Desert Storm Lessons from the Rear

RICHARD SZAFRANSKI

As used by our Marine colleagues, REMF is an acronym that describes those of us who were not in direct contact with the enemy during Desert Storm. The "r" and the "e" stand for "rear echelon." A Marine friend can privately explain the rest. As I use it, however, REMF is an acronym that stands for "rear echelon managerial factotum"—in short, a staff officer. I do not intend and will not use any other translation.[1]

To combatants, REMFs are those distant, detached, and faceless hundreds responsible for planning, transportation, and logistics during deployment, and force sustainment during employment. The responsibilities of REMFs range from moving people, beans, bullets, bandages, basketballs, and mail, to planning how each of these will be consumed and resupplied.

Among REMFs are staff officers in combat support and combat service support within the theater of operations, and those in headquarters at the division, corps, fleet, army, or air force level, wherever those headquarters are located. The most powerful REMFs are found at the headquarters of unified and specified commands, on the service staffs, or in the Joint Staff. REMFs are the ones that pull the ropes that make JOPES (Joint Operation Planning and Execution System) work.[2]

In Desert Shield and Desert Storm, REMFs were charged with managing the theoretically seamless logistics tail. This tail snaked back all the way from the periphery of Kuwait through nodes as far-flung as Vaihingen, Honolulu, Washington, Tampa, Norfolk, Omaha, and Belleville, Illinois.[3] REMFs caused all the activity at the sea and aerial ports, managed the timing and tempo of deployments, and pushed millions of tons of people and things into the able hands of allied combatant leadership.

Within this very broad definition of REMF, I was one during the Gulf War of 1990-91. I worked in aircraft maintenance at a stateside strategic

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bombardment (B-52H) and aerial refueling tanker and cargo (KC-135A) wing. Our responsibilities included sending aircraft maintenance people, equipment, and tanker aircraft to the theater and thereabout, inspecting and repairing tankers as they returned, and responding to a wide range of taskings incident to the utilization of our cargo-tanker aircraft. As a REMF, I spent many long hours working with and responding to other REMFs.

Even though total national mobilization was not required to meet the immediate military objectives of Desert Storm, few of us on duty in the broadly defined rear echelon were unaffected by the deployments and employments that were prelude to an overwhelming military success. So even REMFs had the opportunity to learn some lessons from the conflict. Sadly, what we learned may apply mostly to REMFs. Nonetheless, both Desert Storm combatants and noncombatants—perhaps the next generation of REMFs—need a record of these lessons for future conflicts. There are at least five lessons (a pentagon if you will, especially symbolic and meaningful to REMFs) that warrant recording.

• *Nobody likes REMFs.* Although it is impossible to plan and execute a large-scale military intervention or fight a war without REMFs, nobody likes them. They are, after all, "tail." And conventional military wisdom proclaims tail as categorically inferior to "tooth."

Moreover, and not just because REMFs are safely ensconced in the rear, a majority of combatants may find REMFs silly, bossy, shortsighted, unrealistic, and thoughtless. REMFs are known to some for asking stupid questions (usually prefaced with "My general wants to know"), for demanding quick and simple answers to complex questions (the preface normally being followed by "Right now"), and for seeming largely insensitive to the real environment in which field units operate. Jaws tighten and teeth grind when the words "headquarters says" or "headquarters wants" are spoken anywhere out in the field.

In peacetime REMFs are a nearly unremitting irritant. In crises or conflicts, REMFs are often a distraction. Hence, REMFs are friendless in peace and war. Perhaps as a consequence of this prejudice against REMFs, headquarters staffs at every level were the target of large prewar personnel reductions.

While there still might be some peacetime fluff, from my vantage there appeared to be only a bare minimum of headquarters staff people

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available to do the required work during the war. People detailed from their REMF jobs to headquarters battle staffs, logistics and operations readiness centers, and other war-related oversight and management functions had to leave their day-to-day work largely untouched. While detailed, they worked to—and sometimes beyond—the point of mental and physical exhaustion. Their regular duties were neglected, and the caliber of their wartime performance often reflected their fatigue.

As a consequence, REMFs were credited with a number of verifiable errors and miscommunications, along with some notable, costly, and singularly inefficient misdirections. REMFs alerted portions of some units to be prepared to move on a future date, only to determine at the last minute that other REMFs had intended that a different unit move. REMFs sometimes dispatched the wrong equipment, sent the right people to the wrong place, and thoughtlessly relocated equipment that was already correctly positioned. In some cases, REMFs tasked already-deployed people or equipment to deploy yet again.[4]

When the little REMFs at unit level suggested to the big REMFs at the distant headquarters level that a particular movement did not appear to make much sense, the responses sometimes ranged from "I don't have time to explain it to you," through "You don't have a need to know," to "Just do it." In each case, factors contributing to the error, miscommunication, or misdirection must certainly have been overwork and fatigue. There appeared to be too much work for too few REMFs.

The lessons here are that significant deployments and large combat operations—like it or not—require a ready pool of REMF resources. And to have that pool we must either preserve larger staffs in peacetime or totally and temporarily divest the headquarters staffs of other responsibilities in wartime. Failing these remedies, future crises and wars may not receive the full-time staff support they require.

More personnel cuts are on the horizon. As we contemplate reducing headquarters staffs even further, we need to consider how headquarters staff reductions (in the neighborhood of 20 to 30 percent) will or might affect our ability to perform the staff management functions that will be required in any future wars. Since nobody likes REMFs (including the REMFs responsible for identifying personnel billets for deletion), the potential for metatarsal marksmanship is high. It is so high that we will very probably engage in it when future personnel reductions are made.

- *Expect communications overload and information underload.* The force-tailoring and force-sizing requirements of Desert Shield and Desert Storm were the genesis of many of the problems encountered by or caused by REMFs. There can be no doubt that the National Command Authority must be able to constitute crisis response forces tailored to the size and character

of a provocation. At the same time, however, automated military data reporting systems and force requirement generators must be adequate to support rapid adaptive planning.

When either of these is inadequate, the shortcomings of automated data reporting systems and automated force requirement generators become interactive and compound the problems REMFs face or are liable to cause. Changes made to force sizes or force composition beget changes to the time-phased force and deployment data (TPFDD) and list (TPFDL), the time-phased transportation requirements list (TPTRL), and the aerial port of embarkation (APOE) extract. As these change, they beget further changes to the status of forces. If the changes occur rapidly, even the best REMFs cannot keep up with them. When our automated monitoring system loses track of the situation as it actually exists on the ground, REMFs are more likely to exacerbate problems than they are to solve them.

Whenever forces are to be tailored, REMFs must be supported by automated systems that allow them both to stay abreast of the changes they are making and to assess the impact of changes. And, of course, some force-tailoring decisions are better than others. As air forces were tailored to meet the requirements of Desert Shield and Desert Storm, REMFs may have caused many of their own problems.

For example, rather than deploy entire, integral, and cohesive units as tailored forces, REMFs instead decided to create new "provisional" units. Moving 500 people and their complement of equipment from a *single* air base to a forward-deployed location is no easy chore. But to move the same number from dozens of different units and 15 or 20 separate points of origin is an almost impossibly difficult exercise. (And even when they arrive at the deployment location, the advantages of already-extant work relationships, leadership, and SOPs are lost.) Moreover, each of these changes affected the status and capabilities of the units from which personnel or equipment were withdrawn. This, in turn, affected automated reporting.

REMFs learned that prewar personnel and equipment status reporting systems had limited utility during the deployment and the employment phases. These limitations include the kinds of information reported, the format of reports, their frequency and timing, and the communications modes used.

The "Unit Status and Identity Report," or UNITREP, results in data that may look nice on the big boards that seem to be the centerpieces of the

command centers of the world.[5] But the data may not actually communicate much. During Desert Shield and persisting beyond Desert Storm, the situation was always so dynamic that UNITREP was merely representative of how things *were*. Decisionmakers, however, need to know how things *are*, and, at present, some UNITREP data-supporting systems are not crafted to always provide real-time answers.

As a consequence, REMFs were forced to create additional and more-timely formatted reports and reporting requirements (including all the associated definitions, rules, and guidelines) for field units and other REMFs to fulfill. More than just causing gluteal discomfort at an intensely busy time, this workload was additive to operations more central to meeting the objectives of the war.

Emerging from this experience ought to be the requirement to develop reporting systems that incorporate both "get well" and "get worse" dates. Oftentimes field units definitely knew that their status would get either better or worse within 24 or 48 hours, but existing reports seem to be both indifferent and insensitive to these kinds of forecasts, insisting instead on the status at the moment it was rendered when such was actually misleading so far as impending hostilities were concerned.

For example, some status reports might have an information cutoff or "as of" date that corresponded with the last day of the month. If a number of aircraft and people were scheduled to move on the second or third day of the next month, the report would be accurate at the moment of dispatch, but grossly inaccurate (and useless as an aid to decisionmaking) 48 hours later. Yet, REMFs had little choice but to continue submitting these kinds of largely useless reports. As a result of the limitations of such prewar reporting systems, new reports proliferated, and existing reports—to be accurate—had to be supplemented and qualified by other communications means. Predictably, communications overload resulted.

"Routine" text intended for electronic communications curled and aged awaiting dispatch in communications centers stressed with "Immediate" and "Flash" traffic. The authentically routine material had to be categorized as "Priority" to move, and real priority communications were best transmitted immediately via the telephone.[6]

Hence, the secure telephone proved to be the REMFs' most useful communications tool, with the facsimile modem—both secure and nonsecure—a close second. Yet, after the first few REMF-to-unit misdirections, field commanders rightly refused to respond to "telephone taskings." For example, a unit might be tasked by telephone to configure an aircraft in a specific way for deployment in 12 hours, only to learn 11 hours later that the requirement had been changed or canceled, or the deployment date delayed. In the interval, effort had been unnecessarily expended, the use of an airframe was lost, crews

were resting for a mission that never materialized, and the entire flying operation was perturbed. Rather quickly, commanders insisted on seeing it in writing as a protection against consuming resources unnecessarily.

REMF-to-REMF or REMF-to-unit assurances that "hard copy" would follow immediately invariably proved incorrect. "Immediately," in those cases where a message actually materialized, usually meant many hours later. In the absence of written directions, field commanders were liable to be burned by telephone directions, and most field commanders are more savvy than Mark Twain's cat.[7] Yet, they are not so savvy that they always realized the effect that their demands for written directions, clarifications, and amplifications would have on the command and control communications system.

Ironically, the unavoidable offshoot of clogged communications channels, rigid adherence to limited-utility prewar reporting requirements, constantly amended old reports, and an ever-expanding domain of new reports was information underload. Status-of-forces information could and did flow rapidly via fax and telephone, but REMF-to-unit tasking and direction—the most important information a unit needs—was not considered authoritative unless it was provided in record copy. A rear-echelon unit could be moved to action by a senior commander to subordinate commander telephone call, but these were rare. (Few REMFs apparently were willing to confess to their commanders that no one in the field was eager to comply with REMF telephone taskings).

1st COSCOM, SSG Michael Hughes

REMFs managed the supply of all essential consumables—beans, bullets, bandages, . . . and even bottled water.

An increase in the number of secure telephones would help to keep the big boards updated, but the future also requires an increase in secure facsimile machines. Once-burned units need to see it in writing, and many stateside units were probably burned—prematurely or incorrectly tasked—by a telephone call at least once during Desert Shield or Desert Storm. Moreover, the particular enemy we faced in Desert Storm was unable to disrupt our communications means. Whatever stresses that existed were thus self-induced. We should consider the consequences if a more capable future enemy is able to compound these stresses with electronic jamming, sabotage, or physical disruption.

• *There's a lot in the stovepipes, but most of it is smoke.* "Stovepiping" is the condition that exists when staff or support personnel forget that they are subordinate to a line commander. Thus, the field unit engineer may become more responsive to the next-higher-echelon engineer than to the field unit line commander. Similarly, the local logistician or personnel-type may become disoriented and wrongly believe he is subordinate not to his line commander, but to a logistics or personnel REMF at higher headquarters.

Stovepiping is insidious and is almost always done by telephone. (The spoken word leaves less of an audit trail than the written word.) One of the more undesirable consequences of stovepiping is that it creates an architecture wherein the staff is constantly bypassing the theoretically unbroken chain of line commanders, thereby denying commanders at all levels the authority they must have.

The headquarters deputy chief of staff for operations is neither the chief of staff nor the commander. Similarly, the J-3 of a unified command headquarters staff is neither the commander in chief nor the commander of the Army, Naval, or Air Force component command. While these officers may or should understand the commander's intent, they are not the commander. Superior officers though they may be, they are—strictly defined and perforce—REMFs. Unless their each and every direction has absolute fidelity to the commander's intent, they are liable to err. Yet, because they are general or flag officers, they cannot be and should not be corrected or ignored easily by field unit commanders.

When these officers or their staffs put directives into the stovepipe—the J-1 to the local personnel officer, the J-3 to the unit S-3 or G-3, and so forth—the superior commander and the field unit commander are both denied the authority that should be implicit in their titles. Yet, none of us are trained to easily disregard the directions or heads-ups provided by very senior headquarters officers or their staffs.

Thus, for example, when the senior unit personnel officer or logistician tells the field unit commander that the headquarters J-1 or J-4 has directed the unit to prepare for a deployment, the field unit commander is caught in a

There's a lot in the stovepipes, but most of it is smoke.

dilemma. If the commander acts, he does so without any real authority. Yet, if the commander delays, success may be put at risk. The compromise position is to lean forward, but not too far forward. Some units leaned too far forward by taking irreversible, or extremely difficult to reverse, actions. These units sometimes fell on their faces, at least momentarily.

Another undesirable consequence of stovepiping is that commanders at every level may be deprived of necessary information essential for evaluating options related to planning future events. If REMFs are able to use the stovepipe to force premature actions which alter the disposition of forces, the consequences may be large or subtle changes in the capabilities of those forces. Changed capabilities or repositioned forces may create some options and foreclose others. Unless commanders know the changes that have occurred, it may be the REMF's intent that dominates, not the commander's.

As long as there are REMFs, REMFs will use and sustain the stovepipe. They will attempt to use it to pass directions and they will fill it with inside information. More often than not, however, what comes out of the stovepipe is smoke: incorrect or only partially correct information.

In the future it would be helpful if commanders at all levels admonished their staffs to recognize the merit of a chain of command, unbroken by the sometimes inappropriately anticipatory guidance or direction of well-intended but meddling staff REMFs. It should be axiomatic that one cannot endorse the idea of unity of command while simultaneously using the stovepipe to fragment it.

It would be helpful in reducing the tendency toward stovepiping if personnel and equipment deployment modules were made smaller and more numerous. This would simultaneously allow REMFs to do better adaptive planning and make field units less dependent on REMFs for force tailoring information. In the final analysis, the REMFs at all levels muddled through, but it wasn't always pretty.

• *REMFs like to send messages late Friday night or early Saturday morning.* The long-awaited record copy always seemed to arrive late Friday or before dawn on Saturday. Preliminary investigation reveals that some headquarters staffs follow a process that ensures this will almost always be the case.

REMFs generate great ideas—or discover errors—on Monday or Tuesday. Observations or plans are discussed in lower-level headquarters staff meetings shortly thereafter. When agreement is reached at this level, senior REMFs direct junior REMFs to prepare the staff products necessary for decisionmaking and implementation.

Anticipating the decision, REMFs enter the stovepipe via telephone and advise the affected units' staff counterparts "to expect a message directing . . . ." Simultaneously, the staff product and draft message begin wending their way up through the REMFs' headquarters hierarchy. Questioned, amended, and wordsmithed at every turn, the staff product is not ready to go to the general until late in the week.

In the meantime, the situation in the field may have changed, thereby invalidating some element of the telephone tasking. Personnel required to support the evolving Plan C may have departed in support of Plan B. Aircraft required for the incubating plan may have moved or become broken. Equipment needed might have been removed from service for long-term periodic maintenance, or dispatched to correct an unanticipated shortfall discovered in Plan A.

This updated information would flow up through the stovepipe and necessitate late-week revision of the slowly maturing staff product. The decisionmaker would not see a final product until perhaps Thursday, and not render a decision until Friday.

By late Friday the affected units would be advised by telephone that they would shortly receive an immediate precedence tasking message. And, of course, it would arrive many hours later. Moreover, the actual tasking might be at variance with the description communicated through the stovepipe. If so, more communications would be required to ascertain whether the variance was explainable as a REMF-induced error, omission, or oversight, or an authentic change.

Smaller, on-the-shelf force modules and more responsive reporting systems will help break this cycle in future crises. Already-constituted air composite wings (flying units that are composed of a number of different types of aircraft), for example, will give air component commanders greater flexibility with pretailored and ready-to-employ air elements. And crisis action teams and battle staffs (working directly for the supported or supporting commander in chief) actually empowered to make decisions—as opposed just to doing staff work—would also help. The strongest antidote to the Friday night tasker, of course, would be to assure that staffs and units at all echelons understood the objective and always gave it primacy.

• *The redeployment after a victory will always be less orderly than the deployments that helped enable victory.* Whatever bumps were encountered on the road to success must be judged as small when the outcome is

considered. The larger military objectives were crystal clear and, on balance and in the aggregate, were all met. The objective of the redeployment was to return the victors to home and hearth quickly, however that might be accomplished. Quickly and "however" describe how they are returning.

When provisional units are created out of the penny-packet pieces of many other units, their redeployment will be as much of a piecemeal operation as their deployment was. If a time-phased redeployment data base existed for the initial increments of returnees, it was not apparent to those of us in the field.[8] Amazingly, in some units, waiting spouses talking directly to the deployed member were the single most accurate source of redeployment information.[9]

A transportation analyst or management consultant might, given sufficient time, have contrived a different way or perhaps a better way. To those of us stateside awaiting reunion with our victorious comrades-in-arms, there could have been no better way than the quickest way. If that infuriates some REMF somewhere, then the REMFs ought to dedicate themselves to solving the problem.

Our men and women have now pretty well returned. The other stuff will follow apace. Nevertheless, and fully appreciative of the dynamic nature of military interventions and wars in the coming millennium, we need to strive for more orderly redeployments. Pursuing this quest, we must remain aware that a speedy withdrawal may neither be possible in many cases, nor advisable in most cases. REMFs are well aware of this and must be trusted to engineer the required solutions.

To sum up our five lessons about REMFs: We rely on REMFs, but do not like them. They labor under shortcomings they did not really cause, and cause problems they cannot always avoid causing, problems they cannot solve alone. They are valuable but undervalued members of the team. They are the most sophisticated of the supersophisticated systems upon which our military success is based. Building on Ken Adelman's five Ss for technological innovation in the Gulf War—stealth, sea-launched cruise missiles, SDI-like defenses, space systems, and semiconductors—we can say that staff officers are the sixth S. Without them there would not have been the other five.[10] Moreover, and shortcomings notwithstanding, they put the other five supersophisticated systems where they needed to be, at the right time, and in the right form and quantities.

The pentagon of lessons offered is certainly not the most profound set of insights that will emerge in the wake of the war. Nonetheless, the lessons may be valuable because they resulted from reflection grounded in direct observation and experience. As the academicians, scholars, and fern bar analysts now begin to dazzle us with the deeper truths they garnered from hearsay, press reports, and unclassified accounts, those of us in uniform need to be alert. Whatever template is devised for future victories must be one based

on things learned from those involved. In this regard we have a capital advantage. We, combatants and REMFs alike, were there.

And, by the way, congratulations (or "Bravo Zulu" for our naval colleagues) to all of us. Even the REMFs.

NOTES

1. The background, perspective, and experiences of the reader will ultimately determine the interpretation used, no matter how sincere or lofty my intentions.

2. JOPES is described in the 1986 edition of *The Joint Staff Officer's Guide* (Armed Forces Staff College PUB 1) as an integrated command and control system used to monitor, plan, and execute mobilization, deployment, employment, and sustainment activities. Many elements of the system are automated. For example, the "force requirements generator" (referred to later) is an automated program with modules that allow the staff planner to tailor—add, delete, or otherwise modify—existing force elements and flow them into a time-phased force list.

3. These are the headquarters locations of some (but not all) of the key US commands and command elements that participated in or supported Desert Shield and the successor Desert Storm. They are, respectively: European Command, Pacific Command, the Joint Chiefs of Staff and service staffs, Central Command, Atlantic Command, Strategic Air Command, and Transportation Command.

4. Certainly strategic or tactical deception plans require feints, inscrutable movements, and deliberate misdirections. The objective of these is to befuddle the mind of the enemy. The things to which I refer, however, were plain and simple mistakes. Air units, because they can move quickly and because they were not constituted as composite units prior to the war, were more susceptible to some categories of confusion than other kinds of units. If REMFs do a good job writing their after-action reports, the classified data base of the "Joint Universal Lessons Learned System" (JULLS, pronounced "jewels") will accurately detail whatever mistakes actually were made.

5. UNITREP is the automated data reporting system described in JCS PUB 6 by which "authoritative force status data" is sent to the Joint Staff.

6. It got so bad at one point that the Vice Chairman of the Joint Chiefs of Staff, Admiral Jeremiah, sent a memorable "read my lips" message to commanders, advising that the objective of electronic text "Minimize" was communications discipline. The message, dated 18 January 1991, read in part:

> 1. This message is for CINCs, Service Chiefs, and commanders. Need your immediate help to clear comm[unications] pipelines of all but essential traffic. Previous messages imposed MINIMIZE on Central Command AOR [Area of Responsibility]. [A subsequent message] imposed worldwide MINIMIZE. Message backlogs at major communications switch locations continue to build.
>
> 2. Ensure that only short messages having serious impact on mission accomplishment or safety of life are transmitted. You know what to do; I'll not tell you how to suck eggs. Review your procedures: immediately reduce outgoing msg/AIG/readdressed [message/Addressee Information Group/readdressed] traffic. Jeremiah.

This message is quoted with the kind permission of Admiral Jeremiah.

7. Mark Twain wrote in *Pudd'nhead Wilson's New Calendar* that a cat that sits down on a hot stove lid "will never sit down on a hot stove lid again," but neither will the cat "sit down on a cold one any more." Field commanders are smarter than that.

8. One cause of less-orderly redeployments might be surprise that victory was achieved, or achieved so rapidly. We should not have been surprised over Desert Storm's outcome: we presently possess the best armed forces and the best civilian-military leadership team on this planet.

9. Fortunately, most units had well-organized "waiting spouse" systems operating by September or October of 1990. These proved exceptionally effective when redeployment began. The waiting husbands and wives very often had better, more accurate arrival information than that available in automated logistics information systems. While an indisputable credit to the strength and cohesiveness of the military family writ large, this should not mask the shortcomings of the redeployment plan or data base, nor should it become the operative model for future contingencies.

10. Ken Adelman, "Star Wars in the Desert," *Newsweek*, 4 February 1991, p. 14. I am grateful to Dr. Grant Hammond of the Air War College faculty for calling my attention to this article while reviewing an earlier draft of the present article.