

Statement for the Record

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The condition of our ground force is troubling. Two thirds of our regular brigades and virtually all of our reserve brigades are not combat ready. The Army's Cold War reserves of fighting equipment are nearly gone with half destroyed or worn out though constant overuse. Too many soldiers chasing too many missions for too long have resulted on an Army that spends more time in combat than at home. The stress of back to back deployments has created uncertainty and anxiety among military families that is affecting the morale and resolve of those who we will rely on to fight the Long War for a generation.

These conditions are too well documented to dispute. The issue at hand is what to do next. Past history tells us that often the adversity and stress of war can lead to renewal and rebirth. The Army came out of the trauma of Vietnam resolved to rebuild. That same opportunity exists today.

A Larger Landpower Force

No one from the Vietnam generation ever would have foreseen that America's ground forces would be so stretched for so long without breaking. The robustness and resiliency of the forces in Iraq and Afghanistan testifies to the value of fighting the long war with a long service professional Army and Marine Corps. The bad news is that the Pentagon has grossly underestimated the number of ground forces needed to fight this long war. We have learned painfully that the challenge of recruiting a professional force during wartime dictates that the number and quality available at the beginning of the conflict will never get larger or better. The consequences of this miscalculation have been strategic as well as personal. For the first time since the Civil War the shrinking pool of soldiers is shaping strategy rather than strategy determining our manpower needs.

The lesson for the future is clear. We simply cannot rely on Cold War manning models to tell us how many soldiers and Marines we need. Pentagon personnelists know a great deal about human resource management but very little about war. We must plan future force structures to accommodate the sad fact that wars wear down armies. We must build robustness into our

ground forces, particularly our close combat units, the ones who do most of the fighting and dying.

The planned increase in the size of ground forces is a proper beginning. The Army's effort to modularize an increased number of brigade combat teams will make the best use of this additional manpower. But it is also important to remember that ground forces of the future will be made up of more than just brigades. We will need a very strong corps of trainers, advisors and military assistance groups capable of being sustained for decades in regions of the world where new allied armies will be created or improved. We will need many more specialized units to assist in nation building such as special operating forces, civil affairs, military police and engineers.

How much should the Army grow? If the Army is to restore the optimal ratio of three brigades for every brigade deployed then at least fifty brigade combat teams will be needed to maintain any reasonable presence and fighting capability for the long war. But experience in Iraq shows that casualties will begin to reduce the ranks of these brigades once in combat. So additional close combat soldiers, mainly infantry, armor and Special Forces must be added above and beyond the proscribed table of allowances to insure that these brigades will be sufficiently robust to sustain themselves over an extended campaign. In addition the Army and Marine Corps will need to increase the proportion of leaders to followers, the so called "leader to led ratio," in order to provide additional skilled leaders to advise, train, and instruct coalition partners in the war against radical Islamism.

Materiel

Attrition of the Army's fighting materiel due to wear and combat damage in Iraq presents an opportunity for the Army to rebuild its arsenal. One rebuilding alternative would be to expand the number of light foot mobile infantry and Special Forces brigades. These units are relatively inexpensive to equip and are particularly useful in terrain where vehicular traffic is difficult such as in Afghanistan. But fifty years of experience in American wars has shown that fighting on foot is very costly in human life. Since the end of World War II four out of five Americans from all the services killed at the hands of the enemy have been light infantry, not soldiers and marines, but light infantry, a force that comprises less than four percent of those in uniform.

In contrast, when soldiers and Marines fight mounted in vehicles their chance of survival in battle increases an order of magnitude. Thus it makes sense to rebuild the Army around a core of mechanized brigades. At first glance the cheapest way to rebuild the Army's mounted fighting force would be to repair the mountain of Cold War gear that served the Army so well in the Gulf War and put it back into action. Unfortunately, this generation of Abrams tanks and Bradley fighting vehicles offers protection to be sure but protection unsuitable for today's battlefield. Tanks designed to fight on the plains of Europe in huge tank on tank engagements required very thick and very heavy frontal armor. It's interesting to note that in the practical laboratory of real

combat frontal armor hasn't been terribly useful. Of the tens of thousands of American soldiers killed in wars since the end of World War II fewer than ten died in tanks struck on the front.

Weight extorts a very heavy price in diminished capability. Heavy Cold War era fighting vehicles cannot move great distances. They consume a huge amount of fuel that must be transported by vulnerable unarmored convoys from Kuwait to Baghdad. They cannot be easily transported by air. And it takes a multitude of repairmen, many of them civilian contractors and a huge base infrastructure to keep them running in the punishing heat and dust of Iraq. As we have seen from General Petraeus's recent success in Baghdad fighting a dispersed insurgent is best done by infantry who are able to disperse in turn and stay dispersed for very long periods. The logistics and support demands of Cold War fighting vehicles prevents them from operating for very long in entities much smaller than a brigade while their cramped crew compartments limit severely the number of infantry they carry into battle. The actual price of keeping Cold War materiel in action will actually be very expensive because over the long term these antiques will cost more in maintenance and soldier overhead than the fighting systems intended to replace them.

To be sure the Army will continue to need very heavy Cold War equipped and very light units in some proportion. But a half century's worth of combat experience, to include most recent experience in Iraq, supports the contention that the majority of future ground units should consist of mechanized brigades equipped with a high density of compact, medium weight, easily transportable fighting vehicles such as Stryker today and the Future Combat System tomorrow. We learned in Iraq that more soldiers can be kept alive in combat by placing more of them under armor and allowing them to remain under armor for longer periods. Experience in close combat in places like Falluja suggest that survival rates increase when soldiers are able to move in closer to the enemy before dismounting in the tactical fight. In addition lighter, more agile, reliable and fuel efficient armored vehicles will greatly reduce the size and vulnerability of the logistical umbilical cord that has proven so costly to maintain in Iraq. Medium weight brigade combat teams carry far more infantry into combat, the essential component for counter insurgency operations.

Future medium weight brigades compensate for less bulk and weight by their ability to see and engage the enemy from great distances using broad assortments of aerial and ground sensors. Much of the dirty and dangerous work of tomorrow's mounted soldiers will be done by unmanned robots controlled from FCS fighting vehicles. Future mounted soldiers will have access to the power of a digital network that will provide them with immediate information about the enemy and the whereabouts of fellow soldiers. Future brigades will be able to subdivide easily into much smaller fighting units, at least to company and probably down to platoon, in order to better meet and defeat an insurgent enemy at his own level.

Properly equipping the Army to win the Long War will be very expensive. But we have fought twelve wars in the last thirty years and all but one has been decided on the ground. We will fight

another one sooner than any of us would like so we must start now to build the fighting equipment for a new Army rather than put yesterday's Army back on the shelf.

Cultural and cognitive dominance on the battlefield

All of the pre 911 military pundits who forecast quick victory through shock and awe and precision strike are a distant memory. The techo-centric view of war has failed because it denied the fundamental truth that war is inherently a human rather than a technological enterprise. The future will only increase the relative importance of the human, cultural and cognitive aspects of war. We will continue to witness the classical centers of gravity shift from the will of governments and armies to the perceptions of populations. Success in battle will be defined as much in terms of capturing the human and cultural rather than the geographical high ground. Understanding and empathy are already important weapons of war. The ability to build ties of trust will offer protection to our troops as effectively as body armor. Leaders will seek wisdom and reflective thought rather than operational and planning skills as essential intellectual tools for guaranteeing future victories.

Human capital cannot be bought. It must be accumulated through learning and reflective thought. Unfortunately our soldiers and marines have become too busy to learn at a time when learning has never been so important to the future success of our military. World War II leaders understood the truism that students gain knowledge while teachers gain wisdom. Thus it was no accident that 31 of the Army's 35 corps commanders taught at service schools. Today many of our institutions contract out teaching to civilians because so few serving officers are available for the classroom. After Vietnam the Army sent 7,400 officers to fully funded graduate education. Today that figure is about 450, half of whom are studying to join the weapons buying community.

The Army's school system is starved for resources and is unable to make best use of the dimly limited time available to soldiers for learning. Before Vietnam some of our best universities such as Duke, Yale and Princeton had vibrant defense studies programs that gave future combat leaders the opportunity to learn from many great teachers of the art of war. For the most part those programs and teachers are gone; victims of an academic culture that somehow believes that ignoring the study of war will make wars go away.

As the Army begins to pull back from Iraq it must go back to school. Talented officers and senior non commissioned officers should be given a "soldier's sabbatical" to attend the best civilian graduate schools to study alien cultures and the art of war. More senior officers should be assigned to instructor duties at all of the Army's schools of higher learning. And both students and teachers must be rewarded professionally for their intellectual as well as their operational proficiency.

Cultural isolation in Iraq creates a tragic barrier separating Iraqis of good will from the inherent goodness that American soldiers demonstrated so effectively during previous periods of

occupation in such places as Korea, Japan and Germany. This cultural wall must be torn down. Lives depend on it. Every young soldier should receive cultural and language instruction. The purpose would not be to make every soldier a linguist but to make every soldier a diplomat in uniform equipped with just enough sensitivity training and linguistic skills to understand and converse with the indigenous citizen on the street.

The Army and Marine Corps have proven remarkably competent in the complex human skills necessary to stitch together coalitions by building, often from whole cloth, effective indigenous armies in such remote places as Greece, Korea, Vietnam, El Salvador and now in Iraq. But the unique human talents required to perform these tasks have rarely been valued or rewarded. Today's soldiers and Marines would prefer to be recognized as operators rather than advisors or trainers. This must change. If our success in coalition building will depend on the ability to create and improve partner armies then we must select, promote and put into positions of authority those can do so. We must cultivate, amplify and inculcate these skills in educational institutions reserved specifically for that purpose.

Soldiers need more time to train for combat. Years not months are required to produce a close combat soldier with the requisite skills and attributes to do the increasingly more difficult and dangerous tasks that await him in the future. At least a year together is necessary for small units to develop the collective skills necessary to coalesce and fight as teams. An infantry squad is the same size as a football, soccer or rugby team. Professional team coaches understand that blocking and tackling are not enough to win the Super Bowl. Instead a pro player must undergo a scientific regimen of physical conditioning. He does "two a days" during Summer Camp and watches the films at night. He has to fight for his position on the team because there is always the eager and hungry rookie looking to take his spot.

This is the image that we must internalize if we are to build exceptional close combat soldiers for the future. Not all need apply and very few should expect to join. Any shortcoming in performance should threaten a soldier's place on the team. Finally every manager knows that winning teams are purchased at a premium. The Air Force and Navy have more first line fighter aircraft costing between \$50 and \$450 million apiece than the Army has infantry squads. The precious few squads we have must be treated as national treasures. Soldiers in close combat units, those most likely to die for our country, must be given time to train, bond and coalesce before entering combat.

In the industrial age, junior officers were expected to lead men on the battlefield directly by touch and verbal commands. They were trained to follow instructions from their immediate commanders and to react and conform to the enemy. The image of very junior soldiers, isolated in some distant outpost, performing peacekeeping missions one moment and engaging the enemy the next reaffirms the truth that tomorrow's soldiers must acquire the skills and wisdom to lead indirectly — skills formerly reserved for officers of a much higher grade and maturity. They must be able to act alone in ambiguous and uncertain circumstances, fight with soldiers they

cannot touch, and think so as to anticipate rather than react to the enemy's action. We can make such soldiers. But it takes time.

History teaches that great combat commanders possess a unique, intuitive sense of the battlefield. They have the ability to think in time, to sense events they cannot see, to orchestrate disparate actions such that the symphony of war is played out in exquisite harmony. In the past the only sure venue for exposing the naturals was battle. Soldier's lives had to be expended to find commanders with the intuitive "right stuff." Human science offers the opportunity to find the naturals without bloodshed. We must exploit this opportunity by conducting research in cognition, problem solving, and rapid decision making in uncertain, stressful environments such as combat. Leaders must be exposed during peacetime to realistic simulations that replicate the conditions of uncertainty, fear and ambiguity that he will experience on the battlefield.

The New Army Will Be Expensive

The circumstances that created the Army's dire condition are generational. Excessive Korean War casualties convinced President Eisenhower to fight the Cold War with firepower rather than manpower. All of his successors followed suit, each devising a war-winning version of shock-and-awe built principally around airpower. These strategies would have worked splendidly except for the tiresome fact that the enemy had a vote. Ho Chi Minh got it right: "They will kill many of us," he prophesized in 1964. "We will kill a few of them but they will tire of it first." Al Qaeda is simply following Uncle Ho's philosophy, so far with success.

So, if our vulnerability is dead Americans, both empathy and strategic necessity would dictate that we spend more money to keep alive those most likely to die. This year the administration has raised the Army's share of the budget — a good first step. But the Army will need many more resources if it is to meet the demands of the Long War. I hope the painful and tragic condition of our land forces will finally convince us that land warfare is no longer the cheap alternative.