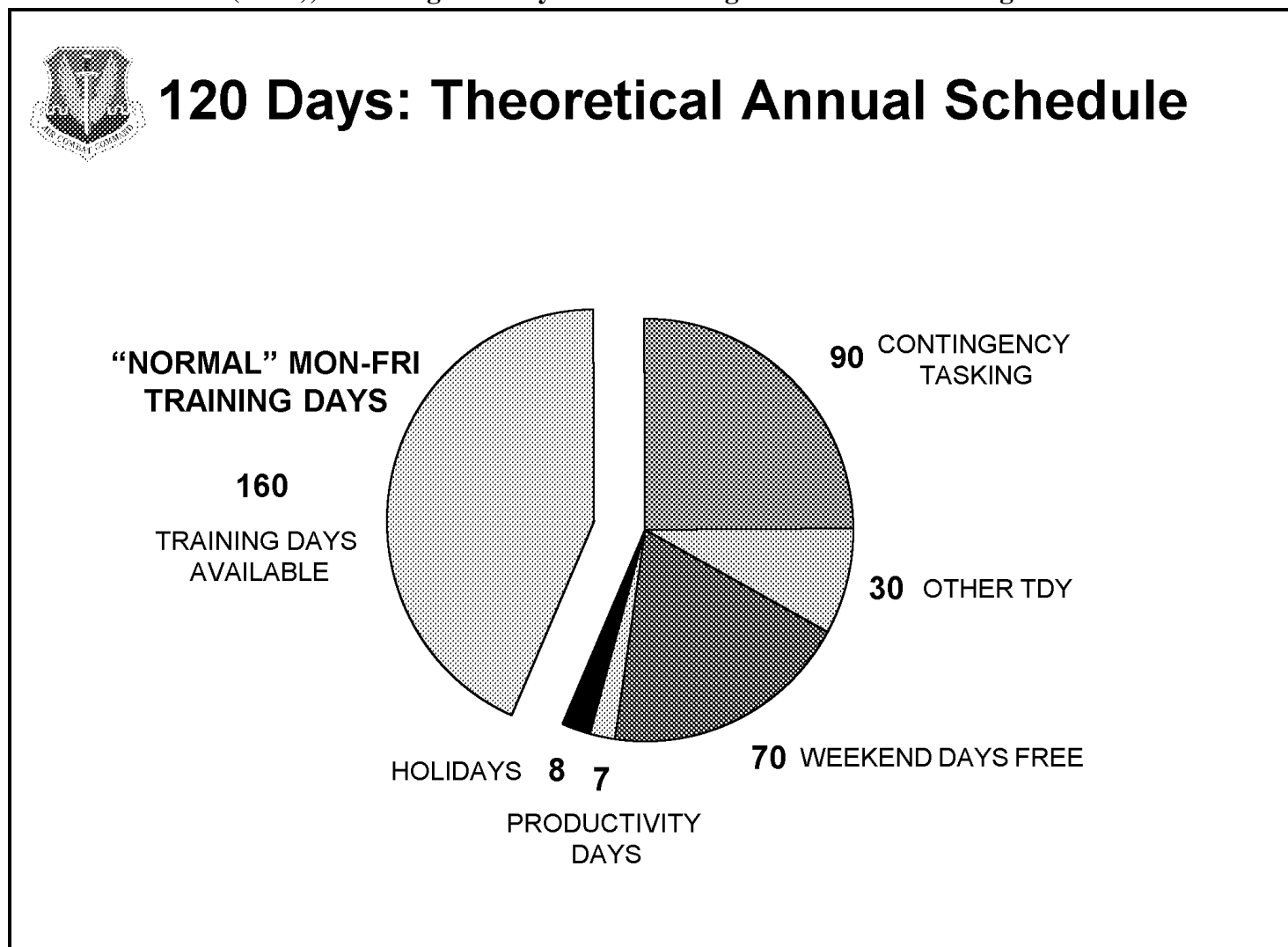
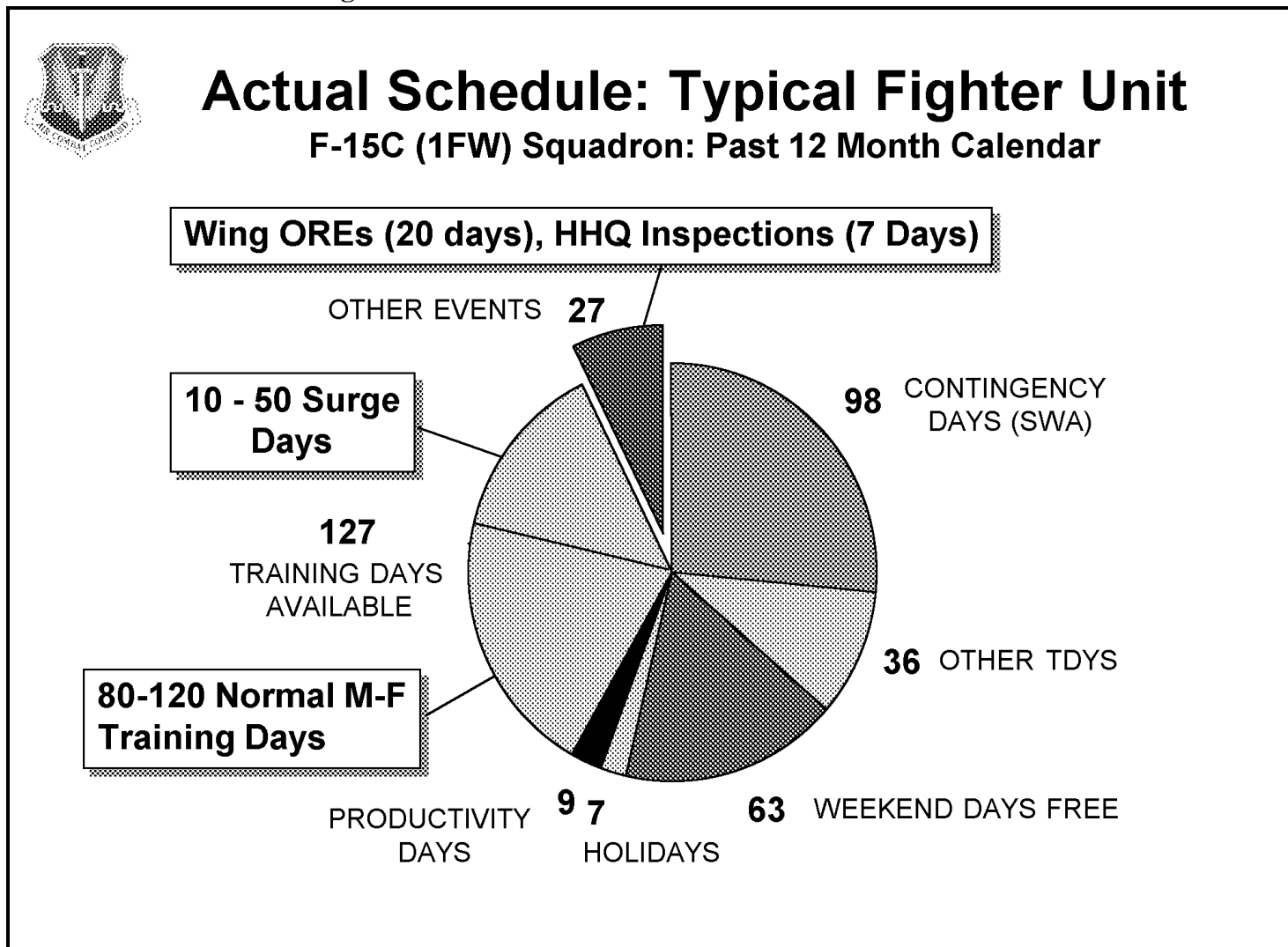


Figure 14. Unplanned additional contingency, exercise, inspection, and local exercise days reduce the number of actual training days available to 80-120 days indicating that both external and internal factors contribute to high OPTEMPO and PERSTEMPO. Source: Air Combat Command



Bottom Line: Sustaining a high operational tempo difficult. In theory, peacetime militaries can only sustain a finite level of activity beyond that required to maintain military readiness and effectiveness through training, exercises, and maintenance. High activity beyond this sustainment level can be “surged” for short periods with little detrimental affect; however, engaging in lengthy activities not related to preparing themselves for their primary missions diminishes the involved units’ capacity to fulfill their assigned responsibilities. Over time, the cumulative affects of lost training time, missed exercises, unprogrammed expenditures, and extended deployments degrade the overall capability of the force. In practice, U.S. military forces, with innovation and dedication, have risen to meet these near-term challenges; yet, there is growing concern that long-term problems may result if today’s obstacles are a result of a fundamental mismatch of resources and requirements.

Value of Monitoring OPTEMPO/PERSTEMPO

High OPTEMPO/PERSTEMPO then, may provide some indication that U.S. forces may be exceeding their designed capabilities in some areas and failing to meet their planned objectives in others. Understanding OPTEMPO/PERSTEMPO does not provide insight into the validity of either the current two-MRC strategy or the policy of pursuing broader military engagement in the world at-large. Understanding OPTEMPO/PERSTEMPO may, however, indicate whether or not U.S. forces are reasonably capable of meeting current and proposed obligations and in what areas change and/or innovation may be required.

OPTEMPO/PERSTEMPO and the QDR. The key OPTEMPO and PERSTEMPO-related questions in the debate on the Quadrennial Defense Review are a) whether or not the armed forces of the United States are sufficiently structured and prepared to meet the requirements of the National Military Strategy, b) whether or not the current requirements levied on the armed forces are too high, resulting in substantial implications for what the military strategy should be. Measuring OPTEMPO and PERSTEMPO and comparing those measurements with other factors like readiness levels, personnel retention statistics, and unit evaluations will give some indication of what level of activity U.S. forces, as currently postured and engaged, are capable of sustaining.

Current Trends¹⁵

The Chairman of the Joint Chiefs of Staff, General John Shalikashvili gave the following testimony before the House National Security Committee in February of 1997:

One of the strategic consequences of the post Cold War period is that the U.S. has been able to reduce military force levels. Since 1989, the active all-volunteer force has been reduced by 700,000 people — about a third of the active force. The Army has gone from 18 active divisions to 10, a 45 percent reduction; the Navy from 566 ships to 352, a 38 percent decline; and the Air Force, from 36 to 20 fighter wings, down 45 percent. These are the lowest force levels since before the Korean War. The Defense Budget has also been cut by about 40 percent since 1985. In FY98, it will represent only 3.0 percent of the Gross Domestic Product, the lowest since before World War II.¹⁶

In addition, Marine Corps end-strength was reduced by 12 percent. Table 4 below summarizes the drawdown.

The armed forces are much smaller but are more operationally active than their Cold War predecessors. Since the fall of the Berlin Wall in 1989, America has committed forces to nearly 40 crises. Operational deployments increased 300 percent over Cold War levels. At the same time, the size of the military has been reduced to pre-World War II levels. On average, the last ten years have seen a more than one-third reduction in the size of U.S. forces. Since 1986, the Air Force alone downsized 36 percent and reduced overseas presence by 40 percent. The combined result of smaller size and increased activity is illustrated by the following: in 1993, the Air Force deployed 28,900 of its 441,533 personnel; by 1996, the figures rose to 63,000 of 385,000, a 118 percent increase. While this number reflects a small percentage of the total force, it is a significant percentage of those forces capable of deploying. Unfortunately, statistics indicating the number of deployed individuals as a percentage of those available to deploy are not tracked by DoD. However, on any given day, the Army estimates 35,000 soldiers are deployed up from 21,500 in 1996. Other military obligations contribute to higher PERSTEMPOS. While the average number of

¹⁵Some have drawn an analogy between the current situation facing the U.S. military and a major league baseball team battling in the playoffs. The games are very close, most are extending into extra innings, some, well into the night, and the players, stressed by the travel, the interrupted schedules and the intensity of the competition, are getting tired and may be losing focus. Now, not knowing if they'll be in the World Series or not, the manager is using starting pitchers in relief on two days and even one day rest because nobody remembers who comes in second. Should the team make it to the World Series, no one knows if they'll be ready...but, what's the point of having an expensive team if you're not going to use it?

The challenge facing QDR planners is how to rest the team, practice fundamentals, retain enough good players to be a contender, and play a 162 game season, when revenues are down, when free agency is tugging at the best players, when the season has been compressed, and overseas franchises have been added to the league.

¹⁶Statement of General John M. Shalikashvili before the House National Security Committee, February 12, 1997.

steaming days per quarter has shown only a slight increase in the Navy, this result was achieved through aggressive management and reduction of training days at sea. Although these days are projected to remain stable, the Navy budget projects exceeding deployed OPTEMPO limits through FY 1999 based on projections in support of current contingencies (See Figure 15). The likely trends for all services are upward (See “Future Trends in OPTEMPO/PERSTEMPO on page 53).

Table 4. Force Structure Drawdown

	Army	Navy	Air Force	Marines
Cold War	18 Divisions	566 Ships	36 Ftr Wings	3 Divisions
1997	10 Divisions	352 Ships	20 Ftr Wings	3 Divisions
Change	-8 Divisions	-214 Ships	-16 Ftr Wings	-0 Divisions
% Decrease	45%	38%	45%	12%

Note: Marine Corps reductions occurred in manpower not in force structure.

Current pressures may be creating trends toward innovation thereby helping DoD come to grips with the new realities of the post Cold War era. In many cases, the pressures involved in doing more with less have led to innovations and “new thinking” in the deployment of forces and in planning for modernization. Increased use of reserve component forces, new training methods and priorities, cross leveling requirements in order to “share the load” within and between the services are all enabling DoD to meet current demands. The Air Force’s creation of an Air Expeditionary Force and its development of a doctrine for its use are born out of the necessity of the day. Some observers suggest that the necessity of meeting today’s demand has accelerated reform with DoD and the military departments. Coupled with budget-constraints, the push toward innovation in all areas may be, in the end, of tremendous benefit to the country.

A Conceptual Framework: Decreasing Size vs Increasing Workload

Smaller forces, increased commitments equal higher workloads. Conceptually, reducing the workforce while increasing the commitments, even with the addition of management efficiencies, will result in higher per capita workloads. At the point that higher workload would begin to diminish returns is generally considered the point of maximum efficiency. According to the Chief of Staff of the Army, General Dennis Reimer, the Army reduced manpower by 36 percent while increasing deployed operations by 300 percent. In this case, the combination of personnel reductions and mission increases results in a purely mathematical 625 percent increase in workload. The reduction of personnel alone, without an increase in the workload, nets a per capita increase of 156 percent. The reduction of force structure by 45 percent, without an increase in the workload, in both the Army and the Air Force equals a 185 percent increase. These theoretical increases alone would require substantial commitments to reform, restructuring, and innovation. The addition of a significant and sustained level of operational deployments and international exercises without additional resources compounds the dilemma. Gone

unchecked, such increases would be unsustainable. The difference between the mathematically increased workload and the actual workload can be attributed to management efficiencies, reorganizations, increasing the workload on individuals and units, depleting surplus accounts, and other actions that ensure the services can accomplish their requirements with the forces they have. One indication of the actual increase in workload is PERSTEMPO. In testimony before the Congress, the Army estimates that its officers and senior non-commissioned officers from deployable units spend 180-190 days away from home annually, while junior soldiers spend 140-155 days away. Understanding how the Army and the other services absorbed the increased load during the drawdown to reach today's level of effort is essential to planning for the future. This analysis raises the question: What has DoD stopped doing, what is DoD doing less of, and does doing less compromise readiness?

Table 5. Estimated PERSTEMPO Days Annually^a

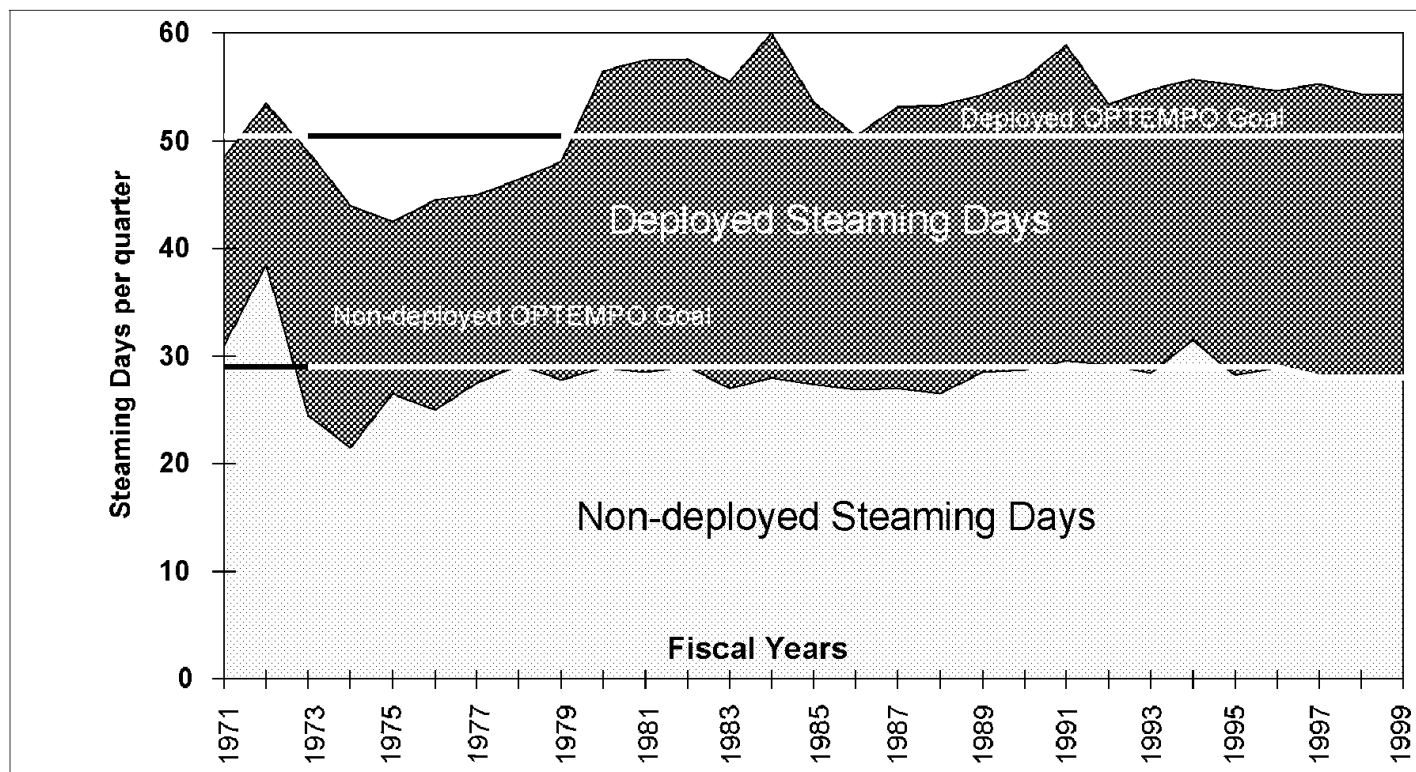
	Army	Navy	Air Force	Marines
Deployments Only	Operational Units: 140-155 Jr Enlisted 180-190 Sr NCO/Officer	Avg 146 ^b	<120 days except U-2 (148), RC-135RJ (148), A/OA-10 (146), F-16L (136), F-16GP (135), HC -130 (121), HH-60G (120)	177 Atlantic 159 Pacific 181 Cbt Spt
All duty		By policy, not more than 182- 183 days	By policy, not more than 120 days TDY	
Korea	365		365	
Target	120-150	50% over past 3 years at home	120	Deployments should not exceed 6 months

^a This table was compiled from data presented in testimony to the House National Security Committee during hearings from February to March 1997 and from data provided by the office of the Deputy Chief of Staff for Personnel, Headquarters, United States Air Force.

^b Based on an average turn-around ratio of 2.6-2.4:1 reported by the Navy staff

Figure 15. Ship steaming days per quarter deployed and non-deployed 1971-1999. Fluctuations from the goals reflect real world operations, FY 1996-FY 1999 levels for known contingencies. Source: FY 1998/FY 1999 Department of the Navy Budget.

Active Force OPTEMPO (Ships)



What is the percentage of troops involved in current operations? The percentage of deployable combat and combat support forces committed to operations may be higher than estimated by DoD. These are the forces whose readiness is measured and reported. Many DoD officials and outside observers, however, continue to define the size of current commitments as a percentage of DoD endstrength. To get an accurate picture of the impact on U.S. capabilities, it is important to exclude the portion of DoD that is not eligible or qualified to engage in current or combat operations when gauging the importance to U.S. defense interests of current obligations. According to GAO, quoting Army officials, only 63 percent of 495,000 Active Army soldiers are in combat or combat support units and therefore are eligible to deploy¹⁷. Also, calculation of this percentage should be based on the explanation of Army operations and readiness officials who estimate that for every unit deployed, one more is preparing to deploy, and one is recovering from deployment. In addition, one more unit is used to provide personnel and resources to the deploying unit. The result is that, at times, as much as a 4-1 ratio of units/soldiers can be involved or affected by deployments. In May 1997, the Army estimated 35,800 soldiers deployed (not including those on assignment without their families to Korea) of which, 7,500 were from the reserve components. Therefore, 63 percent of 495,000 divided into $4 \times 28,300 = 36.3$ percent of the Active “deployable” Army was committed to and/or affected by deployed operations. The addition of the 27,500 soldiers deployed to Korea to the $4 \times 28,300$ nets a 45.1 percent of the active “deployable Army” currently engaged in supporting operational deployments. Whereas, 35,800 divided by the total FY98 authorized “Total Force” end-strength of 1.1 million nets a mere 3 percent and it is 6 percent of the active Army of 495,000.

Bosnia and Korea are sizable operations for the Army. U.S. Army Europe maintains two active Army divisions. The SFOR commitment in Bosnia requires one complete division staff and almost 8,000 soldiers. To keep this commitment, the Army must obligate key elements of 3 divisions to the effort; more than is available in the two stationed in Europe. As stated, when the 1st Armored Division was on a 100-day recovery program, the 1st Infantry Division was in Bosnia, and the follow-on forces for the troops currently in Bosnia were beginning to prepare. Rotations to Korea, in PERSTEMPO terms, that is, to keep individual PERSTEMPOs manageable, affects enough soldiers to man 3 divisions (See “Korea” below). These two commitments can involve a significant portion of the Army’s 10 divisions. Regional exercises also require a significant commitment. The Army at certain times can find itself long on commitments and short on forces.

The other services are also significantly affected by current operations. Air Force readiness officials estimated that as of May 1996, 13 of 20 Fighter Wing Equivalents were required to support current operations. Therefore, 65 percent of the combat fighter force was committed in some way to ongoing missions. The Navy and Marine Corps routinely have 30 percent of their forces “deployed” at sea with another 20 percent of the Navy “underway” at sea which means that on any given day, 50 percent of the Navy’s ships are at sea. These rough estimates support the assertion of some DoD officials that the level of effort for all ongoing contingencies is

¹⁷GAO Report NSIAD-97-66. “Force Structure: Army Support Forces Can Meet Two-Conflict Strategy With Some Risks.” February 28, 1997. p. 19.

equivalent to fighting one major regional contingency. Forces permanently stationed overseas can, as in the case of Korea, be considered as involved in current operations.

The large number of forces involved is both problem and solution. Reducing the number of fighter wings involved in operations would probably raise the OPTEMPO above their 120-day ceiling, lower the readiness, and increase the time required to recover. The services are balancing the load across the entire force which means more forces are used to keep OPTEMPO within reasonable limits. The expeditionary Navy and Marine Corps, which support current operations with their forward deployed forces (e.g. in the Indian Ocean and the Mediterranean Sea), were designed to keep OPTEMPO and PERSTEMPO within limits; however, increased activity and reduced resources are affecting their forces too.

Korea: Compounding the PERSTEMPO problem for individuals. For the 36,000 Americans serving in Korea, roughly 95 percent do so without their families. Assignment to Korea, with a minimum tour-length of one year, guarantees a service member a statistical PERSTEMPO of 365 days. Selection for Korea duty is without regard for one's previous PERSTEMPO level. A soldier coming off the annual Army operational average of 140-150 days per year away from home ends up with a two-year average of 255 days away from home when returning from Korea. Assuming that the same soldier is reassigned to an operational unit following Korea, the three-year average would equal 218 days per year. For officers and senior NCOs, the two-year average would be 275 and the three-year average, 245. By comparison, the Navy policy of 50 percent of one's time spent at home over three years results in a 182 day maximum annual average.

An example: What it takes to keep within tolerable limits. The figures below illustrate the requirements of a high OPTEMPO environment. The Air Force's "Rivet Joint" electronic surveillance aircraft, which is a "Low Density/High Demand" (LD/HD) asset, that is, an aircraft of which there are few but for which there is great demand, has significantly increased its workload since Desert Storm. As illustrated in the following charts, in order for the Air Force to meet its stated requirement to keep PERSTEMPO below 120 days per year, it must increase the ratio of aircrews to aircraft. Figure 16 shows that prior to Desert Storm, mission requirements meant that 19 crews would keep the tempo below the threshold. At that time, the unit had 22 crews. Following Desert Storm, the increase in mission requirements raised the number of aircrews required to maintain the PERSTEMPO threshold at or below 120 days to 26 fully-trained, mission-ready aircrews. This 27% increase in assigned aircrews would require the Air Force to take aviators from another resource or to train more aviators causing either a potential shortfall for the losing units in the first case, or a reduction in aircrew experience levels in the second; either way, the move would increase costs. In addition to adding aircrews, maintenance and support personnel would need to be added to assist in managing the extra flying load on the unit. This example of a unit in extremely high demand shows both the dramatic increase in mission requirements and the significant actions required, in this instance, to bring the workload back within tolerable levels.

Figure 16. Number of airborne surveillance crews required to meet requirements prior to Desert Storm.
 Source, Air Force Studies and Analysis

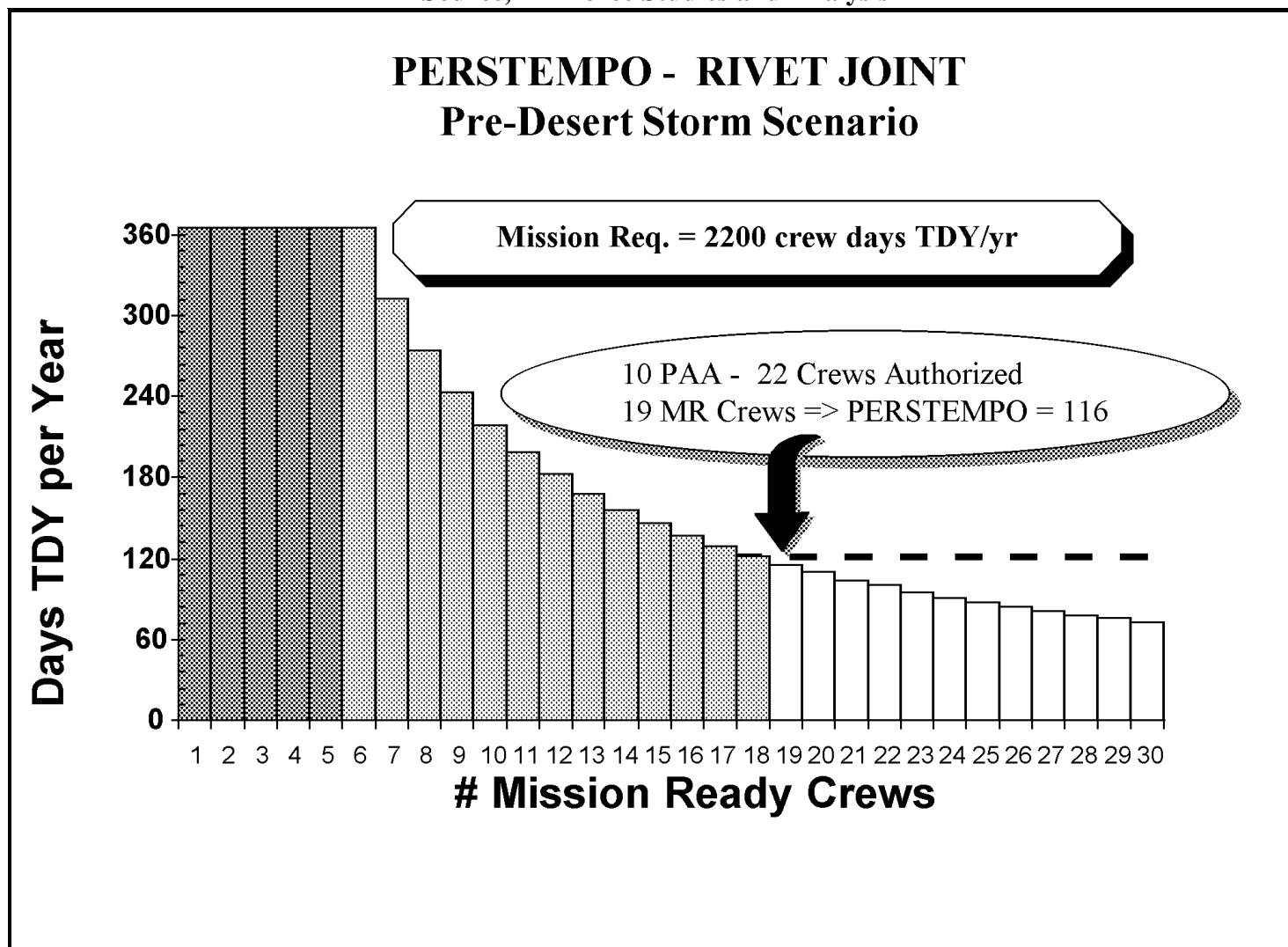
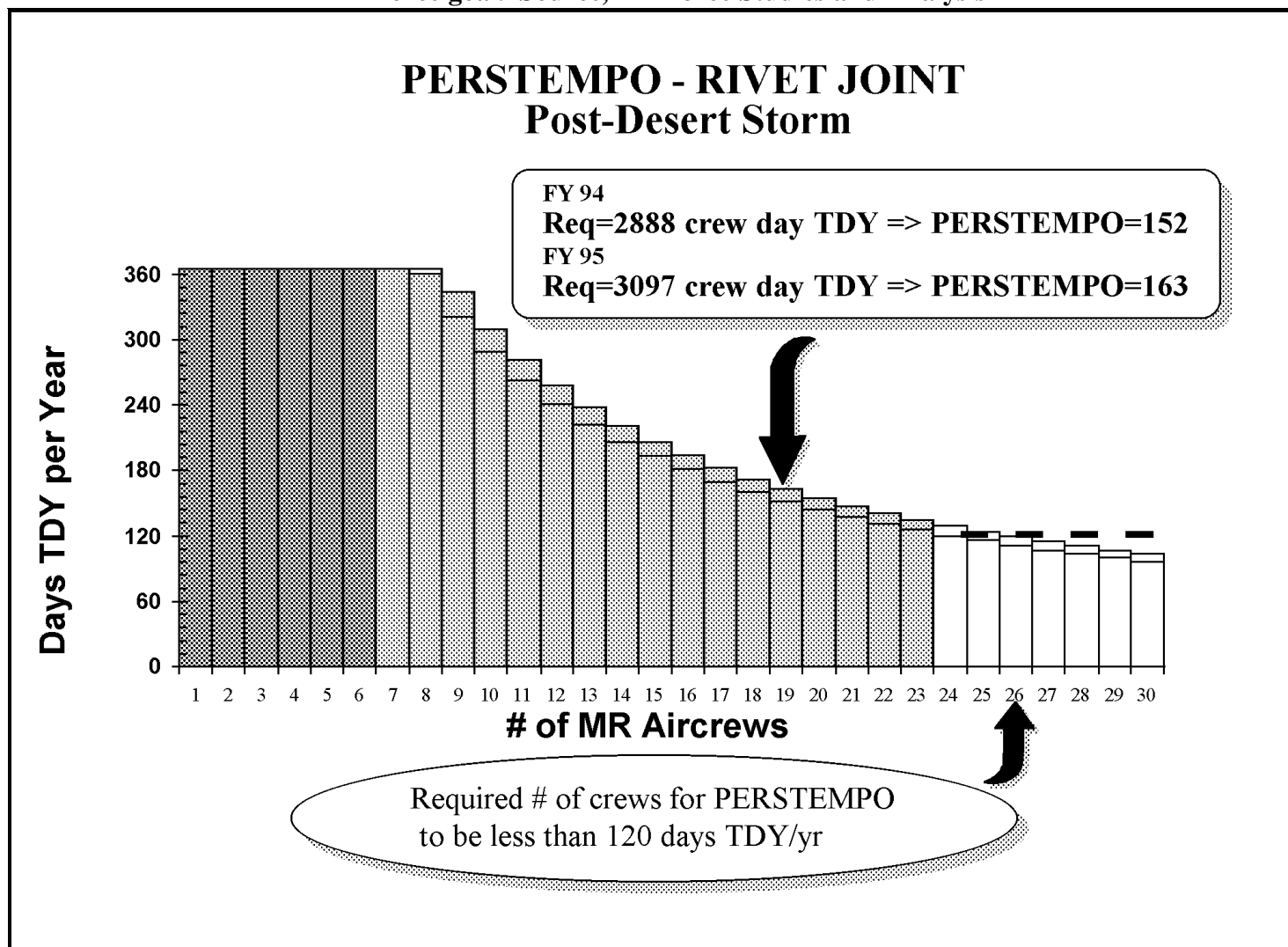


Figure 17. Increase in crew requirements required to keep airborne surveillance PERSTEMPO below the Air Force goal. Source, Air Force Studies and Analysis



“It’s NOT war” — Home Station Hurt. The higher than anticipated use of U.S. forces and the associated effects are not limited to deployed units. The forces involved in operations are not the only ones experiencing higher than normal activity levels. Headquarters staffs are pressed, in some cases severely, by the combination of ongoing operations and other international obligations. Headquarters personnel deploy to many locations in support of operations leaving their colleagues undermanned at a time when work requirements are highest. This is an example of “home-station hurt,” a phenomenon whereby the depleted manpower at home is forced to accomplish 100 percent of the routine tasks in addition to the ongoing support tasks required by the deployments. This phenomenon is not limited to headquarters and other small staffs. Bases from which troops deploy, and any units which send personnel suffer some level of “home-station hurt.” In these cases, the OPTEMPO and PERSTEMPO of the non-deployed personnel increases as well. The increase, measured in longer work hours and other indicators of personnel stress, may also have detrimental affects on unit morale and individual and unit effectiveness. The non-deployed forces do not receive the additional pay, medals, and positive reinforcement as their deployed counterparts yet work extended hours in support of the same commitments and more. Further, when it’s time for those affected by “home-station hurt” to deploy, many do so in a degraded capacity due to their already high activity levels. This aspect of high OPTEMPO and PERSTEMPO can be a significant factor in morale and should be considered in policy decisions affecting OPTEMPO and PERSTEMPO.

Trends in retention and reenlistments. The trend toward greater use of military forces has sharpened the focus on readiness and retention. Former Secretary of Defense Perry made readiness and quality of life issues his priorities during his tenure in order to avoid the pitfalls of a hollow force. While concerted action has ensured at least short-term stability and an acceptable level of readiness, many analysts point to signs of cracks at the fringes of effectiveness. In testimony before Congress, service personnel chiefs continue to warn of impending problems with retention and re-enlistments. Statistics show no immediate declines; still personnel officials, who base their views on surveys of and discussions with military members, anticipate future declines because current statistics are historical, not predictive. Air Force pilot retention and pilot willingness to accept bonuses for continued aviation service are both dropping. In FY97, only 32 percent of eligible Air Force aviators accepted a pilot bonus to continue their service. Army recruiters are seeing evidence of the public’s perception of too numerous deployments.

Pentagon Efforts: Protecting long-term military effectiveness

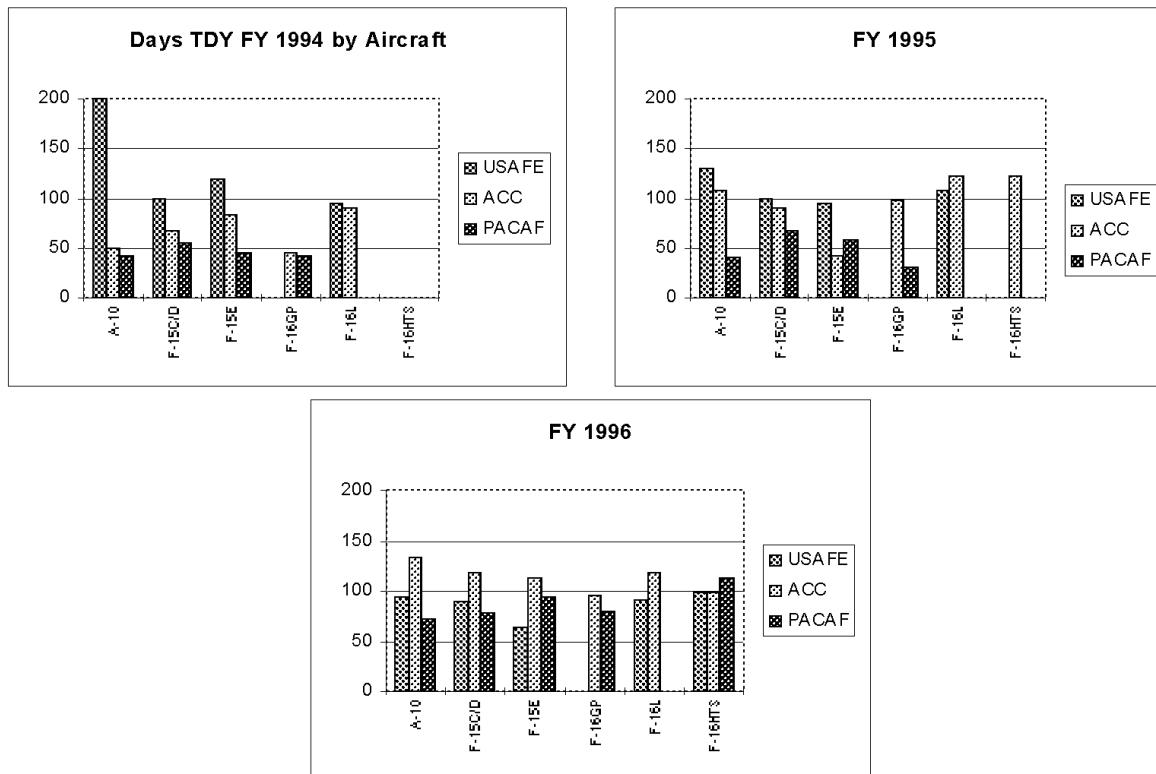
The Pentagon is aggressively tackling OPTEMPO issues within its purview. The Global Military Force Policy (GMFP) established a mechanism to provide relief to overworked units. Under this policy, Commanders-In-Chief cannot, without the Chairman’s adjudication and the Secretary’s concurrence, use forces that have already exceeded their time allocated to non-readiness related activities. This policy is designed to give “Low Density/High Demand” units a break from near-continuous operations. Although this policy has had success, it has limited application. The policy does begin to address DoD’s chief challenge in managing OPTEMPO: How does the Pentagon “Just Say No”?

An example: Air Force Global Sourcing. To reduce the excessive burden on heavily tasked units, European-based forces for example, the Air Force uses a “Global Sourcing” policy that fills operational requirements from organizations world-wide. The graphs in figure 17 below show the effect of “sharing the load;” spreading requirements over geographically-diverse units.

Both the Global Military Force Policy and the Air Force’s Global Sourcing are examples of crisis-driven innovation in which the Pentagon finds low-cost solutions while managing an acceptable level of risk. As high OPTEMPO levels continue, the necessary prioritization of requirements may lead to other such innovations as senior decision makers are forced to make choices. Monitoring the burden on units and individuals should be an important activity while DoD undergoes these transitions.

Figure 18. European-based USAFE aircraft have reduced TDY loads while U.S.-based and Pacific-based aircraft have increased their share of the burden of current operations through “Global Sourcing.” Source: CRS from DoD data.

GLOBAL SOURCING FY 1994 - FY 1996



What Do the Facts Mean? Understanding the Implications

This section explains the effects of high activity levels within the echelons of the Department of Defense. The cause and effect relationships described below provide an explanation of the potentially deleterious effects of excessive OPTEMPO and PERSTEMPO. High OPTEMPO/PERSTEMPO manifests itself in different ways depending upon the area of focus. Individuals and units face different challenges in meeting current demands, while the services and DoD have their own unique sets of problems and responsibilities. Increases in OPTEMPO and/or PERSTEMPO affect each level differently as do changes in policies and procedures.

At the individual level. High PERSTEMPO means people, while generally satisfied engaging in military operations, are not able to meet other demands and goals such as Professional Military Education (PME), specialized training that will enable them to advance in their careers, and important family obligations. When individuals believe their goals and aspirations are at risk due to higher than anticipated military requirements, their willingness to continue in military service diminishes. A sense of satisfaction comes from being highly proficient at one's chosen and assigned duties. Pilots, for example, lose proficiency and motivation, when their combat skills erode because they were engaging in peacekeeping operations. The high number of Training Waivers, that is, authorizations to fly without completing requisite training, granted to pilots by the Air Force is indicative of this decline in capability. In addition, predictability in their lives is a key factor in maintaining morale regardless of the pace of operations. Equal consideration should be given to individuals remaining behind as their PERSTEMPO increases in order to cover the duties of those deployed. Further, those remaining behind whose PERSTEMPO is elevated, are often the next to deploy.

At the unit level. High unit OPTEMPO means that the basic building blocks of military force, if engaged in other than their primary function,¹⁸ are generally not able to conduct some or all of their mission-specific training and exercises, gunnery qualifications, upgrading and development of combat leaders, joint training with similar or dissimilar units, maneuver, or most of all, they may not, in some cases, maintain a level of proficiency that ensures safe and effective military operations. Supply and maintenance factors are a significant aspect of the units capability that is hampered by high deployment rates. Soldiers, who may or may not take their equipment with them on a deployment, are often required to work extensively on their equipment upon their return further exacerbating both their PERSTEMPO and the

¹⁸Each military unit has a primary mission that may be either combat, combat support, or may be to support the services in other ways. In addition, some units primary functions are directly applicable to non-combat operations, some are not. Tailoring forces for "national security" non-combat missions is one option under review in the QDR. Using forces in other than their primary function is possible and often beneficial to the nation, but it comes at a cost to the postured capability. Generally, but not always, deployments for combat units degrade proficiency levels in most key tasks. Combat support units, on the other hand, may engage fully in their "wartime mission". Sometimes, as in the case of preparations for Zaire, support units may be put on short notice alert for extended periods during which time they do not engage in productive activities.

units ability to organize an effective training schedule. Resupply of units may be interrupted when supplies intended for one unit are diverted to a unit that is preparing for a deployment. To maintain unit morale and cohesion that are essential to mission effectiveness, units must engage in activity that is seen as important, relevant, and conclusive. The importance, relevance, and significance of unit activity outside their primary mission should be communicated from the highest levels. Forces returning from the Balkans were considered by their commander to be in a high state of personal readiness because of their experiences and to have a high esprit de corps because of their shared challenges. Although these gains are laudable, the unit was not considered able to maneuver with other units as required in combat scenarios solely because of the lack of ample training while deployed.

At the service level. High OPTEMPO/PERSTEMPO and its associated financial costs, restrict the services' ability to organize, train, and equip U.S. forces by extensively interrupting the planned training, exercise, and acquisition cycles with sustained unplanned operations and significant unprogrammed costs. Short-term surges that cause temporary interruptions are not a severe problem; however, a continuously high demand on any military force especially in an era of shrinking resources, will eventually degrade the skills and capabilities of that force. Services handle unplanned operations best when provided the latitude to determine the course of action and the additional resources required to accomplish the mission. A clear statement of the desired outcome of committing military forces is required to establish a definition of success. Otherwise, operations become open-ended and begin to run concurrently, thereby causing prioritization problems for the military services in allocating limited assets. The resulting requirement to sustain numerous ongoing operations is a key factor in today's high OPTEMPO environment.

At the DoD level. As the agent responsible for maintaining a viable force ready to execute the national military strategy, DoD planners in both the Office of the Secretary and on the Joint Staff need to monitor readiness levels and wartime stockpiles closely to ensure the military does not drop below acceptable levels without a conscious decision on the part of the National Command Authority to do so. The continuing demands on U.S. forces and any resultant temporary degradation of capability could result in a condition, in the not-too-distant future, where the desired U.S. forces may not be available for non-critical operations. At the same time, DoD is responsible for planning force improvements through modernization and acquisition programs, resources for which may be put at risk by continuous unplanned expenditures for ongoing operations.

Future Trends in OPTEMPO/PERSTEMPO

DoD and the military services have taken extensive measures to mitigate the effects of high OPTEMPO/PERSTEMPO; however, predictions and recent administration policy announcements portend that OPTEMPO and therefore PERSTEMPO will remain high. For example, then-Secretary of State Warren Christopher, just prior to his departure from the State Department, reflected on his tenure saying that the United States would need to be more, not less, engaged in the

world.¹⁹ In order to meet the challenges confronting the United States, the nation's leaders must manage the military's capability, as an instrument of national power, to prepare to meet both large and small-scale challenges to vital interests and its ability to deal with important and lesser interests without placing an inordinate burden on the federal budget. This effort comes within fiscal constraints imposed by efforts necessary to balance the federal budget. Efforts to reduce force structure further in order to pay for DoD modernization should be closely examined for any negative implications for OPTEMPO and PERSTEMPO. If commitments expand and/or force structure is reduced, the negative aspects of the current pace of operations will be magnified. With no increases in current commitments and with innovative leadership and a willingness to accept increased risk, options to adjust OPTEMPO and PERSTEMPO may well come to light.

In summary, as defined for this paper, unit OPTEMPO is the cumulative result of operations, training events, field exercises, inspections by higher headquarters, and other duties which demand the presence and/or attention of the unit; while individual PERSTEMPO is the sum total of any required activity that takes a person away overnight such as operations, deployments, training, education, conferences, or exercises. Operating practices developed during the Cold War that today heighten OPTEMPO and PERSTEMPO, were not previously a problem because the size of the force meant fewer repetitive deployments for units and individuals. An OPTEMPO/PERSTEMPO that is too high over time means that units and individuals, even if engaging in activities that fall within their assigned responsibilities, are diminishing their capacity to sustain high intensity operations and meet unforeseen crises. On the other hand, low OPTEMPO/PERSTEMPO may be an indicator that a unit's readiness might be at risk due to insufficient training, exercises, manpower, or resources or it could indicate a unit that is capable of contributing more to current operations. High unplanned activity levels reduce the time available for fulfilling requirements such as training and education, increase the rate at which supplies, equipment, and personnel are exhausted, and limit the flexibility of forces to engage on short-notice in higher priority operations. In addition, anecdotal evidence suggests prolonged high PERSTEMPOs can erode morale and lead to drops in retention and increases in family problems. The Pentagon is working aggressively to overcome the challenges presented by high OPTEMPO; however, DoD has little control over the number and duration of real world operations, the major cause of post-Cold War increases in peacetime activity.

¹⁹U.S. Secretary of State Warren Christopher in a speech at West Point, October 25, 1996 as reported on CNN World View.

Key Issues

Overview: Areas of Congressional Concern

Understanding the new dynamics. The pace, scope, and intensity of DoD's activities has increased. The defense authorizations, appropriations, and oversight processes are the key means Congress uses to address global demands relative to defense resources. To meet the needs of this new era, it is important to understand the ramifications of maintaining a much smaller, highly proficient military force; maintaining or tailoring global commitments while withdrawing from overseas bases; and maintaining readiness to execute major regional hostilities while meeting open-ended contingencies. To keep this smaller, more expeditionary force in a very active and highly proficient state, decisions should, when possible, avoid exacerbating the inherent problems of high OPTEMPO/PERSTEMPO. As pressure to reduce the defense budget builds, Congress and DoD will examine various ways to reduce costs. Because OPTEMPO and PERSTEMPO are projected to remain steady or to increase, reductions based on an understanding of the dynamics of this new defense environment will be pursued.

Operations and personnel tempos are directly related to budget, readiness and force structure issues. This relationship is dynamic; further, because tempos are high, the effects of DoD and congressional action may well be accelerated and amplified. For units and individuals with the highest OPTEMPO/PERSTEMPO, policy changes can have an almost immediate affect. The consequences of delayed supplemental appropriations for operating costs, or exercise cancellations, or addition of unplanned deployments, for example, can be magnified in the most highly stressed units. Increased appropriations, if targeted toward replacing resources expended for contingency operations, can have an immediate impact on reducing the affects of a high operational tempo. Changes in force structure without assignment reductions can dramatically increase tempos if these changes result in fewer assets available. Decisions that reduce funding, manpower, or equipment can have immediate tempo repercussions unless commensurate reductions in unit obligations are made. Examples of negative effects include: delays in funding can cause significant training problems in the last quarter of the fiscal year as money for training may no longer be available; manpower reductions cause turbulence in the personnel system and in the current structure, which may lead to undermanning of units, causing further training degradation; aircraft cannibalization is an expedient when equipment and logistic shortfalls occur, which can reduce the number of combat aircraft available and which significantly increase the workloads of maintenance technicians. Although cannibalization practices quickly return some aircraft back to a ready status, the practice is not a long-term solution. Congressional actions that can enhance the ability of units to prepare for fast-paced operations include privatization of some base support functions that now require soldiers to perform duties away from their units; increased allocations for mobile combat simulators that can accompany deploying units; and improvements to some general purpose forces that can enable them to participate more fully or more often in ongoing operations. The dynamic association of budget, readiness, and force structure with OPTEMPO and PERSTEMPO in this new defense environment is further outlined below.

Budget Implications

Direct and Indirect Affects. If defense spending is cut, resources are made available for other functions; for example, education, welfare, transportation, medical care, public health, and tax reductions. These are the classic decisions that the Congress is charged to make and it has for decades treated the U.S. armed forces with relative generosity, providing much and expecting much. In the current dynamic, the budget has both a direct and an indirect relationship with OPTEMPO and PERSTEMPO. Understanding this relationship will aid the Congress as it wrestles with these decisions. Directly, as the amount of activity increases above preplanned levels so too does the cost. If funding to cover these costs is not appropriated in a timely manner, DoD “borrows” from other accounts until the supplemental funding arrives. This delay can and has had repercussions for readiness. Congress has taken action to minimize delays and now provides funding for ongoing contingencies in regular appropriation bills, and supplemental appropriations have been timely in 1995 and 1996.²⁰ Indirectly, budget-driven decisions can have adverse affects on OPTEMPO and PERSTEMPO by reducing seemingly unrelated resources and personnel, by limiting investments in modernization and acquisition, and also by delaying action on less time-critical elements of DoD programs that may later, in a different crisis, restrict flexibility. Indirect positive effects accrue when, for example, congressional action frees funds and/or endstrength for use in combat and combat support related functions. The categories of direct budget-related effects to consider are operations, personnel, logistics, and modernization.

**Table 6. Costs of U.S. International Peacekeeping Commitments
FY1992-1996**
(in millions of dollars)

	FY 1992	FY 1993	FY 1994	FY 1995	FY 1996	Total
Current Year \$	462.2	1,925.1	1,692.9	1,894.1	3,279.7	9,254.0
Constant FY 1998 \$	541.5	2,160.8	1,856.5	2,036.4	3,447.9	10,043.1

Note: Table compiled from incremental costs provided by DoD, Office of the Comptroller in July 1997 to Nina Serafino, Foreign Affairs and National Defense Division, CRS.

Direct Effects

Operations. Operations above preplanned budget levels will continue to be a congressional concern as both constrained resources and unpredictable contingency operations are expected to occur. Although estimating operational costs seems

²⁰For a further discussion of military contingency funding, see Serafino, Nina M. *Military Contingency Operations: Search for a New Funding Mechanism*. CRS Report 95-636 F, May 22, 1995.

forthright, the very nature of military budgeting makes accurate estimates difficult.²¹ Nevertheless, as operations increase, costs usually increase, leading to potential problems with readiness, logistics, and personnel.

Personnel. Not surprisingly, personnel costs increase as operations increase. The combination of temporary duty pay, family separation allowances, imminent danger pay, bonuses and tax breaks increases personnel costs for contingency operations, though the regular salaries of U.S. service personnel remain unchanged whether training, fighting, or waiting. Efforts to reduce costs by limiting payments to personnel, some argue, affect retention and reenlistments in the long-term as these payments are often cited by service members as an important factor in mitigating the burdens of deployments. Since DoD has come to rely on extensive use of reserve forces in augmenting and replacing active duty forces, their use can increase personnel costs for specific deployments. Although maintaining reserve forces in peacetime is less expensive, the actual use of those forces in full-time operations costs more than an equivalent use of active duty personnel. These costs reflect a fairly direct relationship. Indirectly, if dissatisfied members leave the services, the turnover of experienced to inexperienced individuals has many budget and readiness implications. Recruiting and training a greater number of replacements than planned is an increased burden tied to paying for today's deployments. Individuals that are less experienced are generally seen as less capable and usually require more training than their more experienced predecessors.

Logistics. Logistics, in this case equipment, maintenance, and supplies, show short and long-term cost implications due to higher than planned usage rates. As we enjoy surpluses left over from the Cold War, these costs can be easily sustained and arguably hidden. The Defense Department has taken the lessons of the hollow force to heart and is working diligently to avoid previous mistakes; however, some problems are inevitable. Many supply items, acquired and postured for major conflicts and intended for one-time use, are used and then not expeditiously restocked. Stocks of such things as Air Transportable Hospitals and kits designed to facilitate the stationing of troops in remote locations are dwindling.²² Officers at the Pentagon report that, in some cases, the shipping of equipment destined for pre-positioning to potential hotspots overseas suffered lengthy delays. While maintenance backlogs are generally limited, maintenance has suffered and is now robust only through concerted effort. Depot maintenance on aircraft engines, a perennial problem, continues to require concerted effort as the engines get older. In the long-term, maintenance costs on current equipment will rise as more and more effort is required to maintain a combat-ready posture. In addition, suppliers of older parts may no longer be in production. Remanufacturing parts adds to DoD's costs.²³ These

²¹For more on problems associated with cost estimating, see U.S. General Accounting Office. *CONTINGENCY OPERATIONS DoD's Reported Costs Contain Significant Inaccuracies*. Report Nos B271279 and GAO/NSIAD-96-115. May 17, 1996.

²²Interview with Lt Col Gregory Flierl, HQ USAF/XOOOR, September 9, 1996.

²³Examples taken from service testimony to the House National Security Committee, March, 1997.

long-term costs increase due to higher than planned activity levels and are directly related to modernization.

Modernization. Contingency funding has a direct impact on modernization. Budget solutions that result in delays and cuts in the acquisition of new major weapons systems can increase overall acquisition costs and per-unit costs. They can also contribute to sustaining rather than reducing high OPTEMPO/PERSTEMPO levels and therefore increase operational costs. As stated, delays in modernizing equipment, due to budget tradeoffs in DoD and Congress made for reasons sound, clear, and otherwise, result in higher physical and monetary maintenance costs for aging equipment. Usually, older, less sophisticated equipment means that more equipment and more support personnel are required to meet the contingency commander's needs. This results in higher OPTEMPO and/or PERSTEMPO for all involved.

Conventional wisdom holds that modernization is one area where increased capability might lead to decreases in the amount of forces required to complete some missions. In some areas, this may be true. Still, better capability often creates a false impression that military forces can now do more than was previously possible because many observers add the new capability to existing capability without subtracting the loss of older equipment, installations, and forces. In operational terms, increasing capability increases mission effectiveness. This does not necessarily mean that fewer forces are required to complete a military mission. It normally means that the forces involved can probably accomplish the mission with lower risk, fewer casualties, less collateral damage, and that they can do so more expeditiously. For example, aircraft that are more reliable can fly more often with less maintenance. In this case, the operational commanders can reach their objectives more quickly but not necessarily with fewer sorties, fewer maintenance crews, or fewer forces. In addition, if modern equipment requires less strategic lift to deploy, the resultant free cargo capacity will be used to get all the required support to the troops sooner, thereby speeding up mission accomplishment. For smaller, highly proficient, and busy forces, modernization is needed to reduce the number of units and individuals required for current overseas commitments. Modernization should not usually be justified as a way to increase current military obligations.

Indirect Effects. Budget decisions can also indirectly affect OPTEMPO and PERSTEMPO. Significant areas to consider are: budget-driven force structure decisions; commercial alternatives to military specific hardware; base closures and overseas presence; privatization and outsourcing. In general, decisions that reduce the manpower pool, that limit the availability of units and individuals, that increase time spent away from both home-station and primary duties, and that reduce capability adversely affect units and individuals with either a high OPTEMPO or PERSTEMPO. Some lesser tasked or perennially untasked units (and the nation) might actually benefit from greater activity levels, but it would be difficult to target such units with indirect consequences of budget decisions.

Numbers, Types, and Availability. While cost-capability tradeoffs are critical in achieving an affordable balance between the National Military Strategy and the National Security Strategy, budget-driven reductions in the number of forces, the types of some forces, and the availability of forces, generally will lead to increases in

activity levels for the remaining units. Obviously, as long as commitments remain constant, fewer forces to draw from means a higher OPTEMPO and PERSTEMPO. Less clear-cut are decisions affecting the types of forces involved. For example, F-16 units that are equipped with the Low Altitude Navigation and Targeting Infrared Night (LANTIRN) capability are heavily tasked. However, other F-16 units without LANTIRN are not as heavily tasked. Making more F-16s available does nothing to relieve the LANTIRN units' OPTEMPO. Making more LANTIRN-equipped units from existing F-16 squadrons and training more LANTIRN-qualified pilots is a viable solution. In the same vein, buying more Harm Targeting Systems (HTS) for general purpose F-16 units will also have a dramatic downward affect on the overall OPTEMPO of specialized F-16 units. Units equipped with HTS are in continual high demand as they are used regularly to suppress enemy air defenses in northern and southern Iraq, and in Bosnia. Such defensive aircraft are an important part of any military deployment because they provide the essential protection to any cargo or ordnance delivered from the air.

Increasing the size of the reserve components to save money will increase tempos. Short of full mobilization, Guard and Reserve forces have limited availability. Although these forces significantly mitigate the high OPTEMPO and PERSTEMPO of their active-duty counterparts, their limited availability prevents their taking a leading role in meeting contingency requirements. Although the reserve component is less accessible than the active duty forces, the reasons for, conditions of, and laws governing the access of the reserve component are based on the force structure designed on an MRC concept of operations and not those of operations other than war.²⁴ Since maintaining these forces in peacetime is cheaper than their active duty equivalents, posturing more units in the reserve components is an attractive budget option. Since active-duty forces are always available and can be committed for indefinite periods, active-duty forces are always used initially in operations. Now, with active-duty OPTEMPO and PERSTEMPO at peacetime highs, any reduction in active-duty force structure in favor of increased force structure in the reserve component would cause a dramatic increase in active-duty OPTEMPO and PERSTEMPO.

Summary: Budget, Readiness, Force Structure affect OPTEMPO. As discussed, the fundamental relationship between budget decisions and OPTEMPO and PERSTEMPO extends beyond simply paying for contingency operations. These issues are inextricably tied to readiness and force structure considerations. The timing of supplemental appropriations, the nature of DoD rescissions to offset operational costs, and the resultant effects on short and long-term military effectiveness are key budget considerations for readiness and force structure. In logistics, actions not taken due to funding shortfalls normally must be accomplished eventually. Quality of life gains and losses are potent factors in retaining skilled and experienced professional personnel. The Chief of Staff of the Army, General Dennis Reimer, considers a soldier's confidence that his wife (90 percent of career soldiers are men) and family are being adequately cared for in his absence, the primary consideration for that soldier in retaining his commitment to the Army while on extended deployments.

²⁴This point was made by the National Guard in formal comments on a draft of this report by the Deputy Director, Operations, Plans, and Programs, National Guard Bureau.

Modernization may be area in which the U.S. can make some gains in lowering OPTEMPO/PERSTEMPO and the cost of operations. New technologies, may enable DoD to posture fewer, yet more capable, forces in order to free force structure to train for and engage in both war and Operations Other than War (OOTW). In a fiscally constrained environment, the resultant force structure may be subject to dollar-driven cuts, which would, in effect, recreate conditions the modernization sought to relieve: too few people doing too many things. In addition, the great variety of peace time operations makes it difficult to posture forces for every contingency. The need for a wide variety of specialties is a contributing factor to uncertainty in the ranks and overall high PERSTEMPO. The nature of OOTW often dictates the types of forces required. Simply put, some operations still require a large physical presence. Humanitarian relief operations, peacekeeping, and exercises with allied nations require direct human contact and are not easily adapted to new technologies. The relationships between readiness, force structure and OPTEMPO/PERSTEMPO include these key considerations and more.

Readiness Implications: “Ready for what?”

The readiness posture of U.S. forces is predicated on a clear understanding of the mission set before them. The question “Ready for what?” is paramount. Currently, the requirement to fight two nearly-simultaneous major regional contingencies is the primary factor driving unit preparations. Readiness for high-intensity conflict as envisioned in the two-MRC scenario demands the most exacting standards of military units. Significant commitments of time and resources to other operations may dull, to some degree, the combat edge acquired through realistic training and joint exercises over the last 10 years. Testimony before the House National Security Committee from the commanders of the services’ combat training centers indicated that units and individuals arriving recently for training were not as well prepared, and in many cases, did not perform as well, as units had in past years.²⁵ Units may remain in a high state of readiness,²⁶ as much a subjective assessment as it is a quantifiable standard,²⁷ as is the case today; however, the cumulative effects of continuous activity exact a toll. The time invested in non-MRC operations, in operations that do not contribute to a unit’s readiness, must be factored into the units planning calendar in order for them to meet their training and exercise requirements and thus maintain their combat skills. Note that units such as light infantry, civil affairs, and logistic/supply units usually practice their wartime skills supporting contingency operations; however, some other units dedicated to high or medium-intensity combat generally do not. Even so, in today’s environment, the

²⁵ This testimony was supported by anecdotal evidence from units nationwide that appeared in both press accounts and interviews conducted by the author.

²⁶Unit readiness assessments under the Status Of Resources and Training System (SORTS) are as much a subjective assessment as they are a quantifiable standard in that the unit commander’s assessment of the readiness level is the paramount consideration in assigning the units overall readiness status.

²⁷For more information, see Gebicke, Mark—Director of Military Operations & Capabilities, U.S. General Accounting Office testimony before the Military Readiness Subcommittee of the House National Security Committee, March 11, 1997.

PERSTEMPO of units executing their primary duties in contingency operations still demands attention. In considering OPTEMPO/PERSTEMPO factors and readiness, it is important to keep the two-MRC requirement in mind, as it drives unit preparations and their readiness evaluations.

Prepare, Deploy, Recover — Paying for the cycle with readiness. Not only do the operations themselves require a time and resource commitment, preparing for such deployments and then recovering lost combat skills, if any, afterward are factors in the readiness equation. Preparing for an operation often means training time is spent acquiring new skills not practicing existing ones. In addition, the recovery time following a deployment is spent reacquiring lost skills. As discussed previously, the nature of rotational duty for ongoing operations, such as those in South West Asia, means that for every unit deployed, two others are in some state of preparation or recovery. None of these units are fully engaged in training for wartime.

Intangibles. With exceptions, as OPTEMPO/PERSTEMPO increase, some degree of readiness is lost.²⁸ The longer the deployment, the greater the loss of dedicated training time. The loss of dedicated training normally entails a reduction in readiness. When training time is lost, other related factors are diminished. These factors include the level of individual experience, the capacity to “surge” into faster-paced operations, retention and recruitment, and morale²⁹. For example, unit experience levels, a significant factor in sustaining high levels of readiness, are perishable. The levels drop as fewer members are exposed to realistic, albeit simulated, combat scenarios and are afforded opportunities to fire their weapons. For example, the experience levels of Air Force fighter squadrons, only six years after the Gulf War, are dwindling. Although they are flying a great deal, pilots are accomplishing fewer actual combat-training events than their Gulf War-era predecessors. As these officers move into leadership positions, the impact of their inexperience may be magnified.

In the early years of increased tempos, 1991-1994, the morale of forces involved in contingency operations was considered by commanders to be exceptional. According to Air Force surveys of pilots leaving the service and anecdotal evidence from the Air Force Times, Air Force Magazine, and the authors interviews with pilots, the significant factor in reducing morale has been the continuation of the high pace for an extended period.

²⁸As noted, some combat and most combat support units perform their wartime functions supporting contingency operations. Civil Affairs, transportation, logistics, and some infantry skills benefit greatly from participation in contingencies. For these units, PERSTEMPO is more of a problem than OPTEMPO.

²⁹The most apparent evidence to suggest a correlation between OPTEMPO and retention, recruitment, and morale appears in surveys of pilots leaving the military services. Surveys in 1996 and 1997 list OPTEMPO and “family, personal, or quality of life issues” as the top two reasons pilots are leaving the Air Force in record numbers. In 1996, 34 percent and in 1997, 47 percent cited the above reasons as the major factors in their decision to resign. Navy and Marine Corps officials attribute unplanned interruptions to the time aviators are not on routine pre-planned deployments, i.e. at home, as the primary reasons for the significant increase in aviators leaving the sea services.

Tangibles. Physical factors are also diminished through continuous involvement in operations: weapon and vehicle maintenance, reductions in equipment service life, and depletion of wartime stockpiles. According to the testimony of Marine Corps generals before the House National Security Committee in March, 1997, problems of maintenance on aging Marine helicopters is exacerbated by the pace of operations. Based on the age of the helicopters and the slow pace of acquisition of the replacement CV-22 Osprey (5 per year initially), regular maintenance is becoming much more time consuming and expensive. These “readiness” factors directly relate to budget and force structure deliberations.

Summary: Readiness is pervasive. As Congress analyzes the QDR, the question of “What forces will we need?” will be addressed in terms of affordable force structure. The key readiness questions that relate to OPTEMPO and PERSTEMPO will be part of the force structure debate: “Ready for what?” “Ready by when?” The resolution of each question will affect future OPTEMPO and PERSTEMPO levels. Ultimately, the level of readiness required of all forces, and hence the cost, is directly related to OPTEMPO. In other words, what level of effort will U.S. forces be required to sustain and therefore, what strategy will they have the capacity to support given that level of effort.

Force Structure Implications

The current debate over force structure encompasses a wide range of issues. Many observers believe the threat to the United States no longer warrants maintaining forces capable of fighting a two-MRC war. Many believe that DoD is already too small for the two-MRC requirement. Some high-ranking military officials believe that the force required to meet all current global requirements exceeds the force levels postured in the Bottom-Up Review. Others in DoD believe current operations alone demand commitments of forces that are equal to those required for at least one major regional contingency. Most seem to agree that the Defense budget will remain fairly static for the foreseeable future and that force structure decisions must be made within those confines.

The dangers and options. The dangers involved in balancing force structure with commitments are many. Too few forces prepared for high-intensity combat could result in higher casualties and longer conflicts; whereas, too few forces capable of a wide range of operations results in high OPTEMPO/PERSTEMPO for those qualified units and missed opportunities for the nation. Excess force structure means reduced tempos but requires resources from other national priorities. The solutions under consideration center on ways to reduce the forces required for MRC duty; to reduce the time and effort required to prepare for MRC duty; to increase the number of units capable of executing multiple types of non-combat operations; and to increase the participation of the reserve components. All potential solutions should address whether OPTEMPO/PERSTEMPO levels remain within tolerable levels.

The Pentagon is in the process of assessing the current demand on U.S. forces in order to develop requirements for future force structure. The balance among various capabilities will be achieved within a framework of capacity bounded by OPTEMPO/PERSTEMPO, budget, and readiness considerations. The following relationships are pertinent (assuming demand remains constant or increases):

- As force³⁰ size decreases, OPTEMPO increases.
- As active force size decreases in favor of the reserve components, OPTEMPO increases due to the limitations on the availability of the Guard and Reserve.
- As the number of specialized units increases, OPTEMPO for those types of units decreases; however, with a finite force structure, the increase in such units is at the expense of other types. For example, the Air Force trained and assigned more flight crews to AWACS units in order to lower the sustained high PERSTEMPO of AWACS crews. The personnel to do this came at the expense of other units. In this case, PERSTEMPO for the force at-large may increase.
- New units with missions similar to high OPTEMPO units might reduce the overall OPTEMPO. However, recent experience with both the Joint Stars ground surveillance aircraft and the Predator UAV suggest that this is not inevitable. In practice, the addition of new and improved surveillance complements rather than supplements existing capability.
- As new weapons and capabilities that reduce manpower and support requirements come on line, PERSTEMPO decreases.
- As long as excess demand for military force deployment exists, whether for military or foreign policy purposes, efforts to reduce OPTEMPO and PERSTEMPO will be difficult.
- With these relationships in mind, significant potential for achieving the required balance of forces exists in the reserve components. Although increasing the size of the Guard and Reserve at the expense of the active force will generally result in higher tempos, and the reserve components are generally less available than the active force, the Guard and Reserve offer significant potential in meeting future commitments and challenges. Many defense observers see support and specialized functions in the reserve components as a key building block in developing the affordable force operating at acceptable OPTEMPOs that is required for the QDR. Some movement in this area is underway. At the same time, there is a widely held perception that the reserve component should never be viewed as the key building block³¹ because its near-term warfighting capability cannot match that of the active force.

Summary: Maintaining sustainable OPTEMPO/PERSTEMPO. Key considerations for force structure decisions with regard to maintaining acceptable levels of OPTEMPO/PERSTEMPO are: the reserve components make important and valuable contributions but they are a finite resource; there is a direct correlation between the size of the force and the sustainable level of activity; new weapons and

³⁰“Force” in this construction refers to combat/combat support forces that are deployable to contingencies and/or combat theaters.

³¹This point was made by the National Guard in formal comments on a draft of this report by the Deputy Director, Operations, Plans, and Programs, National Guard Bureau

capabilities may free manpower that can be translated into the creation of specialized units for non-MRC duty and without these improvements, unique units usually come at a cost to MRC capability.

Options for Congress³²

Congressional oversight of DoD during this period of high activity will probably continue to focus on mission. Modernization and quality of life issues will probably continue to remain high priorities for the Pentagon. Congressional involvement will be important as DoD works to meet its commitments. Direct congressional action relating to the National Guard and Reserve, military infrastructure, military end-strength, specialized units and equipment, incentives and increased reporting to Congress by DoD are options to consider. In addition, direct action may be contemplated to end ongoing operations when they are perceived as not closing on a predefined “Exit Strategy” and that may be causing more harm to military capabilities than they are benefitting U.S. interests. Internal actions within DoD that may fall under the purview of congressional oversight include validating employment concepts, increasing resources for training while deployed, reviewing and setting minimum training time guidelines, prioritization of, and early determination of, exercise requirements, reducing the number and duration of required inspections, and providing “down time” to units following extended deployments.

Options for Congressional Action

National Guard and Reserve. Congress plays a vital role in supporting these organizations. The debate over the relevance of Army heavy combat forces in the National Guard will continue; the possibility of converting all or some of this capability to support units more useful to typical ongoing operations will continue to be examined/tested and is a key consideration. Air Force reserve component combat units already participate in a significant way. The important debate for the air reserve component is the Air Defense (ADF) of the continental United States mission. The forces dedicated to ADF, although they are continually engaged in viable training, are not available for worldwide deployments. They do, however, deploy for some counter-drug operations. Converting these units to general purpose forces without reducing or eliminating the air defense mission would actually increase OPTEMPO.

Infrastructure and End-Strength. Increasing the pool of available manpower would tend to reduce PERSTEMPO. Infrastructure (bases) DoD views as extraneous requires DoD to use scarce manpower and financial resources to continue to maintain these facilities. Many DoD officials testified in 1997 that Congress should expect DoD to pursue further closure of excess installations as a means of saving end-strength for force structure. Some outside observers also contend that another round of base closures will be required. Direct end-strength reductions to free funds for modernization were also discussed in DoD. Some contend that personnel cuts increase costs by reducing economies of scale and that paying for the increased cost

³²“Save us from ourselves” was the request a senior officer on the staff of U.S. Army Europe made when, while being interviewed for this paper, was asked “What should Congress do about high OPTEMPO?” He explained that he was referring to DoD’s inability to say no to new operations, exercises, and international events; the military culture’s willingness to do more, and to do more with less; and DoD’s inability to effectively assess the impact of OPTEMPO on mission effectiveness.

forces more personnel cuts which then increases, not decreases, PERSTEMPO. In summary, it is argued that end-strength can remain constant while force structure is increased to meet current demands by freeing manpower supporting excess installations. End-strength cuts to other than redundant personnel can end up costing more in monetary terms and in increases to PERSTEMPO. Those in favor of retaining DoD infrastructure site several factors that argue against more reductions. The potential of outsourcing and privatization as mechanisms to free end-strength for use in force structure is often highlighted as an alternative. The need to maintain an expansion capability for times of national crisis, for example, in training centers earmarked for use during mobilization. Cost estimates for reopening a base in times of crisis can, in some cases, exceed the cost for maintaining an open facility. Also, the impact of facility closure on local retirees can indirectly affect the way in which serving members view their retirement benefits.

Incentives. The use of incentives can sometimes be a two-edged sword, encouraging those receiving the benefits while discouraging those that don't. Regarding the affect of contingency operations on soldiers, many enlisted soldiers lose their basic allowance for subsistence (BAS) when they deploy to the field for operations and exercises. They can forfeit up to \$210 per month from their personal budget that is already strained and in many locations arguably insufficient. Ending the requirement to withhold BAS from at least the most junior grades would have an immediate impact. At the individual level, tax breaks for troops deployed to ongoing operations for extended periods has been used by Congress in the past. Pilots, who are among those with the highest PERSTEMPOs, are slated to receive an increase in their Aviation Career Incentive Pay that keeps pace with inflation and a doubling of their Aviator Continuation Pay from \$12,000 per year to \$22,000 per year. Although these incentive programs have benefits, there are some negative repercussions among service members.³³

Expand and Increase Reporting. Congress may consider requiring DoD to make OPTEMPO and PERSTEMPO reports a key part of the Secretary's Annual Report to Congress. OPTEMPO and PERSTEMPO assessments might be helpful as part of unit readiness ratings. OPTEMPO reporting that is specific by unit and by unit type or by major weapons system and PERSTEMPO reports by unit, unit type, and individual specialty skill and location might provide relevant data. DoD definitions that include all unit and individual activity away from home-station and home (many people are required to remain on board ship or at an alert facility) and that include the time required to prepare for deployments and to recover from deployments could be helpful. While the services all have differing requirements, the tolerance of individuals and their families for continuing displacement and uncertainty may be universal. Units need to train regardless of mission; therefore, any deviation below the minimum time required for primary mission training is a standard that may also be universally

³³A detailed discussion of pilot retention incentives is soon to be published in a CRS Report, "*Military Pilot Retention: Issues and Options*" by (name redacted)

applicable.³⁴ This is the essence of the Pentagon's Global Military Force Policy discussed earlier and may be applicable DoD wide.

Reporting "capacity" in a high OPTEMPO environment. Military forces are arrayed to provide a capability. The smallest building block of that capability that can deploy as a viable unit is a battalion, a squadron, or a ship. Fully-rested, trained, manned, and equipped, each unit provides, in theory, its designed capability at 100 percent capacity. The vagaries of high OPTEMPO and PERSTEMPO degrade the training, manning, equipment, and endurance of units and individuals. Any operation or activity in which a unit engages improves or reduces the level of capacity of that unit. Measuring readiness in terms of capacity by unit-type gives a clearer picture of the capability available within the force structure to execute a proposed strategy. Tracking this capacity accurately and often may improve DoD's ability to plan and execute strategies based on a clearer picture what the available forces are ready to do.

For example, U.S. Army Europe (USAREUR) maintains two divisions which on average have three brigades of three battalions each for a total of eighteen combat maneuver battalions. At any time, these battalions, to some degree, are either in Bosnia, Macedonia, in a Partnership for Peace exercise, in the field training, engaged in some real-world operation, or in garrison. All of these battalions currently maintain a SORTS-reported high degree of readiness. The question, however, is what kind of capability can USAREUR put in the field, how long will it take, and once there, how long can it stay viable. This is the essence of knowing what strategy USAREUR can execute. Current measures of readiness, though useful, in a high OPTEMPO environment may be inadequate for this determination.

By treating all activity away from home as an "operation," by accounting for the time it takes to prepare for and recover from an "operation," and by guarding the minimum training time a unit needs to maintain its designed capability, a reliable system for maintaining manageable OPTEMPO and measuring actual readiness may result. Such a system within DoD would require an overhaul of the existing SORTS system, a readjustment of policies and procedures, and perhaps some expenditure for new and improved hardware and software.

Other options such as maintaining the status quo or adjusting measurements incrementally based on developing circumstances may not provide commanders with a timely assessment. The questions of what kind of capability can be put in the field, how long will it take, and once there, how long can it stay viable should be answered in the initial planning stages of an operation so that the right forces and the right size and mix of units can be employed for maximum effect. Cost factors contribute to the desire to maintain the status quo and such a transformation of readiness measurements would not be without cost. The long-term benefits of knowing the capacity of U.S. forces prior to beginning a new operation or in the development and assessment of new strategies may outweigh the short-term expenditures. To reduce cost and risk, development and evaluation of an appropriate system of measurement could begin

³⁴This approach would also highlight units that for any reason fail to reach their training goals due to an operational tempo that is too low. A low OPTEMPO could result from any number of factors such as underfunding, or undermanning.

prior to large-scale implementation and is already underway in the Air Force as outlined in Tables 2 and 3. In the near term, the commander's assessment portion of SORTS could be expanded to cover the issues outlined in this report. As many of the issues involved are subjective, units and commanders, as in the Air Force approach, are in the best position to provide the data for development of such a system. To the degree that objective measurements can be used to predict the capacity of forces, they should be in order to ensure a fair measurement and to ease implementation. At the same time, any system to measure capacity should not inadvertently impose "union rules" on military units that may create morale problems that they were partially instituted to resolve.

Supplemental Appropriations. Timely attention to supplemental appropriations to meet unexpected costs incurred in fulfilling unplanned obligations would ease some causes of strain on the force.

Congressional Action to End Ongoing Operations. Congress may, on occasion, choose to end support for ongoing operations that are deemed to have outlived their usefulness or to have been misconceived. For example, Operation PROVIDE COMFORT, renamed Northern Watch, which supports the Kurds in Northern Iraq, may fall into this category as a result of Saddam Hussein's actions of August-September 1996 or Kurdish disunity. Because the forces committed to this operation, for whatever reason, were unable to inhibit or interdict Iraqi aggression on the ground, their continued presence in the region is less tenable. There may be other valid geo-political reasons for continued U.S. presence in this operation. If other reasons exist, the force could be adjusted to reduce American commitments and thereby lower OPTEMPO. It is certainly within Congress' purview to withhold funds for operations it deems unnecessary or unwise, but if the administration chooses to continue the operation with existing funds, the resulting situation tends to create hardships for DoD men and women.

Some key questions regarding ongoing operations. Ongoing operations, considered by many to be the main cause of the OPTEMPO and PERSTEMPO which is straining the force, could be reviewed in order to ensure that they are moving toward their agreed objectives and that the planned "exit strategies" remain viable as some of the current "contingencies" have been ongoing for over five years — longer than World War II.

- What are the objectives of the operation? Are they still realistic?
- Within what timeframe do we anticipate reaching the objectives?
- Is the force adequate to reach these objectives?
- Do the current rules of engagement enhance or restrict our ability to reach the objectives quickly and efficiently?
- Are there other forces or other employment options, other agencies, or other countries that could perform some or all of the current tasks?
- What is the definition of success for this operation?

- What cost are we willing to pay to see a successful outcome?
- Under what circumstances do we plan on terminating operations?
- What cost are we willing to write off to terminate an operation without success?
- What are the opportunity costs of the operation?
- What are the affects of the operation on U.S. combat capabilities?
- What are the opinions of major allies in the operation?

Some examples bear consideration. Northern Watch (Iraq: Northern No-Fly Zone) may be in question. Rules of engagement for air forces that prohibit attacking ground forces, even when those ground forces are attacking targets the air forces are defending from air attack, suggests to some critics that the operation is no longer credible. A strong U.S. ally in this operation, France, removed its forces following the events of August-September 1996. Although there may be larger geopolitical reasons for continuing this operation with regards to friendly Turkey and potentially hostile Iran, global U.S. military commitments are increasingly coming under scrutiny as to need, cost, and benefit. Macedonia is another deployment that may be open to questioning. With the NATO Implementation Force (IFOR) and then the Stabilization Force (SFOR) in Bosnia, why does the United States keep rotating troops into Macedonia? Speaking about Bosnia to Jim Hoagland of the Washington Post on March 13, 1997, Secretary of Defense Cohen ruled out “making a long-term commitment to a region which will take a great deal of your resources and drain them away from your primary mission, and it will not have congressional support.”³⁵ President Clinton, with a different perspective, is open to extending the U.S./NATO presence in Bosnia.

Oversight Options

The Congress, in its oversight role, may wish to focus on areas that increase the efficiency of current DoD approaches with a view toward stabilizing and reducing high OPTEMPO/PERSTEMPO and increasing training opportunities while deployed.

Validating employment concepts. There is general agreement among military leaders that the objectives of any military operation should be clear from the outset, that victory should be achieved quickly and with minimum risk to both U.S. forces and non-combatants.³⁶ The requirements for overwhelming force at the point of attack and total commitment to winning result from experiences now deeply ingrained in U.S. military thinking. The combination of today’s joint approach to operations

³⁵Hoagland, Jim. “Pour-Mouth Peacekeeping.” The Washington Post, March 13, 1997.

³⁶Critics of this view hold that in a world of ambiguous, deceptive, and shifting threats, this doctrine could result in underuse of armed force.

and continuing interservice rivalry tend to ensure that each service plays its part in operations. In the military's drive to assure victory, there may be areas in which unnecessary forces are included in operations because the original plan required them, or because certain types of units "always" deploy together, when the situation, unlike the plan, doesn't dictate the inclusion of those forces. For example, according to some Air Force officers, air-superiority F-15s were deployed to cover the planned invasion of Haiti. While fighter/interceptor escort for airborne invasions is generally a good idea, the nature of the situation, in this case, implied that they were unnecessary. Some scrutiny of the process of adapting existing deployment plans to developing situations may result in some savings. The Pentagon, burned by an alleged failure to provide adequate support to combat forces in Somalia, may be overloading commanders with forces for any possibility. While the consequences of insufficient or inappropriate force deployed to a potentially hostile situation are severe, the need to "fight smart" and balance the long-term effectiveness of the force with its short term requirements should not be ignored.

"Cop on the Beat" force employment option. The "Cop on the Beat" is a force employment option that relies on an unpredictable schedule of "shows of force" to deter aggression and to monitor compliance with U.N. resolutions that is more cost effective and possibly just as effective as full time monitoring. The RAND Corporation and others suggested this approach to operations in Northern and Southern Iraq as well as for enforcing the No-Fly Zone over Bosnia. Under this approach, U.S. fighters would patrol in smaller numbers and at less frequent intervals counting on the deterrent effect of their presence coupled with the surprise aspect of their appearance. In this way, fewer fighters are needed to cover more territory. Surveillance aircraft such as AWACS can be used in the same way with a higher level of risk that something "unnoticed" may happen. The level of effort required of this type of operation is significantly smaller. Further, for extended contingencies where "monitoring" is the main purpose, this option may be a viable alternative to large-scale operations.

Increasing resources for training while deployed. The 1st Armored Division that deployed to Bosnia returned with a high level of individual readiness in part because they conducted some gunnery training in nearby Hungary. This practice, of developing training opportunities for deployed forces, is one option for maintaining combat proficiency. The positive aspects of this approach are maintaining proficiency with weapons, increasing morale as troops keep their hard earned skills, demonstrating readiness for combat in the region, and maintaining preparedness to redeploy if needed to an MRC. The negatives include increased costs of deployments due to the requirements to transport training ammunition, simulators, and other resources to the deployed location, possible friction in host-country relations, some increased PERSTEMPO as instructors may need to deploy, added strain on the logistics system to support the training, and a possible increase in overall deployed strength to allow a portion of the force to focus on training and not on the mission at hand. The Navy already makes good use of overseas facilities to train because they have the specific advantage of carrying their ordnance with them. One approach might be to encourage the Kuwaitis to build training ranges, for both air and ground forces, in their western desert. In this location, air forces could conduct realistic training within reach of their assigned "combat" targets. Another option would be to deploy training or combat simulators to long duration contingencies.

Reviewing and setting minimum training time guidelines. Efforts to “fence off” the training time needed to acquire and maintain required skills for individuals and units is a proven approach that has realized improvements for low density/high demand units in all services. As stated, the Global Military Force Policy aims at this approach and could be expanded to include many more units. Fencing this time for those units above a certain level of OPTEMPO ensures that a high-value asset remains a viable long-term contributor to military success.

Congressional action to protect the training base of U.S. forces. In a high OPTEMPO/PERSTEMPO environment where budget restraints, personnel turbulence, and equipment replacement are component problems, protecting the training base of units that are the building block of defense capability is a high priority. Regardless of the strategy, units will be assigned a primary mission. Gaining and maintaining the ability to carry out the assigned mission is the unit commander’s primary task. Currently, commanders are finding it increasingly difficult to do this as time and money for training are going for other things. In this context, Congress may consider action to protect the training base of U.S. forces. One option might be congressional action that emphasizes the primacy of unit primary-mission training over other peacetime activities. This would establish a priority for DoD actions that would ensure the long-term effectiveness and short-term capability of U.S. forces. As with the GMFP, any incursion into a units fenced and dedicated training time would require action at the highest levels. Currently, the Secretary of Defense signs all operational deployment orders for units. Requiring a “determination of training status” prior to deployment and requiring a waiver to violate primary-mission-training time at the Secretary level or higher, would ensure a conscious and ongoing effort to manage unit training time effectively. Using this minimum time as a baseline, which the military already identifies, commanders can plan effective training schedules. The downside is that it may be perceived in the Pentagon as overly regulatory, bureaucratic, and time-consuming in time of crisis.

Prioritization of exercise requirements. The mission of the regional Commanders-In-Chief (CINC) is day-to-day and hour-to-hour readiness to go to war. This contrasts with the services mission which is to organize, train, and equip. The former, by necessity, takes a short-term view and the latter, by necessity, takes a long-term view. One of the greatest contributors to high levels of activity, CINC-sponsored exercises around the globe involve units in realistic regional exercises with the other services and with myriad allies. While CINC are revalidating and condensing their exercise programs and, in some cases, are increasing the interval between recurring exercises, it is difficult for DoD to prioritize which CINC receives exercise support from CONUS-based forces. These decisions are up to the Secretary of Defense, with the advice of the Chairman of the Joint Chiefs. To reduce the number of exercises and hence the demands on U.S. forces, some prioritization among the CINCs may be necessary. In their testimony before the Congress, regional Commanders-in-Chief might be asked to address how they prioritize their activities while balancing risk, war plans, allied sensitivities, training requirements, and other factors to achieve adequate preparedness. Without prioritization, the principle envisioned in the Global Military Force Policy of fencing unit training time may be unworkable. Such prioritization may also enhance planning and enable earlier determinations of both exercise schedules and unit assignments thereby adding some degree of predictability back into the lives of service members.

Reducing the number and duration of required inspections. Operations, exercises, and inspections are areas that require significant preparation and commitment of resources. Inspections that are too frequent interrupt the development of the capability that they were designed to evaluate. Inspections that are too infrequent do not provide commanders with a reliable accounting of a command. High OPTEMPO exacerbates this dilemma. Under the strain of recent years, the services are re-examining the inspection cycle. Some options are to send evaluators to watch units prepare for, deploy to, and operate in, real-world contingencies thereby “killing two-birds” in the process. The negative to this approach is that “inspectors” add stress to an already stressful situation. Also, many service members have a negative perception of inspectors that paints them as irrelevant to “real military missions.” Another option, is to give units credit in the inspection cycle for conducting deployments. This view holds that if a unit can execute in the real-world, why does it have to prove it again in a made-up scenario? Those opposed to this view maintain that there is more on which an inspection is based than just a successful outcome. Either way, selectively reducing the frequency of inspections is an option to make more time available to the units for training.

Providing “down time” to units following deployments. The Air Force and the Army, which were often forces in garrison for the Cold War, are now more expeditionary and therefore, are beginning to examine naval practices. A significant aspect of post-deployment life in the Navy is time off with one’s family. This action requires a unit to reduce its readiness to the lowest levels, in some cases to “not ready.” However, Navy experience shows that the reportedly rejuvenated service members quickly regain their readiness and then maintain it longer than do units without such a recovery period. The danger in this approach is that upon return to work, commanders must remain committed to keeping working hours stable by avoiding the “military imperative” to regain combat-ready status as soon as possible. Instead, a steady pace to return to combat-ready status when needed will avoid deleterious affects of continuous overwork.

For Additional Reading

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