

**Inefficient by Design:
A Model for Leader Assessment of Organizational
Efficiency**

A Monograph

by

Major Christopher L. Larrabee

United States Army



**School of Advanced Military Studies
United States Army Command and General Staff College
Fort Leavenworth, Kansas**

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Major Christopher L. Larrabee

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Approved by:

Thomas A. Bruscino, Ph.D.

Monograph Director

Michael J. Swanson, COL, AV

Monograph Reader

Stefan J. Banach, COL, IN

Director,
School of Advanced
Military Studies

Robert F. Baumann, Ph.D.

Director,
Graduate Degree
Programs

Abstract

INEFICIENT BY DESIGN: A MODEL FOR LEADER ASSESSMENT OF ORGANIZATIONAL EFFICIENCY by Major Christopher L. Larrabee, United States Army, 62 pages.

As the ability of organizations to process information accelerates, and technological advances facilitate ever more rapid decision-making, organizational leaders sacrifice the time once available for careful reflection on the nature of problems and potential resolutions. The phenomenon of globalization—the virtual, constant and borderless interaction between individuals, ideas, institutions and governments—is reinforcing the notion that such a sacrifice of time is both necessary and unavoidable. But the very notion that the critical emphasis should be placed on the *time* available to reflect on an issue assumes (1) that the clock starts running at the point the issue is identified, and (2) that time itself is the critical factor. These assumptions limit a leader's ability to focus his organization to accomplish its purpose. Leaders universally prize innovation because they view it as essential to achieving the best possible result most quickly. The quest for organizational efficiency invariably follows the predictable path of shortening the time required to produce creative solutions, and is heavily oriented on process.

This monograph seeks to provide the organizational leader with an alternative method of considering the efficiency of his organization. While theories related to leadership and organizational management abound, and some are quite useful, their focus tends to be narrow and often limited to a specific organizational type or circumstance. The model developed avoids dependence on theory. Inspiration instead stemmed from author's 25 years of experience in, interaction with, and empirical observation of military and nonmilitary organizations, to include a decade on the Army Staff in the National Guard Bureau. The model uses historical examples and the author's experiences to explain concepts, and explains a way of viewing efficiency broadly applicable to all types and levels of organizations derived from an American cultural context.

Critical aspects of the model are the distinction between the efficiency of organizational purpose and the efficiency of organizational action in achieving purpose; the episodic nature of organizational action as defined by the occurrence of conditions compelling response; and the impact of leader relationships on organizational efficiency. Active management of organizational design reveals valuable insights, particularly concerning inter-organizational cooperation (the elusive 'interagency process') and in organizational innovation. Breaking the 'time barrier' mentioned above, it is apparent that instead of applying a *process* of innovation at the point of need, organizational efficiency demands that the *conditions* for innovation be set well before problem recognition occurs.

What makes the model simple is that it requires no external agent or theory to implement. The sole requirement is for the organizational leader to pause and carefully reflect on what his purpose is—and to design, or redesign, elements of his organization accordingly. While intended to be of broad utility, the monograph seeks especially to influence thinking about organizational design in the Department of Defense and the National Guard Bureau, the organizations with which the author is most directly connected.

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Introduction

There is no need to sally forth, for it remains true that those things which make us human are, curiously enough, always close at hand. Resolve then, that on this very ground, with small flags waving and tiny blasts on tiny trumpets, we shall meet the enemy, and not only may he be ours, he may be us.¹

—Walt Kelly, *The Pogo Papers*

As a young State Department intern in 1986, two incidents occurred which prompted my interest in how and why organizations function.² The incidents were minor, but have grown in personal significance on reflection in the years since. The first was the terrible nuclear accident at Chernobyl in the Soviet Union. I worked in the Office of Soviet and East European Analysis in the Bureau of Intelligence and Research. The entire office seemed convinced that Soviet silence following the accident stemmed from very deliberate, and possibly sinister motives; this was especially so with some of the older career civil service analysts, one of whom had been on the job since the early 1950s when Stalin still sat in the Kremlin. My initial gut reaction, however, was that the Soviets were quiet because *they did not know what to do*—they were embarrassed and had no plan of action. Most of the analysts spoke Russian and was fluent in Soviet political history. I spoke no Russian, but had studied Russian intellectual and political history in college—to me, Soviet inaction was consistent with Russian culture and history, along the lines of Stalin’s stupor following Germany’s launch of Operation Barbarossa. In the end, my gut assessment was correct.

¹ Walt Kelly, *The Pogo Papers* (New York: Simon and Schuster, 1952). Readers may be more familiar with Pogo’s later summarization of, “We have met the enemy, and he is us,” which appeared in print for a 1970 Earth Day commemoration.

² The author interned in Office of Soviet and East European Analysis, Bureau of Intelligence and Research (INR/SEE) during March through May of 1986. At this time, the office was focused primarily on Soviet nuclear testing and disarmament negotiation. By virtue of the author’s ‘extensive’ military background in chemical, biological and nuclear (NBC) weapons (he was classified as a 54B, NBC Specialist), he was ‘put in charge’ of the office’s chemical and biological weapons files.

The second incident involved the surprise movement of Soviet bridging units out of Afghanistan. These units had been in Afghanistan since the Soviet invasion in 1979, so of course to move them at that time *meant* something. Remember, these were the days of the ‘Evil Empire.’ For the better part of two days, the prevailing assessment of the intelligence community at my level (Top Secret, action officer) was that the movement indicated a possible foray into the Fulda Gap or designs on Pakistan. My initial gut reaction is recognizable to anyone who has ever served in the military of any nation because it is grounded in basic military economics. Like any good commander would do, the Soviets took all their assigned equipment with them when they invaded; when it became apparent that the equipment would not be needed, and that it actually was more burdensome to keep it on hand, they sent it home. At this point I was a Specialist 4th Class with all of three years service, but this represented significant military experience relative to coworkers who possessed none. Again, my initial assessment ultimately proved correct.

At the time I thought, “What do I know?—I’m just an intern.” Surely those around me with authority and professional credentials knew better. Or did they? I have since concluded that finding that person who knows better is a very difficult thing for an organization to do. Habit and perception get in the way. As Walt Kelly alludes, ‘those things which make us human’ define the character of every organization, but also block our best efforts. Just how these things combine to establish the efficiency of an organization is the subject of this monograph.

Students of organizational management devote significant energy investigating the inefficiency of actions and behavior. In a military organization, the necessity for tactical commanders to be competent in their duties, to know exact unit locations and for ammunition to be delivered in a timely manner is obvious; failures in these areas directly contribute to inefficiency on the battlefield and are clearly seen as such. A commander who is overly abrasive or stubborn—someone lacking ‘people skills’—may repress or ignore the considered recommendations of his staff, resulting in the adoption of a flawed course of action. Inefficiencies of action and behavior generally are detected easily, although perhaps not as easily

addressed. More difficult to see, and what sometimes is never seen, are the inefficiencies of organization that underlay the actions themselves.

The relationship of the leader to the organization he leads is of central importance. Any external threat has the potential to camouflage from view an internal danger. The real danger is insidious in nature, and occurs when the character of an action is not clearly deviant or objectionable. When a leader achieves an objective that does not stray too far from his self declared and externally accepted intent, there is little impetus to explore how a better end state might otherwise have been obtained. Entirely inappropriate methods thus may achieve reasonable results while eroding the capability to sustain those results. What the ‘tiny flags and tiny trumpets’ really portend is the even greater danger lurking beyond the horizon for which human habit discourages adequate anticipation and preparation.

This monograph will examine organizational efficiency in terms of organizational relationships—as opposed to an organization’s ability to achieve results—and through an empirically developed logical model will address the leader’s roles in properly identifying organizational purpose and in shaping his organization to achieve that purpose. When a leader is blind to how the very design of his organization is defeating his purpose, he will fail—and will do so without ever knowing the reason why. The underlying premise is that by making the development of organizational internal structure more efficient, the quality of planning and resourcing, particularly military planning and resourcing at the national and strategic level, will improve.

Some Varied Thoughts on Organizational Management

The overall academic and professional occupation with the issue of efficiency is quite robust and interdisciplinary in nature. Scant attention, however, has been accorded to organizational efficiency beyond the study of individual leader psychology and the control of

results-oriented actions. While generally of use in individual application, existing discourse lacks the universal utility this monograph seeks to establish.

Alfred Chandler's work on the rise of big business in America and the origins of the Scientific Management movement of the early 20th century was pioneering and remains essential to this aspect of study. While overall profitability was the ultimate motivation, Chandler noted that the managers of very large businesses often encountered very complex obstacles to growth, especially variables of time, future requirements, and distribution of resources. Business managers focused on organizational designs empowered to circumvent such problems and achieve economies in production. These management concepts ultimately found their way into non-business fields and disciplines, to include the US War Department, under such labels as Scientific Management and Progressivism. Secretary of War Elihu Root, a corporate lawyer in civilian life, was influenced by the example of big business management when he sought to establish an Army General Staff and implement other reforms following the Spanish American War of 1898. But Chandler talks about the method of management and the efficiency of managerial control, and not the general conditions within any organization that the form of management must address.³

The bulk of current business management discourse concentrates on the efficiency of the action itself. Not surprisingly, the typical author is a business manager, and—not terribly surprising—he is apt to focus on the methods by which a business can remain profitable. Although great efforts have been made to apply the best practices of business management to non-business sectors, to include—and perhaps especially—the military, few enjoy lasting and widespread success. Peter Drucker is representative of this modern discussion, and focuses

³ Alfred D. Chandler, *The Railroads: The Nation's First Big Business* (New York: Harcourt, Brace and World, Inc., 1965). Chapter 1 of James E. Hewes' *From Root to McNamara: Army Organization and Administration, 1900-1963* (Washington, DC: Center of Military History, 1975) examines the establishment of the US Army General Staff.

squarely on the ‘product, service or process’ of the business. Emphasis is on organizational output; efficiency is measured in terms of whether the potential profit of a given output is maximized. This concept of a results-based output also avoids direct consideration of the fundamental role a leader assumes in any organization, irrespective of purpose.⁴

When leadership’s role in an organization is explored, examinations typically focus on the intangible qualifications of the leader—such as are found in personality and temperament—and in the best practices of proven leaders (or at least of leaders of organizations whose success has been demonstrated through results). Ronald Heifetz characterizes the central role of the organizational leader as the source of authority that provides direction within an organization; indeed, the organization itself becomes a ‘complex system of authority’ designed to solve problems. While not without utility, Heifetz’s argument remains rooted in human relationships of power and interaction, and focuses on the complex nature of a given problem rather than the relationship of the organization to the problem. The tactics, techniques, and procedures of the individual leader are useful, but do not comprise the subject of this monograph.⁵

⁴ Peter F. Drucker, *Management Challenges for the 21st Century* (New York: HarperCollins Publishers, Inc., 1999).

⁵ Ronald A. Heifetz, *Leadership Without Easy Answers* (Cambridge, MA: The Belknap Press of Harvard University Press, 1994). Edgar Schein, considered the founding figure of the field in organizational psychology, asserts that, “One of the most consistent findings by historians, sociologists, and empirically oriented social psychologists is that what leadership should be depends on the particular situation, the task to be performed, and the characteristics of the leader’s subordinates”, a dynamic that necessarily results in a plethora of theories about organizational leadership. “One reason so many different theories of leadership exist,” Schein explains,

is that different researchers focus on different elements. At one level all of these theories are correct, because they all identify one central component of the complex human relationship that is leadership, analyze that component in detail, and ignore others. At another level, all of these theories lack a concern with organizational dynamics, particularly the fact that organizations have different needs and problems at different stages in their evolution.

Edgar H. Schein, “Leadership and Organizational Culture” Francis Hesselbein, Marshall Goldsmith and Richard Beckhard, eds. *The Leader of the Future: New Visions, Strategies, and Practices for the Next Era* (San Francisco: Jossey-Bass Publishers, 1996) 60. In any case, this monograph’s argument shows that the leader’s relationship to purpose and subordinates is a necessary condition of every organization; the intent is not to develop a theory of how any one or more organizational components interact, but only to build a model that shows where such interactions will occur.

Arden Bucholz is one of the pioneering few who examine the military purely from an organizational perspective. Using the German General Staff as the subject of his examination, Bucholz approaches the function of war planning within a military organization from three perspectives. Bucholz notes the effects on the military organization of its transition into modernity, of its cultural and historical world view, and of the role of new technologies as agents of change. But Bucholz focuses on how these organizational perspectives shaped the action of war planning, and stops short of the more general level of inquiry proposed in this monograph.⁶

A promising area of comparison lies with the discipline of engineering design, which shares several key attributes with the military. The first is that both fields are future oriented. Actions taken in the present are intended to influence later outcomes, although the degree of influence often can only be guessed. The second is that each struggles with an internal professional debate over whether the discipline is primarily one based on science or one based on art, or some combination of both. Critics consider Eugene Ferguson's *Engineering and the Mind's Eye* the seminal work on the historical development of American engineering design culture. The efficiency of engineering design is related to how knowledge is used to influence design, in terms of how knowledge is identified as being important and in its application. A later discussion of the relationship of knowledge to organizational efficiency will revisit this theme.

While not detracting from any ultimate usefulness afforded by the preceding perspectives of organizational efficiency, clearly there remains ample room for further consideration. This monograph develops a model for organizational analysis that hopefully will facilitate deeper inquiry concerning those aspects of organizational design that largely fall under the organizational leader's purview to manipulate and control. Historical examples and personal experience illustrate key points where appropriate. Most of these examples are military in nature,

⁶ Arden Bucholz, *Moltke, Schlieffen, and Prussian War Planning* (Providence, RI: Berg Publishers, Inc., 1991).

and all stem from an American social perspective. No attempt is made to explain or compare the model from a given cultural or national perspective; hopefully the model will be explained in sufficiently simple terms that the reader, based on his own experience, will be able to assess its potential utility and application.

Words have Meaning: Essential Definitions

Before proceeding further, it is necessary to define key terms and concepts used in this monograph. The following terms frame the model of organizational efficiency presented by this paper: *purpose*, *organization*, *efficiency*, and *knowledge*. A sub-categorization that defines *strategic purpose* also is necessary. The following definitions largely evolved from the author's reflection on more than 25 years of organizational experience in positions ranging from graduate teaching assistant to State Department intern to various assignments in the National Guard Bureau (NGB) as part of the Army Staff.⁷ Academia, government, the National Guard, and the regular military establishment all employ unique language and approaches to problem solving, but experience in each has reinforced the notion of a common framework or model underlying these differences in organizational culture and expression. The logic of the definitions advanced to explain this model hopefully will be evident to the reader, and require no further argument.

⁷Several jobs and assignments shaped the author's current perceptions of organizational design and efficiency. These include more than a decade in various positions on the Army Staff in the NGB, which required regular contact with the Air Staff, the Joint Staff, the Office of the Secretary of Defense, and the staffs of the Geographic Combatant Commanders and major commands of the Army and Air Force, especially Army Forces Command (FORSCOM) and Air Mobility Command (AMC). Other key jobs were as project officer for the transition of a cannon artillery battalion into a Multiple Launch Rocket System (MLRS) battalion, military training in the UK, assignment as a foreign liaison officer and joint experience as an exchange officer in an air operations center. Significant civilian experience includes two years as a teaching assistant and foreign affairs journal editor at Georgetown University; retail sales and customer relations experience; overseas undergraduate study; and internships with the State Department and the Congress. The unifying aspect of these cumulative experiences, one that upon reflection provided the impetus for this monograph, was either the need to adapt organizational response to novel, unanticipated problems.

Organizational Purpose Defined

The *raison d'être* of any organization is the task which predicates the organization's very existence. Humans generally are very economy minded:⁸ They do not set about to do nothing, nor do they tend to organize themselves and their time and other resources to accomplish nothing. Humans invest resources to accomplish *something*. This is not to say that expressions of purpose may be wrongfully arrived at, outlived, or under utilized—all of which will be addressed in later discussion—but only that a purpose is necessary to anchor an organization in time and space and to provide it direction. The minimum qualities of purpose necessary to provide adequate direction convey a sense of what it is that the organization exists to accomplish and of why the accomplishment is needed. Purpose is the term used by this monograph, but leaders may employ many other words to describe their organizations with the same intent in mind. Such words may include mission, mission statement, vision, statement of purpose, goal, objective, charter, roles, functions, and a host of other terms. These words become code words when analyzing organizations to determine how they have stated their purpose.

Strategic purpose exists as a special instance of organizational purpose. For the purposes of this monograph, strategic purpose exists at levels of organizational strata where purpose is coupled with the responsibility to allocate resources and conduct planning that affects the organization as a whole as well as points external to the organization. For instance, each National Guard state headquarters is responsible for establishing the strategic purpose—to include resourcing, planning and operational employment—of a given state's National Guard while under the governor's authority. At the same time, each state headquarters nests underneath and is subordinate to the National Guard Bureau (NGB) for the purposes of allocating federal resources; the NGB is responsible for establishing a strategic purpose that encompasses the National Guard

⁸ How humans ultimately define economy and determine legitimate objectives is influenced by perception and culture. This monograph seeks only to explain organizational structure from a general American cultural perspective.

in its entirety while remaining nested under the strategic purposes of the Departments of the Army and Air Force. Higher level purposes inform but at various points they all are informed by higher level purposes. When the expression of purpose exists as an organization's top tier of guidance, it assumes the nature of a strategic organizational purpose.⁹

The nested nature of organizational structures, explained further below, leads to the nesting of organizational purpose statements. When these purposes are synchronized vertically throughout all organizational strata, the overall purpose tends to be unified. Any instance where divergent purposes exist typically defines a point of friction (and probable inefficiency).

Organization Defined

When humans perceive an action as necessary, they may organize themselves for the purpose of accomplishing the action. The relationships established by its people component to accomplish a given purpose define the character of an organization. *Organization equals people plus purpose*. This definition is broad in context because it identifies the fundamental nature underlying any organization. As such relationships develop, the organization may be further identified by its type of structure, such as an academic *institution*, federal *bureaucracy*, state *agency*, military *headquarters*, personal *staff*, or something else entirely. The key distinction is that such organizational sub-categorizations stem from the patterns of human relationship employed to achieve the organization's purpose. One also may intuit that such patterns logically should develop *after* organizational purpose has been identified.

Human relationships in organizations develop from a set of shared elements. This monograph levies the human elements (of any organization) into one of three categories: organizational leader, subordinate leader, and follower. The defining characteristics of the organizational leader are that he bears ultimate responsibility for achieving his organization's

⁹ The current official designation of the National Guard headquarters of a state, territory or the District of Columbia is Joint Force Headquarters-State; Michigan's, for example, is Joint Force

purpose, and he possesses decision making authority through which to realize this purpose. The subordinate leader exists chiefly as a function of organizational expansion in terms of size or specialization: in order to facilitate a wider span of control, the organizational leader will delegate decision making authority to a subordinate. The follower is a person who lacks the authority to make decisions for the organization at the level of organization considered. Every organization contains, at minimum, the roles of leader and follower. In a small organization, in something as simple as a child's lemonade stand, these roles may exist in a single individual. In a large organization, such as the US Department of Defense, the Secretary of Defense as organizational leader requires the Secretaries of the Army, Navy, and Air Force, the combatant commanders, and the Chairman of the Joint Chiefs of Staff to act as his subordinate leaders. In some organizations, the leader role may be a shared collective responsibility, as with a board of directors. The size or type of organization is irrelevant in this respect: all organizations incorporate leader and follower roles, and may possess subordinate leader roles as well.

The depiction of organizational structure in terms of leader, subordinate leader, and follower roles illustrates the tiered or nested nature of many organizations. It is possible that a single individual simultaneously will act as an organizational leader, a subordinate leader and a follower at different organizational and sub-organizational levels. In this way a captain fulfills the role of leader as the commander of his company; he is a subordinate leader to his battalion and possibly brigade commanders, and possesses specified decision making authority in this capacity; and he is a follower with respect to the division and corps commanders.

The grouping of functions in an organization also identifies tiered structure. Nested tactical, operational, and strategic levels are inherent in a military organization. In a civilian construction company, similar separations of function might be demarcated by the excavator operator, who only has to dig a ditch when and where ordered; by the foreman, who determines

when and by what means the ditch will be dug; and by the company engineer, who will determine not only where the ditch will be dug, but whether or not a ditch is the best solution for the problem in question. The excavator operator exists at the equivalent of the tactical level of an organization, with efforts to improve efficiency related to improving the morale and proficiency of the digger. At the operational level, efficiency is measured in terms of selecting the correct means to dig the ditch—perhaps with a hydraulic cannon or excavator—but the end state nevertheless remains a ditch. Efficiency at the strategic level of organization concerns itself with appropriate identification of the end state—what other than a ditch may serve to satisfy the need at hand? Because higher levels of organization influence the resources and direction of subordinate levels, subordinate actions are likely to suffer from any inefficiency at higher levels.¹⁰

This nested character of organizational structures is important because it establishes the hierarchical nature of organizational purposes. Purpose at any given organizational level provides the point of orientation for all subordinate purposes. In this manner the President is responsible for the national security of the United States in a broad sense, one that includes all aspects of the welfare of American society, to include its political freedom and economic well being. The Secretary of Defense is responsible for national security in a narrower sense, specifically the military security of the United States. All subordinate organizational levels of the Defense Department are nested underneath the Secretary of Defense; their statements of purpose should be similarly nested. This example is overly general for the purposes of illustration only; reality is more complex than theory. Organizationally, the Secretary of Defense, by virtue of his responsibility and authority, charts the course for his department and exists at a strategic level of

¹⁰ Ronald Heifetz employs similar concepts, but his objective is different. His definition of an organization is as a complex system of authority in which ‘authority’ is the organizational leader. Authority provides direction in response to and contingent on distress, according to Heifetz. In this monograph, the organizational leader reinforces organizational purpose independent of organizational stressors. Heifetz, *Leadership Without Easy Answers*, 69-70.

organization. Those subordinate leaders empowered to make decisions for the Secretary define the practical limits of strategic organization. In like fashion, the Secretary of Defense is a subordinate leader to the President, with delegated authority; he thus shares the responsibility for articulating the President's strategic purpose with his fellow members of the National Security Council, the Chairman of the Joint Chiefs of Staff, and the President's cabinet.¹¹

Efficiency Defined

The earlier definition of purpose determined that the role of people within an organization is to accomplish the organization's purpose. People also are economy minded, and want to know how well they are achieving their purpose. The degree of 'well' determines efficiency. Organizational efficiency, then, is the *capacity* of an organization to produce necessary *results* with a minimum expenditure of energy, time, money, personnel, materiel, or other resources.¹² The two terms which give this definition its scope—*capacity* and *results*—illustrate the internal and external aspects of organizational efficiency. *Capacity* describes the inherent ability of an organization to plan and resource an action calculated to achieve necessary results consistent with organizational purpose. *Results* comprise the external objective on which organizational energy is focused; necessary results should be able to be associated with organizational purpose. For instance, the National Guard Bureau's mission statement includes the purpose to facilitate the provision of trained and ready units in reserve to the Army and Air Force; necessary results would include rapid mobilization of the National Guard during wartime.

¹¹ This depiction is simplified for the purposes of illustration. Congress plays an obvious and significant role as well, and prescribes some authorities under law.

¹² This definition was adapted from the Online Medical Dictionary (<http://cancerweb.ncl.ac.uk/cgi-bin/omd?efficiency,+organizational>). The original definition used 'desired results' where I have substituted 'necessary results.' In a state of perfect organizational efficiency, the desired and necessary results would be equal—the fact that the two often are in conflict suggests a source of inefficiency that is the subject of this monograph's inquiry.

Knowledge Defined

The intent here is not to discourse at length on epistemology itself. Knowledge is defined in empirical terms, based only on observation of how it is utilized to assist in achieving organizational purpose, and what characteristics define its usefulness. Knowledge acquired by an individual in the form of personal experience, and that he subsequently uses to define his actions in achieving his purpose, is valuable. Experience thus encompasses the range of activities from concrete action to abstract thought. Such experience holds potentially greater value if it can be replicated in other members of an organization. Propagation of knowledge in an organization is important, and is accomplished in two ways: either according to other individuals the same primary experience; or by teaching individuals the essential elements of the primary experience. Military training is grounded firmly in the necessity of teaching the essential elements of combat experience to individual soldiers so that the unit's purpose can be achieved. Knowledge allows perception of the environment and conditions human thinking about things. Knowledge, whether embodied in primary experience or gained as secondary experience through teaching, is instrumental in shaping the actions necessary to achieve organizational purpose.¹³

Since experience is acquired through the execution of actions to achieve objectives associated with organizational purpose, it then follows that any or all such experience is of value

¹³ John Dewey's treatment of experience is useful, probably because he approached it from a perspective of teaching and learning. His approach accommodates the fact that the nature of learning requisite to acquire experience necessary for tactical and operational skills can be fundamentally different from that required at strategic level, or at the level of an organization where strategic direction, purpose, mission, and resources are articulated and controlled. Not all activity results in the creation of experience. Dewey argues that when a person commits an action then discerns the impact of his action--that is, he receives feedback--he is gaining experience. "When an activity is continued *into* the undergoing of consequences, when the change made by action is reflected back into a change made in us, the mere flux is loaded with significance. We learn something." Experience involves passive association with the consequences of action and experiment, and by itself is not cognitive in nature. Cognition occurs when the person assigns value to an experience relative to its perceived relationship to other experiences; multiple experiences in ordered combination produce a cumulative value of experience. This conception of the ability to perceive value in experience is what is of importance to this monograph's argument. John Dewey, *Democracy and Education: An Introduction to the Philosophy of Education* (1916; repr., New York: Free Press, 1997), 139-40.

to a given organization needing to duplicate the same or similar actions. The more broadly defined that an organizational purpose is, the less useful it is as a tool to identify requisite experience in minute detail; such a purpose is more suggestive than prescriptive of method, and thus more durable and simple in nature. It is more useful to categorize experiential knowledge as it relates to a specific organizational actions and objectives: (1) experience can be unrelated, as with a state National Guard headquarters' federal mobilization experience relative to accomplishing civil support activities; (2) experience can be indirectly related, as with the same headquarters' wildfire fighting experience relative to responding for flood relief operations; or (3) experience can be directly related, as with the headquarters' prior experience with the Emergency Mutual Assistance Compact (EMAC) support relative to current interstate support requests from neighboring governors.¹⁴ Organizations tend to value directly related experience over indirectly related experience, which they in turn value over unrelated experience. At all time the true valuation of experience is relative to the contemplated action. Overall efficiency is subject to leader perceptions about necessary knowledge and the quality of experience.

As already noted, when people with the desired personal experience are not available, the organization's only recourse is to recreate artificially the experience through teaching. Teaching is used in a broad sense, and is meant only to describe the means by which the benefit of primary experience is transmitted via secondary methods. Indeed, subtle distinctions of terminology, of differentiating between training and education, and between instructing and teaching, only matter when there is disagreement over what is being learned. In a perfect model of knowledge propagation, requisite experience is properly identified and prioritized, and the learning method is

¹⁴ The Emergency Management Assistance Compact, or EMAC, is a congressionally ratified organization that facilitates mutual aid and support during emergencies at the state level. The Southern Governors Association established the Southern Regional Emergency Management Assistance Compact in the aftermath of Hurricane Andrew in 1992, when it became clear that federal aid by itself would not be sufficient to address the needs of a state in a given emergency. The governors opened membership to all states and territories in 1995, and renamed the agreement EMAC. Congress ratified the EMAC in 1996,

selected as a function of the nature and complexity of the desired knowledge and ability of students to learn. Reality will introduce a third practical consideration as well, and that is the availability of resources necessary for learning to occur. As will be discussed later, its treatment of knowledge is a powerful determinant of an organization's overall efficiency in responding to a given problem.

The Elements of Efficiency in Organizational Design

The foregoing definitions are central to understanding how the following seven elements combine to create a new leadership perspective of organizational design:

1. Organizational efficiency is defined by, and is a function of, organizational purpose.
2. The timeliness and appropriateness of the actions an organization takes to achieve necessary results determine the efficiency of organizational response.
3. An inefficient organization may achieve efficiency in results; an efficient organization may achieve inefficiency in results.
4. An event or condition that prompts a response from an organization acts as a stressor on the organizational system; optimally, these stressor events are encompassed within the purpose for which the organization exists, and which necessarily prompt the organization to act.
5. The frequency of occurrence of stressor events correlates to the efficiency of organizational actions taken to respond to and anticipate a given event.
6. Knowledge enables the human element of an organization to formulate actions; the identification of knowledge that is necessary to the accomplishment of organizational purpose, and the methods employed to share and propagate knowledge are controllable variables.

the first such instance since it ratified the Civil Defense Compact of 1950. For more information about EMAC, see < <http://www.emacweb.org> >.

7. The organizational leader and subordinate leader(s) collectively are responsible to articulate the organization's purpose; when they do not share a common understanding of the purpose, then the possibility for multiple conflicting or divergent interpretations of purpose exist.

The sequence of discussion of the design elements hopefully reinforces a leader's ability to assess his organization. The leader's comprehension of organizational purpose is paramount, so purpose is the departure point for inquiry in the 1st design element. The 2nd through 5th elements provide alternate lenses through which to view purpose. Purpose is considered from the perspective of organizational action (2nd and 3rd elements) and conditions necessitating organizational action (4th and 5th elements). The 6th element discusses knowledge as the critical factor linking the organization to the accomplishment of purpose. The 7th element addresses how the leader amplifies his custodianship of purpose in large organizations.

1st Element: The Primary Role of Organizational Purpose

Organizational efficiency is defined by, and is a function of, organizational purpose.

This definition conceptually is very simple, and establishes the framework in which an organization does or does not achieve necessary results consistent with its stated purpose. The measurement of efficiency answers the question, 'How well was the purpose achieved?' The implicit assumptions are that (1) the organization has properly identified its purpose, and (2) that the measurement of efficiency truly answers the question, 'How well was the purpose achieved?' (and not merely 'Was the purpose achieved?'). When one or both of these assumptions are false, the organization is inefficient. In determining how well organizational purpose has been achieved, knowing generally why a purpose exists helps to impart degrees of meaning to 'well.' An effective articulation of purpose, then, is simple—for it must be communicated and correctly comprehended—and expresses the *what* and *why* that define an organization's existence.¹⁵

¹⁵ Some observers of organizational leadership view the effects of globalization—the increasingly murky demarcations that have served to distinguish between societies, economies, national identity, and

The United States Army's purpose statement, or at least as it is reflected in *Field Manual 1, The Army*, illustrates some common difficulties organizations share in developing useful purpose statements. The June 2005 edition of *FM 1* separates purpose into two parts, with the Army Vision answering the why and the Army Mission addressing the what. The Secretary of the Army's vision for 'relevant and ready land power in service to the nation' immediately becomes problematic:

The **Nation** has **entrusted** the Army with preserving its **peace** and **freedom**, defending its **democracy**, and providing **opportunities** for its Soldiers to **serve** the country and personally develop their skills and citizenship. Consequently, we are and will continuously strive to remain among the most respected institutions in the United States. To fulfill our solemn obligation to the Nation, we must remain the preeminent land power on earth—the **ultimate instrument of national resolve**; strategically dominant on the ground where **our Soldiers' engagements are decisive** [emphasis in original].¹⁶

This statement stresses the individual responsibility of the Army, rather than the shared responsibility of all the military services, to provide for the military security of the United States. It also emphasizes individual soldiers' opportunities to become better citizens; establishes a mandate for the Army to remain without a peer competitor in terms of land power; and prioritizes the need to remain a respected institution. In short, the Secretary's vision has too many points of focus, none of which derive from statute or formal tasking.

organizations—are generally rendering organizational purposes more complex and more difficult to identify. Cognition of organizational purpose, nevertheless, remains critical in determining organizational action:

The most important question in any organization has to be, "What is the business of our business?" The answer to this question determines what the organization should do—and what it shouldn't do. In swiftly changing, borderless economies, the question must be revisited often because the answer can change swiftly. Determining the business of the business is the first step in setting priorities. This is a major leadership responsibility because, without priorities, efforts are splintered and little is achieved.

Judith M. Bardwick, "Peacetime Management and Wartime Leadership," in *The Leader of the Future*, ed. Frances Hesselbein, Marshall Goldsmith and Richard Beckhard (San Francisco, CA: Jossey-Bass Publishers, 1996), 134.

¹⁶ Department of the Army, *Field Manual No. 1: The Army* (Washington, DC, 2005), pt. 2-23.

The people who drafted *FM 1* must have realized the shortcomings of the vision statement because they inserted the actual text from the United States Code that explains the statutory mission of the Army:

It is the intent of Congress to provide an Army that is capable, in conjunction with the other armed forces, of—

(1) preserving the peace and security, and providing for the defense, of the United States, the Territories, Commonwealths, and possessions, and any areas occupied by the United States;

(2) supporting the national policies;

(3) implementing the national objectives; and

(4) overcoming any nations responsible for aggressive acts that imperil the peace and security of the United States.¹⁷

With a clear, unambiguous declaration in hand of what Congress requires of the Army, *FM 1*'s writers crafted a more suitable Army mission statement:

The Army exists to serve the American people, protect enduring national interests, and fulfill the Nation's military responsibilities. Specifically, the Army mission is to provide to combatant commanders the forces and capabilities necessary to execute the National Security, National Defense, and National Military Strategies. Army forces provide the capability—by threat, force, or occupation—to promptly gain, sustain, and exploit comprehensive control over land, resources, and people. This landpower capability compliments the other Services' capabilities. Furthermore, the Army is charged to provide logistic and other executive agent functions to enable the other Services to accomplish their missions. The Army is organized to accomplish this mission.¹⁸

¹⁷ Ibid., pt. 2-24. This is an accurate citation of the law.

¹⁸ Ibid., pt. 2-26. As poor as the Army's statement of purpose is in the 2005 version of *FM 1*, it is a marked improvement over the previous 2001 version, which is buried in the manual's third chapter, which explicitly defines the Army Purpose as:

The Army's nonnegotiable contract with the American people is to fight and win our Nation's wars. Our unique contribution to national security is prompt, sustained land dominance across the range of military operations and spectrum of conflict. The Army provides the land force dominance essential to shaping the international security environment.

The Army's strategic responsiveness, overseas stationing, force projection capability, and unique role as America's decisive force are powerful deterrents to would-be challengers. The Army achieves its deterrent effect through the demonstrated capabilities that make it the world's premier land force.

Should deterrence fail, the Army provides the ability to be dominant on land in war and military operations other than war. The Army's goal will be to achieve sustained land dominance, whether in closing with and destroying an enemy or keeping the peace.

It is to the *FM 1*'s drafters' credit that they knew where to look for guidance, given the inadequacy of the purpose statement with which they started. Presumably the drafters included the best available example of the leader's comments on the theme of organizational purpose. There are additional troubling aspects, however. The Secretary's comments clearly diverge from Congress's intent, and their inclusion makes it a more difficult task to communicate the Army's purpose simply, consistently, and accurately. The placement of the purpose statement within the manual—in the second chapter instead of the first—also adds confusion. Primacy of place in chapter one belongs to describing more or less how the Army fights, in terms of history, training, and leadership—the reader learns what the Army does before he learns why the Army exists. The format of *FM 1* suggests the notion that, 'We intuitively know what we're supposed to do, so it doesn't really make any difference how or when or if we state for the record what we're supposed to do.' This is an extreme representation made for the purposes of argument, but the point is that an organizational leader that believes—or *states*—his mission to be one thing, whereas in reality it is something else, often something clearly dictated by a higher level organizational leader, has great potential to introduce inefficiency into his organization. An example is a focus of purpose that seeks to make the Army one of the most respected institutions in the United States at the expense of explicit Congressionally mandated responsibilities. Strategic purpose statements are *expected* to have organization-wide impact; the Army is organized under Congress's authority, and should expect such guidance. The potential for achieving organizational inefficiencies due to

Its circular logic aside (i.e., the Army's ability to deter demonstrates the effectiveness of deterrence), this rendition of the Army's Purpose in reality lists a series of objectives, and is more of a checklist of methods. The 2001 version also cites the Preamble to the Constitution in the context of establishing overall US national security interests. While the documents organization is a bit awkward, the national security objectives listed after the preamble come much closer to articulating an institutional level statement of purpose appropriate for the Army, one that is both simple and durable:

To preserve the sovereignty of our Nation, with its values, institutions, and territory intact.

To protect U.S. citizens at home and abroad.

To provide for the common welfare and economic prosperity of our Nation and citizens.

misidentification of purpose is high, even if subordinate leaders and followers believe they have effected corrective action.

Another example of an organizational purpose statement purposefully published for the education of internal as well as external audiences is the *Annual Report of the Chief, National Guard Bureau*. Published annually and submitted to Congress as a requirement of the National Defense Act of 1908, the *Annual Reports* state the missions of the National Guard and of the National Guard Bureau with exceptional clarity and consistency, and in stark contrast to the previous example of *FM 1*. Since the late 1950s the report has maintained a near uniform format, with a brief ‘the Guard at a glance’ summary, followed by explanations of the dual state and federal missions of the National Guard, and then the organizational mission of the NGB itself. The Bureau apparently abandoned its original practice of citing statutory and regulatory authorities for its organization and mission, significantly weakening the ability to communicate an extremely complex organizational purpose.¹⁹

The NGB’s purpose is complex because it must nest underneath both the Departments of the Army and Air Force to accommodate the warfighting functions of the Army and Air National Guard; it also must nest underneath the needs of the governors, in order to support the National Guard in its state status. At the same time, the NGB serves as a joint bureau to facilitate training and resourcing of the National Guard, in which role the state Adjutants General nest underneath NGB. The NGB also serves as an operating agency responsible for acting as the conduit of communication between the Department of Defense and the Adjutants General in the states. Not only has the language of the reports been weakened, the organizational tempo of the NGB since the 9/11 attacks has delayed the publication of new reports such that a different document—the *National Guard Annual Posture Statement*—is being used for purposes for which it was not

Department of the Army, *Field Manual No. 1: The Army* (Washington, DC, 2001), 16, 21.

¹⁹ See Appendix 1 for a depiction of the evolution of the NGB’s statement of purpose.

intended. The *Posture Statement* is a much shorter document, and is devoted exclusively to the National Guard's current activities and of its future resource requirements; it makes absolutely no attempt to explain the mission or purpose of either the National Guard in general or the NGB in particular. The passage of the National Defense Act of 2008 adds more complexity to the organizational design and purpose of the NGB by designating the NGB a Joint Bureau of the Department of Defense, authorizing the rank of full general for the Chief, NGB, and requiring the Chief to report directly to the Secretary of Defense and the Chairman of the Joint Chiefs of Staff. In terms of rank and reporting chain, the law thus elevates the Chief to a status of a peer leader relative to the chiefs of staff of the Army and Air Force, while maintaining his historic role of force provider to both services (the model's seventh design element addresses the concept of peer leadership). At the same time that the NGB's organizational complexity and personnel strength is increasing, especially in the areas of temporary tours of duty of personnel from the states and civilian contractors, the availability of means to convey effectively organizational purpose are diminishing.

It should be obvious that when an organization focuses its actions on accomplishing a wrong or misidentified purpose, it is in danger of efficiently achieving undesired, and hence inefficient, results. Misidentification of purpose may occur for several reasons. An organization may simply cease to explain adequately its purpose, as described by the example of the *National Guard Posture Statement*, in which case sub organizational leaders may—or may not—attempt to 'fill in the blank' and craft purpose statements of their own. An organizational leader also may not fully understand his mandate, or may fail to communicate it effectively, as demonstrated by the example of *FM 1*. Subordinate leaders sometimes may recognize a poorly or misstated purpose, and may modify their actions without modifying the purpose or realizing how the misstated purpose is complicating their efforts. Sometimes changes in the underlying environment should prompt the modification of organizational purpose, but do not because the

significance of the changes is not recognized, or the change itself is occurring too slowly at a rate below the threshold of normal perception.

Conceptually, a stated purpose is either correct or incorrect; it provides either adequate and appropriate or inadequate and inappropriate focus for an organization's actions. Effective purpose statements generally seem to be those that are simply stated, and thus easy to communicate, understand and implement; they explain in general the necessary *what* and *why* of the purpose, and consistently reinforce the purpose; and they are durable enough to encompass all tasks and objectives that reasonably can be associated with the purpose. This critical association of tasks and objectives—of action—to purpose is the next area of inquiry.

2nd Element: The Measurement of Organizational Efficiency

Organizational efficiency is measured by the actions taken to achieve organizational purpose. The timeliness and appropriateness of the actions an organization takes to achieve necessary results determine the degree of efficiency of organizational response. It is intuitive that doing the right thing quickly enough to achieve a necessary result is perceived as being good; an internal sense of economy is satisfied. To do a thing too slowly or to do the wrong thing wastes resources and time, and potentially produces harmful or irreversible results. An organization's actions determine its efficiency of response. Any failure or slowness to act, or action in response to an event unrelated to organizational purpose, is likely to fail to achieve a necessary result, or fail to achieve it efficiently. Note that this metric is dependent on identifying an aspect of failure with a given action; it is easier to perceive a lack of timeliness and appropriateness than it is to assess when actions are optimally supporting a given purpose.

As explained by the first design element concerning the pivotal role occupied by organizational purpose, if the purpose has been misidentified, any actions prompted by such a purpose by extension also result in a condition of inefficiency. Two special cases of misidentification of purpose occur with relative regularity, but not necessarily under conditions of

inefficiency. The first is when an organization is tasked to accomplish something outside its current purpose or mission, and this condition is recognized; the second is when the organization fails to recognize that a tasking lies outside its purpose, which sometimes creates a condition of mission creep.²⁰

It is entirely possible that an organization will be required to accomplish an action for which it is neither organized, trained, nor staffed. Remember that the organizational leader takes his cue for organizing, training, and staffing from his purpose statement. Recall also that the organizational purpose should be durable enough to accommodate all actions that reasonably can be contemplated in its achievement. Durability does not imply permanence, however. Should the environment that shapes the conditions requiring organizational response change at a rate faster than the need for change is perceived or faster than modifications to purpose can be implemented, the response is likely to be slow or imperfect. In other words, when the expression of organizational purpose fails to remain synchronized with the events likely to compel organizational response, inefficiency of action will result. If the action itself remains inconsistent with organizational purpose, then inefficiency of purpose also will result.

The Doolittle Raid of April 1942 is an example where inefficiency in action resulted in achieving overall efficiency of response. Following the Japanese attack on Pearl Harbor, President Roosevelt demanded US forces bomb the Japanese home islands, a task clearly beyond the capability of the War and Navy Departments. The immediate strategic benefit would be a psychological boost to American morale and proof to the Allies that America would and could fight. A plan wherein 18 (ultimately 16) Army medium bombers would fly from a US Navy aircraft carrier and bomb Tokyo and other Japanese cities was proposed. Neither the Army nor the Navy had anticipated the

²⁰ The fourth design element introduces the concept of stressor events, adding another dimension

necessity of such an action in contemplating actions supporting their individual organizational purposes.

A large amount of resources went into modifying 24 B-25 Mitchell bombers, providing special training for 24 bomber crews, and building a secret training base. The Navy not only had to learn how to launch the large and heavy aircraft from an aircraft carrier, it had to make its scarce carrier assets available for training and actual mission execution. The size of the bombers meant that the carrier would be especially vulnerable to enemy attack prior to mission launch because it had to keep its complement of defensive fighter aircraft in hangars below deck—there was no room for them on the flight deck as long as the bombers were aboard. The bombers were too big to land back on the carrier so the plan called for the crews to fly their aircraft to China. Due to the threat of Japanese detection, however, the bombers launched earlier than planned, at the extreme range of their fuel capacity. One crew landed in Vladivostok, where the Soviets interned it for the war's duration; the rest all ditched or crashed. The raiders bombed Nagoya, Osaka, Kobe and the Japanese capital city, Tokyo. When President Roosevelt announced in a radio address to the American people that American land based bombers operating from a secret base in ‘Shangri-La’ had bombed the Japanese home islands, morale surged upwards. Japanese military leaders were stunned, and their responses included the strategic redeployment of four fighter groups from the Solomon Islands to provide air defense for the home islands, and approval of a previously rejected Combined Fleet plan to engage the US Navy carrier force in the Pacific. This plan culminated with the devastating Japanese defeat at the Battle of Midway, ultimately setting the stage for

with which to assess the impact of unrecognized changes in organizational environment.

the US to assume the offensive in the Pacific. The Doolittle Raid was costly, risky, and—from solely a Navy or Army perspective—inefficient. But interpreted from President Roosevelt’s perspective of national security and his articulation of actions necessary to support a strategic purpose under which the Army and Navy were nested, the raid was extremely efficient. Inefficient but necessary service level actions resulted in overall US military efficiency of response.²¹

Organizations may find themselves imperceptibly drawn into actions which appear to conflict with their purpose and for which they have conducted no deliberate planning or preparation—this defines ‘mission creep’. Mission creep typically occurs when an organization misunderstands the external environment or when the environment changes. Mission creep becomes a force for inefficiency when it draws increasing amounts of resources without a commensurate redefinition and reprioritization of core missions (or actions) in the mission statement (the organizational purpose). The necessary realignment or reorientation of staff efforts therefore does not occur, thus promoting increasingly unfocused and inefficient staff efforts. When the mission creep is toward a new but necessary expression of purpose, then an overall condition of increasing efficiency of purpose exists, and any inefficient actions become necessary; when the trend is towards a new but flawed expression purpose, inefficiency is increasing. Mission creep in and of itself is neither good nor bad; it exists because the conditions compelling it are not recognized.

It remains possible, however, for appropriate actions to seemingly attain a necessary purpose and yet embody an overall state of organizational inefficiency. This paradox provides

²¹ Carroll V. Glines, *The Doolittle Raid: America’s Daring First Strike Against Japan* (New York: Orion Books, 1988). For a fresh look at the strategic effect the Doolittle Raid had on Japanese planning and the ultimate decision to engage the American fleet at Midway, see Jonathan Parshall and Anthony Tully, *Shattered Sword: The Untold Story of the Battle of Midway* (Washington, DC: Potomac Books, 2007).

impetus for the organizational leader to investigate his organizational successes more thoroughly, and is the subject of the next section.

3rd Element: A Paradox in the Relationship of Efficiency and Results

An inefficient organization may achieve efficiency in results; an efficient organization may achieve inefficiency in results. It is clear that reasonable actions undertaken to achieve a flawed purpose are likely to fail to achieve an organization's *true* purpose, resulting in an overall condition of inefficiency. But it is possible that results supporting the true purpose will yet be attained, either intentionally or otherwise. The previously cited example from *FM 1* is an instance where a subordinate leaders corrected the organizational statement of purpose in a doctrinal publication. The effect of this may not be realized at the organizational leader level, but if it helps to focus subordinate levels of effort, then overall efficiency may prevail over a poorly articulated purpose. Sometimes the conscious efforts of subordinates are adequate to affect self correction of organizational purpose. Sometimes chance also seems to intervene.

That an inefficient organization may achieve necessary results, at least occasionally, does not seem to surprise an observer, whether internal or external to the organization; human nature seems to place unfounded faith in 'the system' and exudes a belief that 'luck' can happen anywhere, anytime. The fact that the right thing *can* happen seems to dampen serious critique about the relationship between organizational inefficiency and the times that the wrong thing actually occurs. Higher level organizations generally take corrective action when they recognize such obvious sources of inefficiency as incompetent leaders and shortages of required resources. But when inefficiency stems from the more subtle sources—improper identification of purpose and the improper relationship of action to purpose—the needed exploration of the root cause of inefficiency never occurs. For instance, when students in an academic program fail to achieve the full measure of the program's intended purpose, the first variables investigated are curriculum

content and the qualities of the students themselves. The dean of academics might never consider the appropriateness of either the academy's stated purpose or the teaching method itself.

Teaching method is especially important because it embodies the organizational action directed on the student intended to achieve organizational purpose. All this discussion reinforces the notion that, as long as an organization achieves necessary results, or results within an acceptable zone of tolerance, the organizational leader is apt to perceive a condition of efficiency, either ignoring or not recognizing any true inefficiency.²²

What is more difficult to comprehend is the paradox of an efficient organization that achieves inefficient results. It is counterintuitive that an organization that properly identifies its purpose and actions and is appropriately organized and resourced should be inefficient. Yet this situation is possible. Because organizational efficiency is relative to the interpretation of what constitutes necessary results, it is possible to describe efficiency in more than one way. This example assumes that leaders are competent and that leaders share common understandings of words, actions, and organizational purpose. Organizations motivated by fundamentally different core beliefs, or *principal motivations*, view efficiency differently; friction between organizations occurs at this point. These motivations are not mere matters of opinion—they in fact serve to codify the best case scenario from an individual organization's perspective.

For instance, when the military defines organizational efficiency in terms of its being able to destroy an enemy quickly and completely, it does so through the lens of a principal motivation. The elected government may define military efficiency as the ability to destroy an enemy economically—or cheaply. 'Quickly' and 'completely' are at once at odds with 'cheaply'. The

²² John Dewey identified the mismatch of teaching method with the ways in which people learn as problematic in American education. A teaching method that not only stresses abstract rationalization, but also deemphasizes the value of experience inefficiently exploits the duality of learning ability in the student—to learn by abstract rationalization as well as by gaining experience through action. While Dewey primarily was concerned with the education of children, his assessment that the teaching method ultimately should balance a student's educational needs with his learning abilities provides a useful example of the

United States Constitution provides a ready example of this tension of core motivations. The Constitution established the framework of checks and balances necessary to prevent abuse of power and to preserve the freedoms of the new Republic; in this way, the competing principal motivations of political freedom, free trade and military security are locked in tension. The regular military forces of the United States define themselves according to their 'Title 10 warfighting functions', that is, their statutory responsibility to provide for the military security of the United States. Terms of military power more accepting of a Clausewitzian theory of warfare without restraint define the principal motivation of American regular military forces. Winning is everything. When one hears an Army officer describe the limitations imposed by domestic law (e.g., *posse comitatus*, the law prohibiting the Army and Air Force from providing direct support to law enforcement) and the two year budget cycle as impediments to efficient planning and execution of his mission, the friction between competing perceptions of organizational efficiency is underscored.²³ While the Army may perceive inefficiency in its own conduct and may blame external agents such as the Congress for its inefficiency, it in reality is functioning in harmony with the ideal of organizational efficiency established by the Constitution which balances competing principal motivations. The efficiency of American Republican government mandates inefficiency within its constituent military, political and economic interests; the dominance of any single interest would unbalance Constitutional equilibrium. Inefficient means may satisfy an efficient end state.

The friction points a leader identifies as obstacles to his mission accomplishment may exist by design; wishing them away only cements their status as points of friction. Leaders should investigate the principal motivations of their peer organizations and the organizations from

relationship of organizational action to organizational purpose. Dewey, *Democracy and Education*, 140-44, 333-36.

which they receive guidance. Successful reframing of the organizational environment actually may improve the effectiveness and efficiency of cooperation and the satisfactory achievement of mutual objectives.²⁴ The proper recognition of principal organizational motivations may facilitate implementation of true ‘interagency’ and ‘whole of government’ solutions. However, it is not sufficient to understand merely why an organization acts, which has been the focus of the first three design elements—one must understand also how tangible prompts interact with organizational purpose to create action. It now is time to examine directly the conditions towards which an organization’s purpose and actions are oriented.

4th Element: The Relationship of External Events to Organizational Action

*An event or condition that prompts a response from an organization acts as a stressor on the organizational system; optimally, these stressor events are encompassed within the purpose for which the organization exists, and which necessarily prompt the organization to act. An event that prompts an organization to action imposes stress on the organizational system. Because an organization exists to satisfy a specific purpose, it follows that any such stressor event should be related to organizational purpose. All organizational actions, therefore, meet one of two conditions: either the action relates to organizational purpose, or it is unrelated to purpose. When an organization responds to a stressor event related to its purpose—that is, when the organization’s action describes something the organization should accomplish—it is responding to a *positive stressor* event. An action unrelated to organizational purpose, then, defines a *negative* or *destructive stressor*, and causes wasteful diversion of resources. This discussion categorizes positive stressors as routine, minor, major and catastrophic stressors, and negative stressors as necessary and unnecessary destructive stressors.*

²³ Matt Mathews offers a concise summary of the origins and practical application of posse comitatus in *The Posse Comitatus Act and the United States Army: A Historical Perspective* (Fort Leavenworth, KS: Combat Studies Institute Press, 2006).

It is useful to consider stressor events in terms of the effect they have on an organization, and the impetus for organizational change that they may foster. A routine stressor describes an anticipated event for which an organization is completely prepared due to frequent and habitual response: prerequisite planning has been accomplished; necessary funding and resources have been identified, procured, and allocated; required knowledge has been identified, and training programs have been developed and implemented. The development of organizational competencies correlates to the frequency of stressor event occurrence (the fifth design element addresses stressor frequency); a person generally gets good at doing something he is required to do with some regularity. For a stressor event to remain routine, organizational action must be confined to existing planning, resourcing, and training. This condition can be satisfied in two ways: either there is *no* deviation in the type of response necessary to achieve necessary results, which means there is no deviation in substance of the stressor event itself; or the stressor event is so similar to prior occurrences that the deviations in response are slight enough to be accommodated by existing organizational processes. An example of a significant but routine stressor would be the annual identification of organizational budget requirements under the Program Objective Memorandum process, the US Government's established system for review and submission of departmental budgets. Subject matter expertise develops of its own accord due to the stability inherent in routine actions, assuming personnel policies support the development of such expertise.

Minor and major stressors are related in that both cause organizations to recognize the necessity for organizational change in order to improve the ability to achieve necessary results. The realization that change is needed to improve the overall efficiency of response is the only given; as previously explained, due to possible variances between what is seen as necessary and what is desired, the nature of change may or may not result in greater efficiency. Minor stressors prompt organizations to identify internally the need for change; major stressors prompt organizations into mutual identification of the need for change.

An example of a minor stressor was the development of Civil Support Teams (CST) in the National Guard during the 1990s due to the potential threat of a terrorist attack in the United States using weapons of mass destruction (WMD). Congress funded the CSTs under a separate appropriation, and the National Guard addressed organization, training and employment issues.²⁵ The US Army, which was the DoD's executive agent for domestic response at the time, had only minor oversight responsibilities; the creation of the CSTs was a virtual non-event for the Army. The creation of US Northern Command (NORTHCOM)²⁶ in response to the 9/11 attacks was a major stressor event for the Army and the National Guard (as well as all of DoD and other government departments). Each organization made significant adjustments in resourcing and staffing, developed new organizational objectives that supported a broadened homeland security role for DoD, and identified new points of interagency and interdepartmental collaboration. Because the effect of a given stressor event—that is, the necessary response of an organization—will vary among different organizations and different organizational and sub organizational levels, and can evolve over time, individual stressors may be related in complex fashions. When Congress and the DoD recognized that rapid expansion of the CSTs was necessary to enable overall WMD response capability, the CSTs were elevated from being a minor stressor internal to NGB to part of the overall major stressor of NORTHCOM's establishment.

Another example of a major stressor was President Roosevelt's direction to bomb the Japanese home islands as soon as possible following the surprise attack on Pearl Harbor. To conduct an attack with land based Army bombers launched from a Navy aircraft carrier was

²⁵ Congress mandated the development of Weapons of Mass Destruction Civil Support Teams (WMD-CST) in 1998. The teams are federally funded, state controlled National Guard full time WMD response units with robust communication and detection capabilities. For more early background of the WMD-CSTs, see Senate Committee on Armed Services, *Statement of Lt Gen Russel C. Davis, USAF, Chief, National Guard Bureau, Before the Senate Committee on Armed Services, Subcommittee on Emerging Threats and Capabilities, May 1, 2001, 107th Cong., 1st sess., May 1, 2001.*

²⁶ The Unified Command Plan approved by President Bush in April 2002 established NORTHCOM.

clearly beyond the purpose and experience of both the Army and the Navy. The Doolittle Raid forced both services to modify their organizations and provide mutual support for planning, resourcing, and execution in order to realize efficiency in achieving the President's objective of bombing Japan.²¹

A catastrophic stressor event is an event that fundamentally reorients an organization's strategic purpose and mission, and contrasts starkly with mere organizational reorientation to address an existing condition. A catastrophic stressor event alters the fundamental nature of the very environment in which the organization exists. Because a catastrophic stressor introduces the requirement for organizational change in such a sweeping, precipitous, and immediate fashion, the tendency for internal resistance to change or failure to recognize the changed environment may be more pronounced. Critics too often and too glibly attribute this tendency to bureaucratic inertia, a consideration already discredited in the earlier definition of organization. The source of inertia seems more directly related to how an organization learns to adapt, and is related to the discussion of knowledge in the sixth design element. The 9/11 attacks represent a catastrophic stressor that forced the DoD and the US Government to reassess and realign actions and purpose at a fundamental level, and to adapt to a changed—in fact and perception—domestic and international security environment. The National Guard and NGB responded to requirements for increased state and federal utilization. A revamped purpose defining national homeland security objectives now holistically included the homeland security endeavors of individual governors. The National Guard (and the other reserve components) transitioned from a strategic reserve to an operational reserve supporting the operational and routine requirements of the DoD. All levels of US Government implemented and are still implementing significant changes—in all aspects of law, policy, regulation, organization, resources, command and control, and inter-organizational relationships—in response to a sea change in purpose wrought by the 9/11 attacks.

The Great Depression of the 1930s is an example of a nationally catastrophic stressor, but one that the War Department felt only as a major stressor. The Depression affected America

profoundly as a nation, exerting tremendous change on the sense of economy and social purpose expressed at the individual and government levels. Certainly the Depression caused scarcity in resources appropriated for military defense, and the assignment of new missions designed to promote social welfare in the United States, such as the administration of Civilian Conservation Corps camps, but the overall purpose and environment of the War Department were unchanged.²⁷

Negative stressors are destructive in nature because they inhibit an organization's ability to accomplish its purpose. Not all negative stressors can or should be avoided, however. An organization must address any stressor that poses a threat to organizational survival or purpose, even if it is otherwise unrelated to organizational mission. The military services are responding to a necessary destructive stressor when they posture before Congress during annual military budget deliberations: While fighting for a service appropriation does not lie within any service's organizational purpose, the failure to do so places in jeopardy the service's ability to best accomplish its purpose according to its principal motivations. Aspects of Strategic Communication provide a similar example of a necessary destructive stressor when the US Government's public messaging efforts target external audiences *solely* to create conditions permitting organizational freedom of movement (taking time to project a message on the Sunday morning news shows might be a distraction from the *real* job at hand, but it is a necessary distraction). The more intense the budget argument or public message is, the greater the potential diversion of attention and resources away from positive stressors. The likelihood of failure to

²⁷ The Depression certainly had the *potential* of being a catastrophic stressor relative to the Army. In his autobiography General Douglas MacArthur recounts an episode where President Roosevelt had proposed drastic cuts in military spending (more than 50 percent in the regular Army alone) in order to fund America's social and economic recovery. Such budget reductions threatened American preparedness at the time that Europe was rearming for war—a reckless course of action in MacArthur's eyes. A compromise ultimately was achieved, and crisis averted for the Army. Douglas MacArthur, *Reminiscences* (New York: McGraw-Hill Book Company, 1964), 100-01. The CCC is an example where Roosevelt did manage to direct Army resources. The Army used CCC projects where feasible to augment its training for wartime. Ultimately, the Army assigned much of the responsibility CCC administration to the Organized Reserve Corps, and the Army was relatively unfettered in pursuing its preparations for probable war in

perceive changes in organizational environment also increases. Organizations cannot ignore such negative stressors, because doing so would further jeopardize organizational ability to respond to positive stressors.

Unnecessary negative stressors encompass what an organization *should not* be expending effort and resources against. Such stressors are easier to describe conceptually than they sometimes are to identify in reality, unless they are extremely obvious. An organization might not detect an unnecessary negative stressor until an overall shortage of resources prompts an internal audit of organizational actions. One might conclude that the Army's administration of the CCC camps during the Depression was an unnecessary negative stressor, but this is not the case because it was within President Roosevelt's purview to task the Army—a subordinate level of organization—in order to preserve the broader conditions of American domestic security for which he was responsible. The CCC tasking was a major stressor for the Army, and actually defines a paradox wherein the Army's inefficiency in action (doing something it had neither contemplated nor been organized for) achieved overall efficiency of national purpose. An example of a truly negative destructive stressor occurred with the airlift of National Guard CST teams to annual training sites located throughout the United States. No actual requirement for air transportation existed, but this was not discovered until 2005, when the demand for Air National Guard (ANG) airlift exceeded airlift availability, prompting a thorough review of all air transportation missions.²⁸ Negative destructive stressors especially threaten organizational efficiency when they appear to support organizational purpose.

Europe. A good summary of the CCC is John A. Salmond, *The Civilian Conservation Corps, 1933-1942* (Durham, NC: Duke University Press, 1967).

²⁸ The Mission Readiness Airlift (MRA) program allows airlift assets of the ANG to utilize unit training flying hours to provide point-to-point transportation in direct support of National Guard unit readiness training requirements. The flying unit funds aircraft operating costs as part of its training program and the NGB funds aircrew costs. Transporting a CST is expensive, requiring a C-5 Galaxy, the Air Force's largest cargo aircraft, or a total of six C-130 Hercules, but there was no reason to question the legitimacy of such requests. The NGB routinely approved CST airlift without question until early 2005, when the overall operations tempo and increased training requirements of ANG airlift wings caused airlift

Stressor events should be named and defined (or their conditions defined) in the organizational purpose statement to the maximum extent possible, without sacrificing simplicity or durability. Thus any reaction to a stressor *not* identifiable within the organizational purpose either (1) represents wasted or inappropriately directed resources, resulting in organizational inefficiency; or (2) an unanticipated event to which the organization must respond and *must adapt*. The next step in investigating the relationship of stressor events to organizational efficiency is to consider their frequency of occurrence.²⁹

availability to shrink. Airlift demand exceeded capacity, forcing a comprehensive review and reprioritization of transportation missions. It was discovered that a supposed CST training requirement for actual air deployment did not exist, since the Army Mission Training Plan for a CST states only that the CST must be able to plan an air deployment. Additionally, the original urgency for nationwide air deployability had diminished upon the establishment of at least one CST in every state, territory and the District of Columbia. Airlift diverted from CST support immediately became available to support GWOT requirements, either through volunteer missions flown for AMC or by supporting the premobilization training of National Guard units alerted for Operations Iraqi Freedom and Enduring Freedom.

This example illustrates how a stressor event can evolve over time. The MRA program developed from a proof of concept exercise called GUARDLIFT I in 1964. The NGB's intent was to demonstrate to the Congress and the Air Force the integration of operational utility with normal training flying requirements, thereby increasing relevancy, economy and efficiency. The motivation behind GUARDLIFT and other initiatives at that time was the necessity of redefining the organizational environment of the Department of Defense and the National Guard in the aftermath of the Berlin Crisis, a catastrophic stressor event. Four decades later, the NGB had institutionalized the MRA program; MRA airlift had become a routine stressor. The routine nature of airlift requests combined with the chronic lack of sufficient staff training in the NGB obscured the fact that inefficiencies had developed within the MRA program; some requests, such as those for CST transportation, had become unnecessary destructive stressors. While NGB could approve the CSTs for airlift, it was not efficient to do so. The resulting comprehensive review of airlift policy and practice turned up other instances inefficient allocation as well, some in violation of law and regulation. The author performed the referenced analysis of ANG airlift while serving as the deputy chief for airlift operations in the ANG operations center on Andrews AFB from September 2003 through January 2006.

²⁹ The perception of organizational purpose in relationship to stressor events adds a further dimension of understanding to studies of organizational leadership. Judith Bardwick conceptualizes the leadership spectrum as one of peacetime management and wartime leadership. Peacetime and wartime do not denote a political state, but rather characterize the level of intervention necessary of the leader, with times of turmoil and change being more demanding.

Peacetime has neither crisis nor chaos, so no major change is needed. Instead, people are content with what already exists and change involves a gentle tweaking of an existing system in order to slowly improve it. Peacetime management consists of incremental modification of what already exists, without major disruption and, therefore, without any major emotional consequences.

Bardwick's peacetime management can be seen to encompass routine and minor stressors; the more urgent requirements of wartime leadership are expressed in major and catastrophic stressors, often under the rubric of globalization:

5th Element: The Significance of Stressor Event Frequency

The frequency of occurrence of stressor events correlates to the efficiency of organizational actions taken to respond to and anticipate a given event. The frequency with which an organization responds to stressor events is related to its development of internal competencies to plan, resource and execute actions. Experience embodies these internal competencies. Familiarity with a given stressor event accrues from frequent response to multiple similar stressors. Frequent response to multiple dissimilar stressors promotes the ability for rapid adaptation to new circumstances. Such habituated response forms the core of internal competence; people develop definable skills to accomplish actions that support the organizational purpose. If the organizational leader recognizes this relationship between stressor frequency and the development of internal competencies, he is likely to place a premium on such experience, and will seek ways in which to propagate the value of the experience within his organization.

Clausewitz's conception of method reinforces the understanding of stressor event frequency. The recurring selection of a given procedure from among several alternatives in response to similar events defines habit or method. Methodism is an essential part of problem definition and resolution, if applied judiciously: "[Routines] represent the dominance of principles and rules, carried through to actual application. As such they may well have a place in the theory of the conduct of war, provided they are not falsely represented as absolute, binding

The world has changed and the change is permanent. The comfort zone is increasingly being replaced by endless danger. In turn, peacetime managers, people who are most comfortable in static conditions, will have to learn to be wartime leaders, people who embrace major change because they see far more opportunity than threat in turbulence. . . . Peacetime conditions are not conducive to generating wartime leaders. In peacetime, people do not have the opportunity to hone themselves on a hard stone that teaches them to be unafraid of change and of making the right, but difficult, choice.

Bardwick asserts that peacetime managers and wartime leaders fit themselves to the specific needs of an organization and that the two leader types are incompatible and cannot function effectively in each other's place. A wartime leader is too aggressive for the passive needs of an organization in a peacetime environment, and vice versa. This is a fundamental point of disagreement with this monograph: leadership, not simply passive management, is a constant need in an organization, and will facilitate

frameworks for action (systems); rather they are the best of the general forms, short cuts, and options that may be substituted for individual decisions.”³⁰ Methodism carried to extremes prescribes action and substitutes regulation for creativity; methodism embodied in routine adds form and structure while allowing innovation and flexibility.

The object of training, particularly military training, often is a function of the most immediate previous stressor to which an organization responded. As the time between stressor event occurrence increases, the relevancy and adequacy of training prompted by a given stressor declines. Because organizational purposes often encompass multiple conditions that will trigger action, training programs normally will reflect the influence of multiple stressors. But from among these multiple stressor experiences, the ones most likely to influence training the most are those that are most recent and those of the greatest magnitude. When a stressor event is both recent and of great magnitude, organizational attention may become narrowly focused on a single condition. This phenomenon may help explain why the lessons of irregular warfare did not completely consume American military resources in the 1960s, because the threat of conflict with the Soviet Union loomed larger than Viet Nam.³¹ While focus on multiple stressors does not guarantee increased efficiency in addressing a new, unanticipated stressor, it does provide multiple experiential departure points for reflective consideration. Training focused on multiple stressors is apt to be more accommodating of change. Such a focus creates a stronger default position for stressor response.

identification of necessary transitions from peacetime/routine events to wartime/catastrophic events. Bardwick, “Peacetime Management and Wartime Leadership,” 132-33.

³⁰ Carl von Clausewitz, *On War*, ed. Michael Howard and Peter Paret (Princeton, NJ: Princeton University Press, 1989), 153.

³¹ Andrew J. Birtle, *U.S. Army Counterinsurgency and Contingency Operations Doctrine, 1942-1976* (Washington, DC: United States Army Center of Military History, 2006), 477-95. Birtle chronicles the dismantling of the US Army’s counterinsurgency capability that occurred during and following the Viet Nam War. The primary reasons for this were lack of resources to pursue conventional and counterinsurgency training and force structure, and the belief that future contingencies were likely to be more conventional in nature.

When the National Guard responds to wildfires in a state where wildfires are a common annual occurrence, the organization over time acquires and maintains routine competency in responding to fires. Changes in climatic conditions may result in differences between given fire seasons, but because ongoing preparations for the next fire season immediately absorb this experience, changes in organizational structure tend to be incremental in nature. Thus routine stressors may accomplish over time the same organizational change that a major stressor might precipitate in a shorter period. The frequency of response is the critical factor. The flooding caused by Hurricane Katrina in September 2005 in New Orleans was not a routine stressor; while the Louisiana National Guard and other federal, state and local responders *planned* with great regularity their potential response to flooding in New Orleans, they had not benefited for several decades from experience derived from actually having responded to such severe flooding.³²

The beneficial aspects of frequency of stressor response can be negated for primarily three reasons, all of which contribute to overall organizational inefficiency. The first occurs when an organizational leader fails to assess properly the stressor environment. When a leader focuses only on the success of an individual's response to a given stressor, he may attach special significance to the individual person instead of the experience of that person. Consequently, no thought is given to the long term sustainment of the value of experience in an organization. The

³² The Mississippi River drains 41 percent of the continental United States, making it the third largest watershed in the world. Accurate flood records date to the time a port was established at New Orleans in 1718. Until Hurricane Katrina struck in 2005, the last hurricane to cause severe flooding in New Orleans was Hurricane Camille in August 1969. Between Camille and Katrina, significant flooding of New Orleans occurred three times, in 1973, 1979 and 1993. The worst recorded flooding on the lower Mississippi River basin was caused by rainfall in 1927: the levees protecting New Orleans and the lower river valley broke in 246 places; 27,000 square miles were inundated; 137,000 structures were destroyed or damaged, 700,000 persons were displaced; and 1,000 persons were killed; flooding persisted for six months. The point is that while the severity of past flooding ensured disciplined and regular planning for future flooding by state and city officials, the frequency of severe flooding was not sufficient to sustain a truly useful level of experience. This is not to make light of the suffering of New Orleans' inhabitants, but merely stresses the very tangible difference between 'doing something' and 'planning to do something.' R. B. Seed et al., *Investigation of the Performance of the New Orleans Flood Protection Systems in Hurricane Katrina on August 29, 2005* (National Science Foundation sponsored project report under Grants No. CMS-0413327 and CMS-0611632), http://www.ce.berkeley.edu/~new_orleans/report/CH_4.pdf (accessed April 17, 2008).

further danger of such oversight on the part of the leader is that he is most apt to ignore the significance of relatively minor or routine actions; the individual gains a reputation for competence that may fail when the leader assigns him to deal with a more critical or non-routine (or at least not routine to the subordinate) stressor. The ‘go-to guy’ fails. A common example occurs when a leader is promoted above his level of competency.³³

The second instance of negation occurs when an erroneous identification of stressors as being similar mask any inefficiencies stemming from the application of inappropriate actions. Here the reality is simpler than the description. For instance, when mobilization for the Global War on Terror (subsequently for Operations Noble Eagle, Enduring Freedom and Iraqi Freedom) was initiated in September 2001, the institutional memory of the Department of Defense in the Pentagon generally travelled no further back in time than mobilization for the first Gulf War in 1991. Few, if any, organizational leaders looked for lessons learned from any other mobilization experience—after all, the 1991 mobilization was the most recent wartime mobilization, and the Iraq part of the war would be fought in the same geographic area of the world. But the 1991 Gulf War represented only a minor stressor to the Army National Guard: Mobilization occurred quickly, mobilized only whole units, was of a manageable size, and above all was of short duration and contained in a single iteration.³⁴ The National Guard Bureau easily satisfied its organizational purpose of facilitating the mobilization of units to reinforce the regular Army. The General Accountability Office has criticized the Defense Department for not having a strategic

³³ Laurence Peter’s ‘Peter Principle’—the notion that a person will rise to his level of incompetence—provides a similar argument. This monograph asserts that simple incompetence is fairly easy to detect. The danger of a leader that produces incompetence by failing to prepare subordinates for mission changes or changes in environment is more insidious. Laurence J. Peter, *Why Things Go Wrong, or, The Peter Principle Revisited* (New York: William Morrow and Company, 1986).

³⁴ National Guard Bureau, *Army National Guard After Action Report for Operation DESERT SHIELD and DESERT STORM (2 August 1990 – 28 February 1991)* (Washington, DC: National Guard Bureau, 1991). The report notes many issues—such as last minute changes in units alerted for deployment, requiring Herculean efforts to reposition personnel and equipment to bring units up to deployment standards—that were not new. The report highlights significant issues that would have become chronic problems had the period of mobilization been extended.

plan for long term utilization of Reserve Component personnel to support the Global War on Terror. Better historical examples of mobilization occurred in 1961 for the Berlin Crisis and in 1950 for Korea—both were partial mobilizations initially of unknown duration, and attended by significant readiness and personnel issues. Both the earlier mobilizations provide better, more appropriate examples of similar stressor events.³⁵

The third scenario in which the experiential aspect of stressor frequency is counterproductive occurs when the event frequency is too rapid. When organizational adjustment and realignment is *too* constant, dramatic and continuous, organizational inefficiency may develop precisely because the constant change undermines the chief advantage of stressor

³⁵ US Government Accountability Office, *Military Personnel: A Strategic Approach Is Needed to Address Long-term Guard and Reserve Force Availability*, Testimony presented by Derek B. Stewart before the Subcommittee on Military Personnel, Committee on Armed Services, House of Representatives, February 2, 2005, p. 9. The report in part states:

DOD does not have the strategic framework and associated policies necessary to maximize reserve component force availability for a long-term Global War on Terrorism. The availability of reserve component forces to meet future requirements is greatly influenced by DOD's implementation of the partial mobilization authority and by the department's personnel policies. Furthermore, many of DOD's policies that affect mobilized reserve component personnel were implemented in a piecemeal manner, and were focused on the short-term needs of the services and reserve component members rather than on long-term requirements and predictability. The availability of reserve component forces will continue to play an important role in the success of DOD's missions because requirements that increased significantly after September 11, 2001, are expected to remain high for the foreseeable future. As a result, there are early indicators that DOD may have trouble meeting predictable troop deployment and recruiting goals for some reserve components and occupational specialties.

The author's experience as a mobilization officer at NGB during 2001-2002 bears witness to the GAO's conclusions. Secretary of Defense Rumsfeld had assigned mobilization caps—maximum numbers of personnel to be mobilized—to the service secretaries, within the limits of the executive order authorizing mobilization. Army policy in turn sought to mobilize only the necessary parts of units, ostensibly in order to maximize the utility of the numbers actually mobilized. What typically was not communicated to NGB, however, was the necessary detail—which personnel and what equipment—of mobilization requirements. Units regularly arrived at their mobilization stations only to be told they were either short or over on 'required' personnel and equipment.

Title 10, United States Code, Section 12302, is the statutory authority for the partial mobilization of up to 1,000,000 reservists for a maximum period of service of 24 consecutive months (partial mobilization as contrasted to full mobilization of all reserve personnel). Congress wrote the law during the 1950s, following the difficulties encountered with the limited mobilization for Korea, and reflects a Cold War mobilization scenario. There is an opinion prevailing within DOD that the remobilization of personnel under the same partial mobilization authority for the GWOT, as long as individual mobilized periods do not exceed 24 months, is a matter of policy, not law. If accepted, this 'policy' would permit DOD to sustain

frequency: the *systematization* of the means of response, the capability for rapid decision making and decision implementation. Maximum efficiency—and hence, maximum benefit—is achieved when the incremental degree of organizational adaptation and reorientation is manifested in the slightest change allowable by conditions. Even though change for change’s sake is grossly inefficient, some leaders feel compelled to leave their mark on an organization by changing some aspect of its structure (some leaders even assess subordinate leaders by the degree of change they implement, as if this can occur in isolation from an organization’s efficiency in achieving its purpose).

The challenge for the organizational leader is to recognize a given stressor event for what it truly represents, and to assess accurately the effect of its frequency on his ability to respond. Stressor event frequency may signal the necessity to review and revise organizational or sub organizational purpose statements.³⁶ Refined purposes may then necessitate the acquisition or sustainment of new knowledge or experience, justifying new or additional training needs. Crafting a training event in anticipation of a given stressor event; creating a sense of urgency about the training to compensate for a low rate of stressor frequency; injecting realism into the training as an alternative to actual hands-on experience that would accrue from an actual event—these are techniques that enable efficient organizational response tailored to purpose. Organizations should not enter into training and exercises lightly. Because they typically require significant investment of resources and because they represent deliberate opportunities to hone

mobilization at current levels indefinitely. It is doubtful that Congress intended the law to permit such open-ended authority to mobilize the reserves. The GAO noted this as a specific flaw in DOD calculations.

³⁶ Dietrich Dörner states that, “Methodism is likely to flourish in those situations that provide feedback on the consequences of our actions only rarely or only after a long time. In particular, if our plans apply to a field in which we rarely act, our planning gradually degenerates into the application of ritual.” Dietrich Dörner, *The Logic of Failure: Recognizing and Avoiding Error in Complex Situations* (Cambridge, MA: Perseus Books, 1996), 172. Feedback can be considered in terms of John Dewey’s conception of experience (see note 13) as well as the leader’s proactive assessment of stressors. Dörner is commenting on the extreme case of Clausewitz’s Methodism governed by predictive and regulatory controls. Methodism by itself is not the problem. Methodism grounded in routine, which allows flexibility

specific response capabilities, such training can be an efficient means of sustaining overall organizational efficiency of purpose. Effective training also entails one of the most subjective aspects of organizational leadership: the identification of necessary knowledge and experience.

6th Element: The Relationship of Knowledge to Organizational Efficiency

Knowledge enables the human element of an organization to formulate actions; the identification of knowledge that is necessary to the accomplishment of organizational purpose, and the methods employed to share and propagate knowledge are controllable variables.

Knowledge encompasses in some fashion the experience necessary for a person to formulate a deliberate course of action in a given situation; possessing the correct knowledge is instrumental in preparations to make the response the most efficient possible. As discussed, the valuation of experience, particularly as expressed by the perceptions of organizational leaders, plays a pivotal role in posturing an organization to achieve its purpose. The implication is that such managerial manipulation of knowledge can be good or bad in terms of organizational efficiency. Lack of knowledge or possession of the wrong knowledge—if these become the basis of organizational decision and action—will not achieve necessary results, and may not even achieve desired results. When desired knowledge is at variance with necessary knowledge, then an inefficient outcome is likely.

The novelty of the new sometimes denigrates force of habit to the point that newness itself causes the forced obsolescence of proven thought or practice. The general's condemnation for refighting his last war implies this very criticism. That organizations should accord newness with such unproven status is illogical, but it remains a practice with a long history.³⁷

and innovation, must be moderated actively by the leader as an aspect of his continuous assessment of his organizational environment. Stressor event frequency *should* be related to the moderation of routine.

³⁷ Ralph Waldo Emerson wrote about the danger of wholesale devaluation of the past more than a century and a half ago, when the technological modernization of America was gaining tempo:

The civilized man has built a coach, but has lost the use of his feet. He is supported on crutches, but lacks so much support of muscle. He has a fine Geneva watch, but he fails of the skill to tell

Sometimes an organization will recognize success in a given area or at a given level, value it accordingly, and incorrectly attempt to duplicate success by applying the same knowledge, experience and skill to a different, mismatched level or area of the organization. An example might be an outstanding salesman whom the company promotes from the sales department to be vice president of human resources. The new vice president, having no management experience, fails in his new job. The company—which values company sales above all other considerations and extends this prioritization to sub organizational levels of the company, to include the human resources department—fails to realize its fundamental error. The company shunts the now ex-vice president to some dark corner of the company, and the process begins anew. This type of knowledge valuation establishes meaningless measures of

the hour by the sun. A Greenwich nautical almanac he has, and so being sure of his information when he wants it, the man in the street does not know a star in the sky. The solstice he does not observe; the equinox he knows as little; and the whole bright calendar of the year is without a dial in his mind. His notebooks impair his memory; his libraries overload his wit; the insurance-office increases the number of accidents; and it may be a question of whether machinery does not encumber; whether we have not lost by refinement some energy, by a Christianity, entrenched in establishments and forms, some vigor of wild virtue.

Ralph Waldo Emerson, “Self-Reliance”, in *Selected Writings of Ralph Waldo Emerson*, ed. by Brooks Atkinson (New York: The Modern Library, 1950), p. 167. New technology and methods displace the old because there is no room—in time or budgets—to do both. The fallacy is that the new is accepted at the expense of the old, because of the two, one—the new—is perceived as having to superior. The creation of new abilities, such as shortening the time necessary to complete a task, reinforces this propensity towards newness. For example, in the field artillery, success hinges on accurate computation of the ballistic firing solution and on accurate weapon system location. Fire direction specialists now rely on a computer to provide necessary firing data; commanders rely on satellites and the Global Positioning System to emplace their units. The Field Artillery School has stripped from its training program manual computation of firing solutions and the relevant theory of indirect fire, and manual determination of azimuth by sighting on stars during night occupation. The tasks can be accomplished faster, which reinforces the notion that new is better, but the thinking piece has been transferred to a printed circuit board; the human agent increasingly is unable to effectively troubleshoot errors because he does not understand why something was supposed to happen.

Eugene Ferguson expands the concept of the utility of old technology still further in his discussion of engineering design. An important aspect of old technology is that it provides a departure point for thinking about new designs and applications. Far from stifling innovation, acceptance of the old is essential to the design and development process: “The inevitability of the old in the new is no check to originality, however. The possible combinations of known elements exceed comprehension, and the combination of elements is subject to endless variation.” The friction between the artistic and scientific sides of engineering is the same friction that exists between the constructivist and deconstructivist approaches to problem resolution discussed later in this section. “Art, as it is understood in engineering

performance that fundamentally do not translate into increased organizational efficiency, and sometimes result in increased inefficiency.

The military provides another example. Combat experience is of obvious utility at the tactical level, but does not necessarily enjoy the same degree of usefulness throughout the entire military organization, such as at the service or strategic level. The military bases personnel assignments and promotions on combat deployments, which become a measure of performance. When such a system then selects an individual with no background in budget analysis over a trained and proven analyst to assume responsibility for preparing the service's budget submission to Congress, then a mismatch in knowledge prioritization occurs. The point is that a given body of knowledge and experience normally cannot be valued equally throughout all levels of an organization, and to insist artificially on such a prioritization will discourage the organization from achieving optimum efficiency in results.

Once an organization identifies necessary knowledge, it remains to manipulate the knowledge in the pursuit and sustainment of the organizational purpose.³⁸ As has been stated, engineering design's contingent nature, the dependency of unknown future outcomes on current actions, makes it a useful comparative candidate with the military organization. Attempts to banish the old and the artistic, in order to leave only the new and scientific, often have followed

schools, is effete, marginal, and perhaps useless. It is a 'soft' subject, lacking the rigor of the hard sciences and the supposed objectivity of engineering." Eugene Ferguson, *Engineering and the Mind's Eye*, 22-23.

³⁸ The manipulation of knowledge involves ascertaining how it will be used within an organization in order to develop adequate courses of action that attain necessary results. When the results—the end state—is not known, or if an unanticipated problem is the subject of consideration, the proper utilization of knowledge is critical. Innovation is essential. A common problem with conventional analytic problem analysis is that it emphasize the comparison of potential solutions over the generation of potential solution. Henry Mintzberg discusses analytic propensity as a specific failing of planning. “. . . The analyst tends to want to get on with the more structured step of evaluating alternatives and so tends to give scant attention to the less structured, more difficult, but generally more important step of diagnosing the issue and generating possible alternatives in the first place. The result tends to be conservative problem solving, heavily biased towards the status quo: problems are approached as they have always been conceived, in terms of the alternatives already available.” When an analytic process can seemingly produce innovation and creativity, an organization exhibits little motivation or investment in developing in advance the

parallel paths in engineering and military circles. Ferguson describes an early 1960s system of engineering design intended to reduce “design, drafting and engineering costs” by one third to one half over a conventional drafting room in which designers and draftsmen sat side by side, collaborating on a concept sketch and its transformation into a set of plans:

In 1961, a radical new system of designing and drafting called “Panoramic Design Technique (PDT)” was developed by TAB Engineers, Incorporated, a small Chicago firm. As though straining to eliminate everything that made a drafting room a vital place to work, the PDT system banished drafting tables, put drawings on blackboards, and made a record of drawings by photographing the blackboards.

Ferguson describes the “intellectual impoverishment of the new system:”

Continuous discussion in each group (in order to appear busy) eliminated contemplation, the time to think through a promising concept, to refer to other drawings, notebooks and printed books. The absence of reference materials and the apparent disdain for any reminder of the company’s products ensured that designs would be based on first thoughts and a minimum of time-consuming reflection and rethinking of doubtful concepts.³⁹

conditions necessary to stimulate innovation. Henry Mintzberg, *The Rise and Fall of Strategic Planning: Reconceiving Roles for Planning, Plans, Planners* (New York: The Free Press, 1994), 300-01.

³⁹ While the engineering design community quickly discredited the PDT process, computer automation by the mid-1960s was resurrecting some of its traits. Engineers and the military were two of the earliest and largest consumers of computer automation. PDT itself was a culmination of an earlier 1950s fad of ‘brainstorming’, given impetus in engineering and military circles by the threat of Sputnik:

In many engineering schools, new techniques to encourage creativity were expected to yield bright ideas that would result in inventions. If Americans could just become more creative than the Russians, it was believed, the United States would forge ahead of the USSR in the fields that counted: space and war.

Courses in creativity were started in engineering schools and in the armed forces willy-nilly. Psychologists staked out a claim in the new field, but nearly anyone could play the game. One of the most successful gurus of creativity was Alex Osborn, a co-founder of the Batten, Barton, Durstine, and Osborn advertising agency. Osborn’s chief contribution to the creativity craze was the technique of “brainstorming.” A group of people was assembled, the leader explained the occasion for which ideas were wanted, and a secretary wrote down all the ideas that occurred to members of the group. The group was admonished to suspend all inhibitions, and all ideas were recorded—the good, the bad, and the silly. The immediate aim of brainstorming in creativity classes was to develop “ideational fluency”—that is, to produce lots of ideas quickly. The gurus assumed that if enough ideas could be brainstormed, some of them would *have* to be good ideas.

Eugene Ferguson, *Engineering and the Mind’s Eye*, 36-7, 56-7. While particular methods have fallen from favor and occasionally resurface in different guise, the qualities of innovation and creativity remain prized attributes. The potential threat to creativity from computer automation exists when computers pass from a subordinate role of merely speeding up processes to defining and controlling the processes themselves. The computer’s theoretical capability to calculate numbers of permutations of a

Another salient aspect of engineering design involves the recognition of how different people think about problems. Some people think in terms of words and numbers; some people think in pictures. This dichotomy in the application of thought, between visual thinking and purely intellectual verbal and mathematical inquiry, recalls Dewey's concept of the duality of learning.⁴⁰ There may be a cultural or national basis within a discipline or profession that leads to reliance on one form of thought over another. Certainly an investigation of the careers of prominent engineers and scientists seems to support such a conclusion. To the extent that the tactical unit level and strategic, service level represent such differing cultures internal to a military service itself, might it be reasonable to speculate that long service at either level encourages differing forms of thought and perception? To picture in the mind's eye an enemy force's movement, and to convey one's meaning in pictures—operational graphics appended to a tactical map—is a critical skill on the battlefield. But the ability to argue successfully a budget submission before Congress might rely more heavily on intellectual conceptualization. The point of this discussion is not to determine definitively how an organization approaches thinking about problems, but to underscore the fact that once an organizational leader has prioritized the knowledge his organization requires in the accomplishment of its purpose, it remains a formidable challenge to determine how best to apply, store, and teach such knowledge.⁴¹

given problem and solution far in excess of human capacity leads to the erroneous assumption that the computer can consider all the scenarios conceivable by an optimally creative human mind.

⁴⁰ Dewey, *Democracy and Education*, 140-44, 333-36. See note 20.

⁴¹ Edgar Schein has investigated from a clinical perspective the negative organizational impact of flawed organizational values. Schein's term of management development is analogous to the training and promotion of organizational leaders and subordinate leaders:

Management development is typically a very weak function in young organizations and succession is often based on criteria that are not relevant; for example, the organization may promote the people who are most like the entrepreneur or who are technically the most competent in the area of the organization's work, rather than seeking out people who have managerial talent. Founder-builders often glorify the "technical" functions of research and development, manufacturing, and sales and demean "managerial" functions such as finance, planning, marketing, and human resources. At the personality level, leaders often prevent potential

Postmodernists would have critics believe they have identified a formidable obstacle to successful application of knowledge to problem solving. For practical purposes the phenomenon of ‘globalization’ captures the essence of this obstacle. A changing environment marked by the elimination of boundaries and traditional norms, decentralization and deconstruction of order, and increasingly complex and rapid interactions are thwarting traditional methods of innovation and response. David Harvey assembles a useful list of comparative descriptives of what he calls Fordist modernism and flexible postmodernism. When one views these intellectual approaches as differing perceptions of the *same* environment, one wonders about the real significance of their differences. Fields heavily grounded in a long view of their historical pasts—such as biology, geology, and even religion—and educated through strong historical tools—such as books vice newspaper headlines and blogs—tend to be affected less by globalization. Organizations with no such grounding are apt to feel adrift when confronted by a novel problem because they are unable to leverage the weight of their historical pasts in achieving the necessary innovative solution. The fundamental nature of problems has not changed, but the rapid exchange and sheer volume of often superficial information overwhelms knowledge receptors that have been optimized over time by historical experience. The necessity for an organization to be innovative is constant—only the perception of need has increased.⁴²

The US military is an example of an organization weakly anchored in its historical past attempting to address the need for innovation in problem resolution. Systemic Operational

successors from having the kind of learning experiences that would enable them to take over or, worse, they undermine any successors who display the strength and competence to take over.

Edgar Schein, “Leadership and Organizational Culture,” 62-3. Schein’s description of a ‘young organization’ is more useful when one considers it in the context of stressor events: An organization long familiar with the response necessary for a routine or minor stressor is ‘old’ relative to its corresponding lack of familiarity with a major or catastrophic stressor, in which it is ‘young’.

⁴² Harvey, David. *The Condition of Postmodernity: An Inquiry into the Origins of Cultural Change*. Cambridge, MA: Blackwell, 1992.

Design (SOD), a theory authored by Israeli Brigadier General Shimon Naveh, was seized as a departure point for exploring means of incorporating timeliness, relevancy, and creativity into the military planning process. Specifically, a methodology that adequately informs operational art within the perceived constraints of an increasingly complex ('globalized') world is sought so that the science of campaign planing can produce timely, effective, and responsive military plans. The identification of the need for something that fosters innovation is absolutely correct; the problem arises in that the execution of SOD and SOD-like derivatives to date has been characterized by a postmodernist revival of 1950s and 1960s era brainstorming. Experimentation is focused on injecting innovation at the point of need—when the problem is imminent or has occurred—instead of setting the conditions for innovation well in advance of problem recognition. This critique is not meant to trivialize the efforts of any experimentation, because they address the acquisition of vitally important knowledge necessary for the Department of Defense to accomplish its organizational purpose. The point is that setting the conditions for creativity is difficult and uncertain. For instance, General 'Hap' Arnold in 1941 could not have known in 1930 that he would head the Army Air Forces, and that the experiences of his friend Jimmie Doolittle as a test pilot, aeronautical engineer, air race competitor—and Army aviator—would prove to be decisive in accomplishing an innovative attack against Japan by Army bombers flying from a Navy carrier in April 1942. Personal relationships and the unknown future utility of experiences decades in the acquisition played major parts in making the Doolittle Raid a timely strategic success.⁴³

⁴³ For a current example of published US doctrine incorporating elements of SOD, see Training and Doctrine Command, *TRADOC Pamphlet 525-5-500, The U.S. Army Commander's Appreciation and Campaign Design* (Fort Monroe, VA: Training and Doctrine Command, 2008). Background information about SOD is in Shimon Naveh, "Fostering Operational Command, Operationalizing Systemic Design" (instruction, School of Advanced Military Studies, Fort Leavenworth, KS, October-November 2007); and Huba Wass de Czege, "Unified Quest Postscript 2 (June 29, 2007): On Inserting Systemic Operational Design (SOD) Derived Ideas into US Army Doctrine" (instruction, School of Advanced Military Studies, Fort Leavenworth, KS, October 2007).

Cultural differences between organizations are less significant than the differences among cultures that exist within an organization. When organizations define their culture in terms of organizational purpose and values, individual organizational culture turns out to be not so significant—the common ground defined by common understanding of purpose allows organizations to work together. Such differences do in part explain the inefficiency sometimes associated with joint, multi-service endeavors, but they do not directly address the inefficiency internal to an organization. The actual distinctions between Army and Air Force, National Guardsman and regular, and uniformed officer and departmental civilian are not nearly as significant as what organizations allow themselves to believe about other service cultures, and what they fail to see regarding their own internal cultures. What matters most are the common ways in which organizations are able to convince themselves into seeing—and acting on—a reality that does not exist. This is an extreme statement of the situation, but it finds expression in the facts and assumptions that occasionally go unquestioned and become the basis for decision making. The decisions may be small and the error slight, but they exert a powerful cumulative effect on organizational efficiency. The prioritization of knowledge requirements becomes closely associated with organizational values, and hence organizational culture. When flawed facts and assumptions persist due to improperly identified organizational knowledge requirements—which establish the base capabilities of any organization to respond in a stressor condition—organizational culture itself is flawed, sometimes fatally so. Organizational efficiency is irrevocably dependent upon organizational valuation of knowledge.⁴⁴

⁴⁴ While a discussion of organizational culture lies outside this monograph's purpose, it is important to realize that the proper consideration of the organizational design elements herein proposed, especially the relationship of knowledge valuation to overall efficiency, do more than just interact with organizational culture—they in fact define it. Edgar Schein stresses the importance of the leader's recognition of the influence of organizational culture, particularly during times of stress:

Leaders who find themselves in a mature organization that has developed dysfunctional processes, and who therefore must think of themselves as agents of change, need two particular characteristics. First, they have to have the emotional strength to be supportive of the organization while it deals with the anxieties attendant upon unlearning processes that were previously

Because knowledge and experience are so critically important in shaping the human element of an organization, the leader must not leave its acquisition and nurture to happenstance. The leader constantly must ask himself, “What knowledge should be valued by my organization?” The leader typically must overcome three biases that may inhibit the proper identification of knowledge. First, novelty is neither inherently more innovative nor better than older methods and solutions. Second, the analytic process of solution development may focus on the wrong problem. Thirdly, the knowledge necessary at other levels of the organization (either higher or lower) may not be appropriate. Once the leader has removed obstacles to proper knowledge prioritization, then he can address the issues and methods of how to store knowledge for future use and how to propagate knowledge within the organization. The organizational leader, once in possession of an organization comprised of a human element equipped with appropriate knowledge and focused on objectives directly supportive of organizational purpose, now must address a final element: the sustainment of organizational efficiency in terms of the necessary interaction of subordinate leaders and the leaders of external organizations.

7th Element: Efficiency and the Leader-Subordinate Leader Relationship

The organizational leader and subordinate leader(s) collectively are responsible to articulate the organization’s purpose; when they do not share a common understanding of the purpose, then the possibility for multiple conflicting or divergent interpretations of purpose exist.

successful, that is, the ability to create for the organization a sense of “psychological safety”. And second, they need a true understanding of cultural dynamics and the properties of their own organizational culture.

The critical thing to understand about cultural dynamics is that leaders cannot arbitrarily *change* culture in the sense of eliminating dysfunctional elements, but they can *evolve* culture by building on its strengths while letting its weaknesses atrophy over time. Culture cannot be manipulated by announcing changes or instituting “programs”. If the organization has been successful doing things in a certain way and has evolved mental models based on those methods, it will not give them up. However, mental models can be broadened and enlarged.

Ibid, 64. This monograph’s argument is that proper valuation of knowledge will positively affect organizational efficiency of action and purpose. This valuation, one largely based on perception and subjectivity, in turn becomes a significant determinant of organizational culture.

Organizational leaders often must contend with the diffusion of decision making power, particularly as an organization grows in size or its formal purpose expands in scope. This diffusion of power, such as occurs when a leader divides decision authority among relative peers or delegates it to subordinates, becomes a practical necessity when the leader's effective span of control is eclipsed.

As already demonstrated, purpose provides an organization with its compass heading, and should be simple, durable, and communicable. This dynamic does not change when an organizational leader delegates decision making authority; unity of purpose remains paramount. The mechanics of shared responsibility for organizational purpose in a superior-subordinate relationship are unambiguous. When A delegates to B the authority to make decisions in A's name, he incurs the responsibility—whether implicitly, or stated explicitly—to act in a manner consistent with A's guidance and stated purpose. However, when A delegates authority to B to act completely autonomously and make decisions in B's name, A effectually is giving—not delegating—authority to B, and is creating a peer—not a subordinate—leader. Probably a more common expression of this A-B relationship is as a hybrid, wherein the leader—within the context of an overall leader-to-subordinate relationship—grants autonomous peer authority within specified limits. For example, when a battalion commander agrees to accept his Command Sergeant Major's recommendations for nonjudicial punishment for all enlisted violations of the UCMJ not otherwise prescribed by regulation, he is making him a peer leader within this specified area of action. Furthermore, the commander is consciously making this decision in order to improve unit efficiency (whether described in terms of morale, discipline, or NCO empowerment).

The A-B leader-subordinate leader relationship may result in organizational inefficiency in several cases:

1. When A delegates authority to B, but A and B do not share a common understanding of purpose; inefficiency stems primarily from divergent purposes.⁴⁵
2. When A delegates authority to B, but B interprets this delegation as authority for autonomous action; inefficiency may stem from over-action and divergent purposes.
3. When A grants autonomous authority to B, but B interprets this grant as a delegation of authority. A automatically avoids interfering, allowing B the necessary freedom to act; B fails to act because he expects continuous guidance and feedback from A. Inefficiency results from under action, because B has defeated whatever ‘fresh look’ or degree of efficiency A hoped to achieve.
4. When A grants autonomous authority to B and B accepts autonomous authority, but A insists on intervening in B’s activities; friction between A and B is likely to cause inefficiency due to conflicted guidance to subordinates and delays in necessary action.

It should be obvious that in all four cases the common problem is one of communication. Two considerations chiefly affect the fidelity of communication. The first is the quality of interpersonal relationships among organizational leaders, subordinate leaders and peer leaders; the second is the physical number of subordinate leaders that exists at a given level of organization. Communication must be both effective and complete— *every* subordinate leader must *understand* every message because every subordinate leader is making decisions for the organization. Not only are people skills at a premium, but the organization must integrate

⁴⁵ Note that purposes may diverge over time, often because A assumes B is competent enough to require little or no supervision. This assumption is a fallacy, however. A’s true motive lies not in B’s assessed competency, but in A’s desire to shepherd his own personal resources, especially time. By not providing regular supervision, A unintentionally establishes B as a peer leader. Assuming B indeed is a competent subordinate leader, he will base his actions on his interpretations of A’s original intent and organizational purpose. Over time, B’s organizational decisions and guidance to followers may cement a course of action not intended by A. When A fails to perceive such organizational drift and takes no corrective action, then the potential peril is even greater and overall organizational inefficiency increases.

effective means of mass management of organizational purpose. Open door policies and town hall meetings are examples of such enabling tools, but they must be more than mere window dressing; they must be part of a coherent, deliberate, and synchronized organizational effort to maintain true to purpose in the most efficient way possible.⁴⁶

Remember that a leader delegates authority to increase his effective span of control, either over a large organization, or a specialized function of the organization, or both together. Sometimes a subordinate leader charged with a very technical, specialized function, a function that those outside his own sub organization do not understand well, assumes the character of a peer leader for this function. He demonstrates a degree of autonomous impact over the organization as a whole not intended by the leader. An example of this might be a G6, a staff communications officer, tasked with integrating information technology (IT) to automate—and make more efficient—the organization’s internal staff coordination and communication. If the momentum to automate internal staff communication manages to supplant the original organizational imperative to improve staff coordination and communication, then the G6 effectively has become a peer leader and is in fact defining the efficiency of coordination and communication in terms of IT automation, an area of expertise no one else can question competently. Any failure to improve the efficiency of internal coordination and communication

⁴⁶ While the actual number of sub organizational leaders itself is not indicative of a problem, a large number of people possessing decision making authority for a given level or organization might nevertheless prompt additional scrutiny to ensure that the organization’s purpose and actions are fully synchronized. For example, in 1964, when the National Guard and the NGB were as fully engaged in reform and modernization activities following the Berlin Crisis as they are now after the 9/11 attacks, the entire NGB staff consisted of 98 uniformed and 275 civilian personnel organized into 15 offices. This staff supported a National Guard 454,000 strong, of which more than 37,000 were full time technicians. In 2001, the strength of the National Guard was 484,000, and the NGB staff included fully 77 persons of office chief or equivalent status. This represents a minimum of 77 persons with some degree of authority to make decisions for the NGB directly, that is, in the name of the Chief, NGB. The size of the staff as well as the number of Colonel and GS-15 office chiefs has continued to grow since the 9/11 attacks. Increases in the numbers of contractor personnel and National Guardsmen on temporary tours of active duty from their states may warrant special consideration because they are most likely to be ignorant of the overall mission and purpose of the National Guard and the NGB. *Annual Report for 1964*, 6; *Annual Review for 2001*, 1.

is apt to be interpreted as stemming from internal resistance of the organization to properly integrate and utilize IT technology; the real cause of failure—and possibly even the worsening of conditions—may not be investigated or even suspected.

The problems associated with making the interagency process work efficiently illustrates the difficulties encountered when peer leader relationships are necessary to achieve a larger organizational purpose. Such peer leadership roles typically are directed rather than delegated, as when the various departments of government attempt to act out their statutory responsibilities in a collective fashion. The crux of the interagency problem is that nothing compels cooperation short of direct intervention by Congress or the President, and even then there is no guarantee that such cooperation will be effective. The President's National Security Strategy prompts his cabinet heads to publish supporting strategy documents for their own departments, but at no point is the process disciplined to ensure that fully coordinated strategy documents are produced—neither the President, his National Security Advisor, nor the National Security Council itself provides such coercive direction. The irony is that at the tactical level—the ‘tip of the spear’ as they say, where decision making authority is weakest and resources are least abundant—the interagency identification of common purpose is likeliest to occur. The character of organizational level peer leader relationships largely influences the productivity and efficiency of cooperation at sub organizational levels.⁴⁷

⁴⁷ The Goldwater-Nichols Department of Defense Reorganization Act of 1986, normally heralded as the champion of interservice cooperation and efficiency with the US military, may actually have retarded progress towards true ‘jointness’. The interservice success of the War Department’s WWII organization, particularly as regards strategic campaign planning and planning for the postwar occupation of Germany and Japan, often is studied as an example to strive for. While the logic fails on several substantive points, a key one is that during WWII the War Department consolidated strategic planning and resourcing under the Joint Chiefs of Staff, with decentralized strategic execution under field commanders. Goldwater-Nichols changed this dynamic, retaining strategic resourcing in the Pentagon (as the service chiefs’ ‘Title 10 responsibilities’), but delegating to Combatant Commanders the responsibilities for strategic planning and execution. The overall efficiency of US military preparations in anticipation of future security requirements—resourcing and planning—now requires a high degree of peer leader cooperation between the service chiefs and combatant commanders. Only the President and the Secretary of Defense possess the authority to intervene directly within these peer leader relationships. For more on the history of Goldwater-

The lesson for the organizational leader is obvious: There is no such thing as an organizational autopilot. The constant attention of the organizational leader is a mandatory requirement to keep the organization aligned on its purpose and efficiently achieving necessary supporting objectives. The degree of leader intervention or direction is needs-based, and often may be found to be proportionately greater when the number of subordinate and peer leaders is greater.

Conclusion

The leader has a tremendous responsibility to keep his organization focused on its purpose, one that exists independently of any subjective leadership skills or professional knowledge that might be required by a specific function of a given organization. The theories on just how leaders go about shaping their organizations are diverse and quite numerous, and travel beyond this paper's scope. The twofold observation of this discussion only is that such things need doing in any and every organization, but also that human habit tends to obscure the necessity of action.

The methods employed by a military leader and a business leader to manage their subordinates will be (or should be) tailored to the requirements dictated by organizational purpose; it is quite reasonable to expect the methods themselves to be different. What is common is the need to prepare those personnel to accomplish the organization's purpose.

This monograph has sought to demonstrate the central role that expression of purpose plays in any organization, and the leader's responsibility to act as the custodian of organizational purpose and the needs of organizational personnel in the attainment of that purpose. An organization's efficiency in achieving its purpose defines the very relevance of that purpose. The conceptual separation of the efficiency of action from the efficiency of purpose allows the leader

Nichols see Jonathan Parshall and Anthony Tully, *Shattered Sword: The Untold Story of the Battle of Midway* (Washington, DC: Potomac Books, 2007).

to consider the appropriateness of both action and purpose, individually and in combination.

Where a clear distinction between the two does not exist, an organization may erroneously state its purpose in terms of action (or method). Such a focus on *how* at the expense of *why* must be avoided, because it may permeate throughout an organization, ultimately limiting adaptability and innovation—which may help to explain an unrelenting fascination by the field of management with the need to create organizations that are adaptable and innovative.

The concept of the stressor event similarly gives the leader another tool with which to assess the appropriateness of organizational purpose and related actions. The expression of purpose in terms of the stressors an organization is likely to have to respond to not only focuses leader attention on the knowledge and capability requirements of the organization needed to establish organizational objectives, but also fosters inquiry about the relevance of existing stressors and speculation about future stressors. Such inquiry helps to keep organizational purpose vibrant, relevant, and focused.

One of the most critical elements in the leader-people-purpose makeup of an organization is the knowledge necessary for the empowerment of the people to achieve the organization's purpose. The need for knowledge is a fact. The leader's identification of necessary knowledge and determination of how to propagate that knowledge within an organization, is art. To a greater or lesser extent, this art serves to define organizational culture as well. The manipulation and prioritization of knowledge is dependent largely on leader perception and subjective assessment; efficient knowledge propagation also is dependent on the human capacity to learn and apply requisite knowledge. Again, a discussion of actual methods is not intended, nor is a treatment of organizational culture. It is sufficient to explain how perceptions of efficiency can influence, for better or worse, how necessary knowledge is identified within an organization.

A key concept is how the roles of subordinate and peer leaders develop in an organization. Recognition of why and how subordinate and peer leaders should interact to promote a common organizational purpose hopefully will allow the leader to take proactive steps

instead of merely reactive corrective steps prompted by a subordinate's divergent action. No matter how competent a subordinate may be, he will fail in the long run if the leader allows his relationship with his subordinate to run on autopilot.

Finally, the reader must be understand that the organizational design model developed is intended to aid a leader's internal organizational assessment. While potentially of some use in evaluating the organization of a peer leader engaged in a mutually shared purpose, the danger of mirror imaging one's own organizational concerns and perceptions is too great in external applications. For instance, the nested structure of organizations familiar to Americans may have no corollary in a foreign country, such as Iraq, where local, provincial, and national levels of authority not only may not perfectly nested, they often may exist in violent opposition. Perhaps the design elements could be modified to accommodate a wider applicability, but that would deviate from this paper's central purpose.

This monograph hopefully has contributed to the exploration of why competent leaders sometimes make less than optimal decisions, when hindsight indicates better solutions were within reach, and why those leaders may fault the methods employed but seldom indict the system of organization that prompted the selection of those methods. Should the organizational model presented help provoke thoughtful deliberation of organizational purpose, the actions necessary to achieve that purpose, and the knowledge required to enable those actions, and culminate in a synchronization of effort and increased organizational efficiency in planning for the future and executing in the present, then a degree of success will have been attained.

APPENDIX 1

Evolution of the National Guard Bureau's Statement of Purpose

While the NGB's mission is stated clearly in law and regulation, these are not the typical means of educating staff members about organizational purpose. What has served the NGB well in this capacity over several decades is the *Annual Report of the Chief, National Guard Bureau*; the reports effectively communicate necessary organizational information to both internal and external audiences. The following description of NGB's mission is excerpted from the *Annual Report* for 1964:

The National Guard Bureau is both a staff and operating agency. As the chart shows, it is a joint Bureau of the Departments of the Army and Air Force. The Chief, National Guard Bureau, reports to the Secretaries of the Army and the Air Force through the respective Chiefs of Staff and is the principal staff advisor on National Guard affairs.

As an operating agency, the National Guard Bureau is the channel of communication between the States and the Departments of the Army and the Air Force. (AR 130-5/AFR 45-2 which implements section 3015(a) of title 10, United States Code, as amended by Section 12, Department of Defense Reorganization Act of 1958 (Act, 6 Aug. 1958, 72 Stat. 514,521).

At the end of 1964, the office of the Assistant Chief, NGB, Army National Guard, was organized into five divisions, and the office of the Assistant Chief, NGB, Air National Guard, was organized into six divisions. Also, in the Bureau "overhead" organization were the Administrative Office and the Office of the Legal Advisor; Office of Public Affairs; and Office of Plans, Policy, and Programs. Two new offices were added during FY 1964: Special Assistant for Congressional Liaison, History and Reports; and Special Assistant for Data Systems. These offices advise and assist the Chief, National Guard Bureau on both Army and Air matters.

The function of the National Guard Bureau is to formulate and administer a program for the development and maintenance of Army and Air National Guard units in the several States, the Commonwealth of Puerto Rico, and the District of Columbia, in accordance with Departments of the Army and Air Force policy and the dual State and Federal missions prescribed in law and regulations.

The Chief of the National Guard Bureau is appointed by the President, with the advice and consent of the Senate, from a list of National Guard officers recommended by the respective Governors, for a term of four years, and is eligible to succeed himself. The grade authorized for this position is major general.

Annual Report of the Chief, National Guard Bureau for Fiscal Year 1964 (Washington, DC: National Guard Bureau, 1964), 9. The annual report for 2001, while not as detailed, nevertheless remains useful:

In 1933, the Militia Bureau was redesignated the National Guard Bureau. After World War II, the Bureau became a joint agency of the Department of the Army and the Air Force. The Chief, National Guard Bureau, reports to the Secretaries of the Army and the Air Force through the respective Chiefs of Staff and is the principal staff advisor for National Guard affairs.

The National Guard Bureau is both a staff and an operating agency. As a staff agency, the Bureau participates with the Army and Air Staffs in the development and

coordination of programs pertaining to or affecting the National Guard. As an operating agency, the National Guard Bureau formulates and administers the programs for the training, development, and maintenance of the Army and Air National Guard, and acts as the channel of communication between the States and the Departments of the Army and the Air Force.

The Chief of the National Guard Bureau is appointed by the President, with the advice and consent of the Senate. The Chief, National Guard Bureau is appointed for a term of four years, and is eligible to succeed himself. The grade authorized for this position is lieutenant general.

Annual Review of the Chief for 2001 (Washington, DC: National Guard Bureau), 3. Even the title is less informative than previously.

Due to the continually delayed publication of the *Annual Report* since 9/11—the publishing office, NGB Historical Services—has fewer personnel assigned even though its workload has increased—the NGB routinely uses the annual *National Guard Posture Statement* as a substitute deskside reference. The *Posture Statement* is a much shorter document, and is devoted exclusively to the National Guard's current activities and of its future resource requirements; it makes absolutely no attempt to explain the mission or purpose of either the National Guard in general or the NGB in particular. The document is far less useful than the *Annual Report* as an instructional device. The closest that the posture statement for 2009 comes to describing organizational purpose is in the Chief, NGB's introduction:

In the 371-year history of our National Guard, the year 2007 will no doubt be remembered as one of historic proportions. We are members of a National Guard in the midst of significant evolution.

We have become an operational force, fighting side by side with our active duty partners, working hard to win the long war against terrorism that began some six and a half years ago. While we are an essential force multiplier in the overseas warfight, we also remain focused on and connected to our constitutional roots as the organized militia of the states, prepared to rapidly respond domestically under the command of our nation's Governors whenever and wherever we are needed in the 54 states and territories.

The President, Congress, the Secretary of Defense, the Secretaries of the Army and Air Force, the Governors and the Adjutants General all agree: The country needs a National Guard that is manned, resourced, ready and structured to meet the security challenges of the 21st century.

National Guard Posture Statement for 2009 (Washington, DC: National Guard Bureau, 2008), 2. The posture statement attempts to meld current fiscal year facts, prior year historical data and following year resource requirements, and can be confusing at points. Reminiscent of the same problems discovered earlier in FM 1, the statement does not adequately address the purpose—the *why*—of the National Guard or the NGB.

The example of the evolution of NGB's statement of purpose is meant to highlight the problems shared by many organizations in maintaining deep awareness of organizational purpose. The same problem can be detected in Army doctrinal publications, and doubtless exists in many if not most organizations of all types. Organizational purpose above all else must be continuously reinforced, cultivated, and revised as necessary in order to keep organizational actions efficiently focused. The failure to maintain a simple and durable statement of purpose is an indicator of a potential source of inefficiency.

BIBLIOGRAPHY

- Birtle, Andrew J. U.S. Army Counterinsurgency and Contingency Operations Doctrine, 1942-1976. Washington, DC: United States Army Center of Military History, 2006.
- Bradley, John H. and Jack W. Dice. *The Second World War: Asia and the Pacific*. West Point, NY: United States Military Academy, 1977.
- Bucholz, Arden. *Moltke, Schlieffen, and Prussian War Planning*. Providence, RI: Berg Publishers, 1991.
- Chandler, Alfred D. *The Railroads: The Nation's First Big Business*. New York: Harcourt, Brace and World, 1965.
- Clausewitz, Carl von. *On War*. Edited by Michael Howard and Peter Paret. Princeton, NJ: Princeton University Press, 1989.
- Dewey, John. *Democracy and Education: An Introduction to the Philosophy of Education*. 1916. Reprint, New York: Free Press, 1997.
- Drucker, Peter F. *Management Challenges for the 21st Century*. New York: HarperCollins Publishers, 1999.
- Dörner, Dietrich. *The Logic of Failure: Recognizing and Avoiding Error in Complex Situations*. Cambridge, MA: Perseus Books, 1996.
- Emerson, Ralph Waldo. "Self-Reliance." In *Selected Writings of Ralph Waldo Emerson*, edited by Brooks Atkinson. New York: The Modern Library, 1950.
- Ferguson, Eugene S. *Engineering and the Mind's Eye*. Cambridge, MA: The MIT Press, 1992.
- Glines, Carroll V. *The Doolittle Raid: America's Daring First Strike Against Japan*. New York: Orion Books, 1988.
- Harvey, David. *The Condition of Postmodernity: An Inquiry into the Origins of Cultural Change*. Cambridge, MA: Blackwell, 1992.
- Heifetz, Ronald A. *Leadership Without Easy Answers*. Cambridge, MA: The Belknap Press of Harvard University Press, 1994.
- Hesselbein, Francis, Marshall Goldsmith and Richard Beckhard, eds. *The Leader of the Future: New Visions, Strategies, and Practices for the Next Era*. San Francisco: Jossey-Bass Publishers, 1996.
- Locher, James R. III. *Victory on the Potomac: The Goldwater-Nichols Act Unifies the Pentagon*. College Station, TX: Texas A&M University Press, 2002.
- MacArthur, Douglas. *Reminiscences*. New York: McGraw-Hill Book Company, 1964.
- Mathews, Matt. *The Posse Comitatus Act and the United States Army: A Historical Perspective*. Fort Leavenworth, KS: Combat Studies Institute Press, 2006.
- Mintzberg, Henry. *The Rise and Fall of Strategic Planning: Reconceiving Roles for Planning, Plans, Planners*. New York: The Free Press, 1994.
- National Guard Bureau. *Army National Guard After Action Report for Operation DESERT SHIELD and DESERT STORM (2 August 1990 – 28 February 1991)*. Washington, DC: National Guard Bureau, 1991.

- National Guard Bureau. *Annual Report of the Chief, National Guard Bureau, Fiscal Year 1964*. Washington, DC: National Guard Bureau, 1964.
- National Guard Bureau. *Annual Review of the Chief, 2001*. Washington, DC: National Guard Bureau, [2002?].
- Naveh, Shimon. “Fostering Operational Command, Operationalizing Systemic Design.” Instruction, School of Advanced Military Studies, Fort Leavenworth, KS, October-November 2007.
- Parshall, Jonathan and Anthony Tully. *Shattered Sword: The Untold Story of the Battle of Midway*. Washington, DC: Potomac Books, 2007.
- Peter, Laurence J. *Why Things Go Wrong, or, The Peter Principle Revisited*. New York: William Morrow and Company, 1986.
- R. B. Seed, R. B. and R. G. Bea, R. I. Abdelmalak, A. G. Athanasopoulos, G. P. Boutwell, J. D. Bray, J.-L. Briaud, C. Cheung, D. Cobos-Roa, J. Cohen-Waeber, B. D. Collins, L. Ehrensing, D. Farber, M. Hanemann, L. F. Harder, K. S. Inkabi, A. M. Kammerer, D. Karadeniz, R.E. Kayen, R. E. S. Moss, J. Nicks, S. Nimmala, J. M. Pestana, J. Porter, K. Rhee, M. F. Riemer, K. Roberts, J. D. Rogers, R. Storesund, A. V. Govindasamy, X. Vera-Grunauer, J. E. Wartman, C. M. Watkins, E. Wenk Jr., and S. C. Yim. *Investigation of the Performance of the New Orleans Flood Protection Systems in Hurricane Katrina on August 29, 2005*. National Science Foundation sponsored project report under Grants No. CMS-0413327 and CMS-0611632. [Berkeley, CA?], 2006. (accessed April 17, 2008).
- Salmond, John A. *The Civilian Conservation Corps, 1933-1942: A New Deal Case Study*. Durham, NC: Duke University Press, 1967.
- US Army Training and Doctrine Command. *TRADOC Pamphlet 525-5-500, The U.S. Army Commander’s Appreciation and Campaign Design*. Fort Monroe, VA: US Army Training and Doctrine Command, 2008).
- Wass de Czege, Huba. “Unified Quest Postscript 2 (June 29, 2007): On Inserting Systemic Operational Design (SOD) Derived Ideas into US Army Doctrine.” Instruction, School of Advanced Military Studies, Fort Leavenworth, KS, October 2007.