

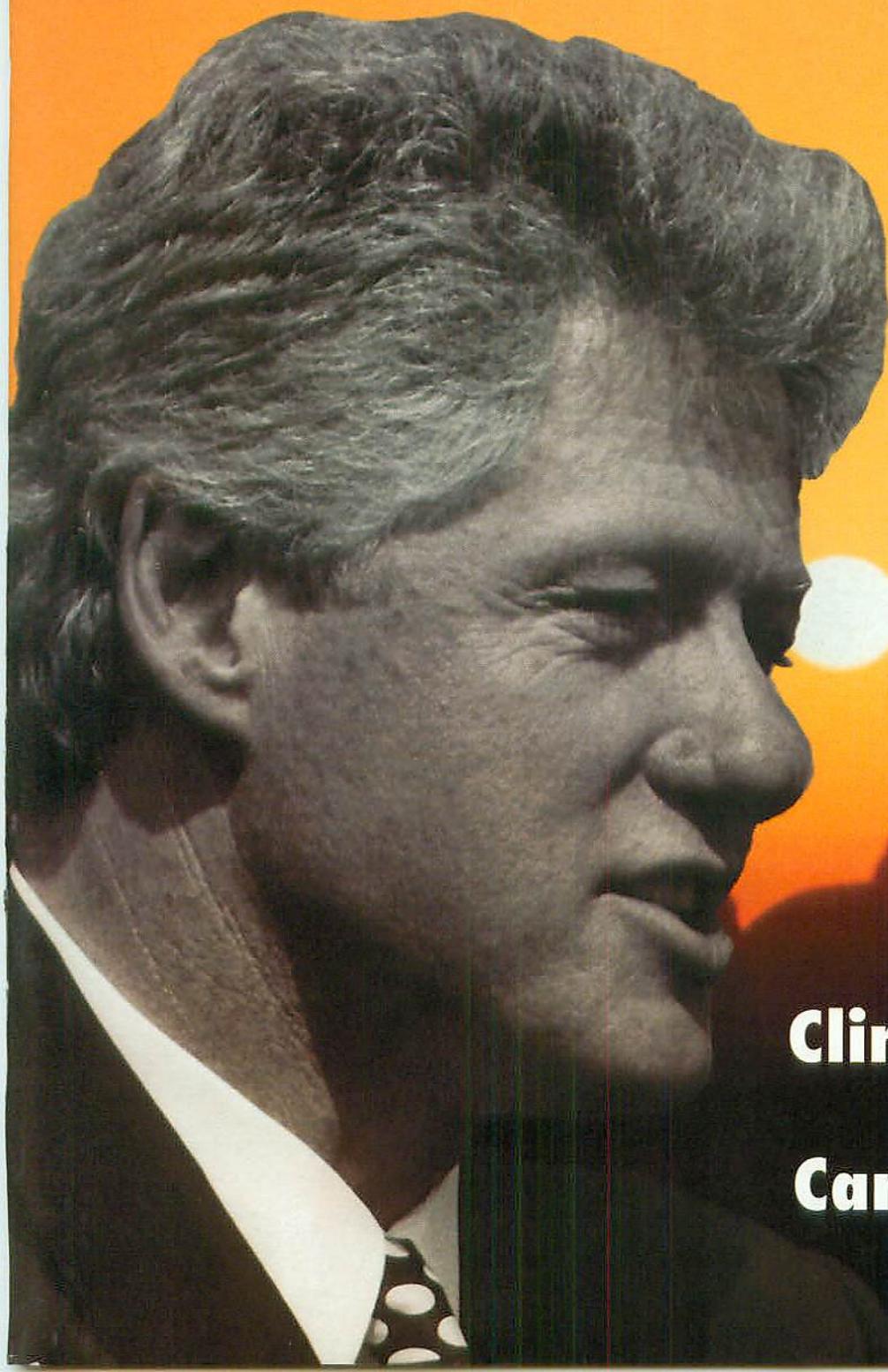
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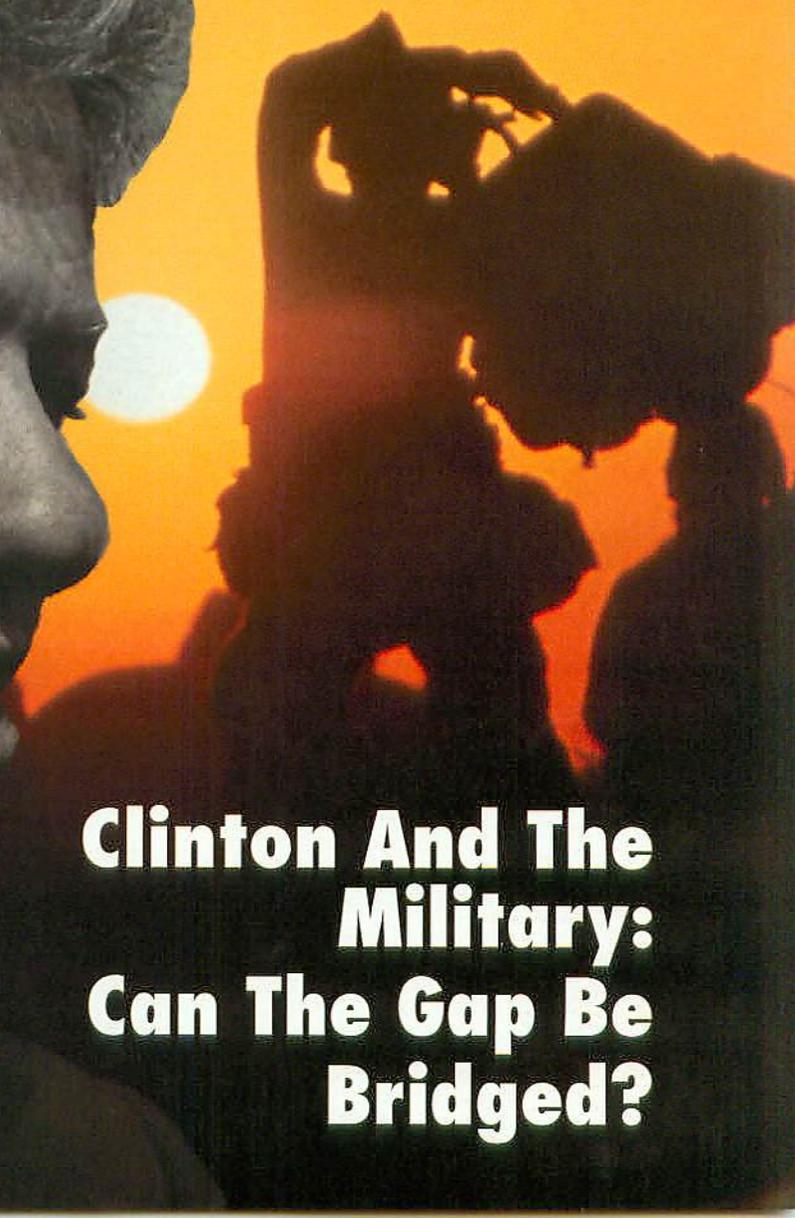
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INTERNATIONAL



**Clinton And The
Military:
Can The Gap Be
Bridged?**



MLRS: THE ARTILLERY ARSENAL.

The Army's Multiple Launch Rocket System is a complete arsenal. In less than a minute, its 3-man crew can ripple-fire 12 rockets at targets up to 32 kilometers away, showering a 30- to 60-acre area with nearly 8,000 submunitions.

Then, before the smoke clears, the MLRS launcher can move to a new location, quickly reload and launch again.

This time, however, the crew may be firing the long-range Army Tactical Missile System. Or mission-oriented warheads such as the counter-battery SADARM warhead being developed. Or a new rocket also under

development with an extended range of more than 45 kilometers. Whatever the mission demands. Plus, MLRS can easily integrate new weapon technologies as they emerge.

And MLRS is battle proven, earning the reputation as the most devastating artillery system used in Operation Desert Storm.

All of which is why the U.S. Army and Army National Guard continue to field the system. And why the U.S. Marine Corps plans to acquire it. Versatile and efficient. MLRS truly is the artillery arsenal.



LORAL
Vought Systems

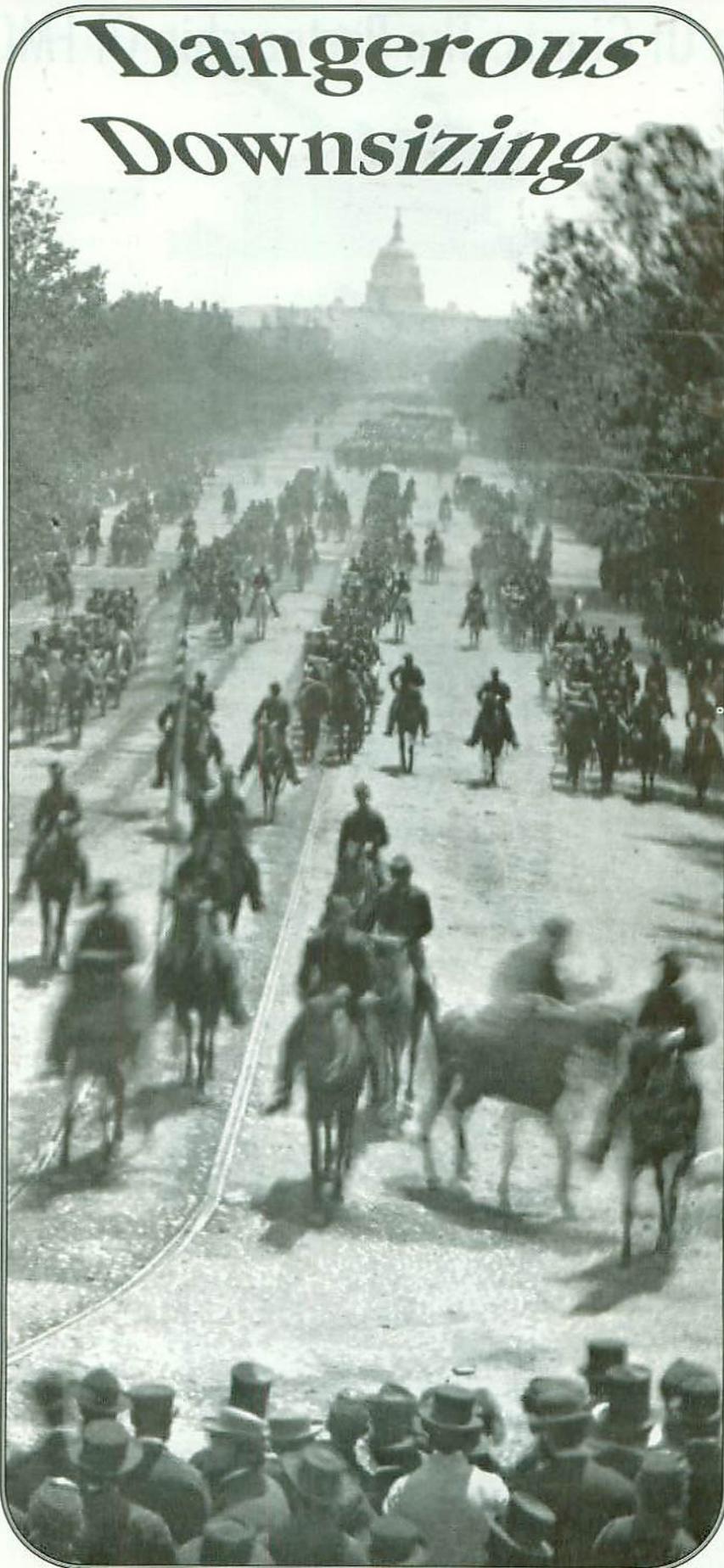
Dangerous Downsizing

Promptly at 9 a.m. on the morning of May 23, 1865, the flag on the US Capitol was raised to full standard, cannon and bugles sounded, and the Army of the Potomac marched onto Pennsylvania Avenue to begin its Grand Review. The Army that marched for the next two days was absolutely the finest fighting force of its day. It was technologically far advanced over its counterparts throughout the world.

Yet that magnificent Army of the Grand Review, though lauded by the nation and ably led, was to crumble within half a decade to a level of capability barely able to defeat the Indians in the Plains Wars to come.

The story of how that post-Civil War demise came to pass is frighteningly scary because the circumstances of those times have almost exactly been recreated today, and the initial reactions of decisionmakers seem identical to those of that disastrous era.

The first and most obvious similarity is that the threat to the United States had changed. In one case the South was vanquished and in the other the Soviet Union came apart as a military threat. In both cases no other threat of comparable dimensions existed and the standing army was deemed by Congress to be far too large to be affordable. Then as now, the country was experiencing an economic downturn and was confronted with a dramatically large and unaccustomed



national debt. In both cases the most evident place to cut expenditures was in the military.

National priorities were also shifting in 1865, with emphasis on westward expansion and its associated needs for railroads, ports, and infrastructure. Today those priorities are health care, the environment, and entitlements. On top of all this was the traditional American distrust of large, standing armies.

But the most pernicious similarity between those times and now is the existence of very real Third World threats. Those who do not want large armies ignore such threats on principle. But such threats are also too small to justify the army in existence.

Congress and the military in the 1860s were confronted with the problem of conflicting interests between the Indians and the policy of westward expansion. Today, they are confronted with Iraq and the Balkans, but tomorrow there could be any of a dozen similar reasonably small contingencies involving US national interests.

The Post-Civil War Drawdown

Good people in 1865, faced with choices similar to those today, appear to have acted in a very similar manner. The arguments then have a surprisingly familiar ring.



An Embrace Of Giants: The Partnership Of FMC And BMY

David Silverberg

Like two elephants mating, sometime before the end of this year FMC Corp., Chicago, IL, and Harsco Corp., Camp Hill, PA., will combine their defense units, creating a new corporate entity. The offspring promises to be enormous and competitive, and executives and experts are hoping that like a young bull elephant, it will trample all before it.

"If the companies truly fall together and work as one unit, they will be unbeatable," predicts Gregory Fetter, an independent analyst of the armored vehicles market for Forecast International, a market analysis firm in Newtown, CN. The companies "are very diversified, and with this merger they will be able to produce and compete more efficiently."

Under the new partnership arrangement, FMC will be the majority partner with 60 percent ownership and Harsco taking the rest. In July, the US Department of Justice ruled that the prospective partnership did not violate any antitrust rules, and the US Army has not raised any objections to it. Company spokesmen say completion of the partnership is expected sometime in the third quarter of the year. The tentative name of the new behemoth is United Defense Systems, though company spokesmen insist that no official name has been chosen yet.

The two 50-year-old companies have a lot of heritage. FMC's Defense Systems Group, in Santa Clara, CA, has produced such venerable military stalwarts as the M113 personnel carrier, 85,000 of which were exported to 44 countries since they were introduced in 1960. The company also makes the Bradley Fighting Vehicle and naval guns and has contracts to develop a new armored gun system and an advanced field artillery system. In Turkey it is co-owner of FMC Nurol, which produces a Turkish fighting vehicle.

BMY, in York, PA, developed and produced the M109 howitzer and its variants, the M88 recovery vehicle, and the M992 field artillery ammunition support vehicle, among others. A truck production plant in Marysville, OH, that produces military five-ton trucks will not be part of the new company. FMC and Harsco estimate that the consolidation will reduce costs by \$400 million to \$500 million over the next seven years by eliminating duplication and overhead. At the same time, they say, previous capabilities will be maintained.



The two have been fierce competitors. Most recently they competed to provide a follow-on batch of Paladin M109A6 self-propelled howitzers to the US Army, a contract that FMC won.

Executives expect the new partnership to be a very strong competitor internationally. Tom Pavlock, BMY's international vice president, says he expects to have far more power in the marketplace than before and sees between one and two billion dollars in business among the countries of the Persian Gulf where there is a need for armored vehicles and artillery. In Asia, Taiwan will be conducting a light tank competition and will be purchasing self-propelled howitzers. FMC, which does substantial business in Turkey, will provide an opening for BMY products as well.

The prospect of the new US competitor leaves executives from rival firms unconcerned. "We are not surprised. It is the current trend to consolidate, and we expect it will be the trend in the future," said Jacques Gentgen, executive vice president of GIAT, France's giant vehicle manufacturing company. "I do not feel that competition will be harder for us than it is now. However, Gentgen did say it will give the new company an advantage in the US Advanced Field Artillery System (AFAS) competition. But in the Middle East it is unlikely to have any new impact, he said.

South Africa has recently emerged from international isolation to become a player in the world defense market. The Denel Group, based in Pretoria, is aggressively marketing the self-propelled G-6 155-mm howitzer, which competes with FMC and BMY products. Paul Holtzhausen, Denel's director for group communications, says that currently the FMC-BMY partnership would not have a significant impact. However, he hastened to add, "We note with interest that this is a sign of the times, when these large gun manufacturers need to partner up." ■

Two of the most famous products of BMY and FMC: The M109 self-propelled howitzer made by BMY (top and bottom) and the M2 Bradley Fighting Vehicle (center three photos) made by FMC.



George A. Custer

The force structure was the subject of constant animosity among Congress, the administration, and the military. The then-commanding general, Ulysses S. Grant, wanted a base force of 80,000 men in the Army. Edwin Stanton, then-secretary of war, recognizing the political wind, cut that to 58,000. Congress, unmoved, authorized a total force of 35,000 in 1866 and by 1869 had appropriated only enough to fund 28,000 men.

Today's force structure discussions sound very similar. Moreover, things will likely get much worse before they get better. Downsizing has plateaued largely because of a reluctance to release yet more people onto an already weak economy. In 1866, most people were farmers and they could be absorbed by the land. But even here there is a similarity: the economic downturn then was in part attributed to government debt.

Bureaucratic Responses

Between 1865 and 1890, the Army Ordnance Department steadfastly viewed the major threat to the United States as the "Rising Again of the South" rather than the Indians of the West. That might have been plausible in 1866 when it was uncertain how demilitarization of the South would go and Indian attacks were only starting. However, it persisted until 1892 when it was clear the South was not going to rise and the Indians were causing "a hell of a problem."

It appears to be very difficult for military forces to readily accept a significantly revised threat when that revised threat appears to require only a small portion of the forces then enrolled. That is understandable — a smaller threat in turn threatens the continued existence of members of that force. As a result, the forces tend to focus on threats that justify a larger force size. That in turn distorts weapons development and procurement.

During the Indian wars, commanders in the field pleaded for magazine-loading, repeating rifles like the Winchester then available to civilians on the open market or to Indians on the black market. The Ordnance

The Perils Of A Hollow Army, 1876

In the late 1860s, hoping that things would get better, the US Army kept more force structure (regiments) than it could effectively man, knowing that once disbanded, their reconstitution was virtually impossible. That kind of concern continues to this day.

Bureaucracies have a similar reaction to the incremental but continual reduction of their funding. Like the Chinese water torture, they never know when it will end, so they try to hold on to everything they can.

It was true after the Civil War and the result was an undermanned and under-equipped "hollow" army. In 1876, when George Armstrong Custer left for the battle of the Little Big Horn, he rode off without 30 percent of his officers, that number being assigned to temporary duty (TDY in today's parlance). Then, as today, commanders could not get them back fast enough for battle.

Another lesser-known defeat occurred at the battle of Big Hole in 1867. Col. John Gibbon, a proven, very able Civil War commander, had six companies of the 7th Infantry Regiment with a total strength of 15 officers and 146 men — an average of 24 men per company, compared with the 75 he should have had.

A decade ago, General Edward Meyer, then chief of staff of the Army, focused attention on the problem when he coined the "hollow Army" term. He realized it was inefficient to organize for optimally efficient fighting and then not staff the organization. His Army could reduce force structure because it realized if it reduced itself it would not be cut by outside forces.

This assured "floor" to the force structure did not occur after the Civil War and, so far, has not occurred today. After the Civil War the Army held on to everything it had and then bellyached in a very familiar fashion at how inefficient its staffing was from a warfighting standpoint.

To change this situation today, further exhortation to be sensible is not the answer. Rather, a reliable and believable floor to any future cuts needs to be established and preserved. Only then can the bureaucracy effectively organize itself for efficient operation. ■



Ulysses S. Grant

Department refused, saying the Winchester did not meet operational specifications, supposedly lacking range and penetrating power. Not until 1892 — 16 years after Winchester-wielding Indians wiped out Custer at the Little Big Horn — did the infantry get something other than the single-shot, breech-loading Springfield of the Civil War.

Part of the problem, then as today, was that the Army was robbing its procurement accounts in an effort to maintain its force structure.



Edwin M. Stanton

The issues of today are: who is the enemy, what force do we need to fight that enemy, and what are the special tools we need to fight him with? If the enemy is a clearly-located, reinvigorated major power (i.e., the South) then research and development needs one set of tools. If the enemy is a yet-to-be-determined Third World contingency using unconventional warfare (i.e., Indians), then a quite different set of tools will be required.

What is important is what comes next on the acquisition agenda. One hopes that a focus can be achieved on the real needs of the contingency warfare capability that patently lie ahead.

The Real Needs Of Future Warfare
Contingency warfare requires high firepower. After the Civil War, weapons with improved firepower, like repeating rifles and the Gatling gun, were surprisingly slow in reaching the Army inventory. It may be that it is just very difficult to encourage developments that diminish the role of influential force structure elements, for example, the cavalry.



Doomed to Repeat?

Can the cycles of history be broken? Some remarkable things have happened to the US Army on its road to downsizing. Some of these things are very good and some are not so good at all.

Bureaucratically, the post-Civil War mold may have been broken by several highly creative steps taken by General Gordon Sullivan, chief of staff of the Army. New technologies, aimed not at the past but at the future, appear to be emerging from his Battle Labs initiatives. New concepts for the structure of the Army and its use in contingency deployment will emerge from the Louisiana Maneuvers scheduled for 1994 and from the Bottom-Up Review.

The US Army has also made simulation capabilities a major focus. A major acquisition emphasis on continuous modernization of forces is now occurring through the Army's commitment to "horizontal insertion" of new technology.

But the key issue remains assuring stability in the size of the force. If the force levels proposed in the current Bottom-Up Review remain stable and are not immediately changed by Congress, the military will be able to plan its force structure secure in the knowledge that it will not face further cuts. If, however, force levels become uncertain or unstable, the bureaucratic response will be the same, the forces will hollow out, and the United States could face another post-Civil War disaster.

Addicted to mobility: The need for firepower was sacrificed to the prestige of the cavalry. Above, a cavalry troop returns from the December, 1890 battle of Wounded Knee.

(Photo courtesy of National Archives.)

Ever since the Army could afford horses, it has emphasized mobility over firepower. This was certainly true of the plains fighting, perhaps because of the role of the cavalry during the Civil War and the prestige of generals like Philip Sheridan and George Custer. However, if your Army is addicted to mobility, then logistic support will determine its usefulness. But this was not realized after the Civil War.

Col. W.B. Hazen, commander of the 6th Infantry Company, complained that "after the fourth day of march of a mixed command, the horse does not march faster than the foot soldier and after the seventh day the foot soldier begins to outmarch the horse and from that time forward the foot soldier has to end his march earlier each day in order to allow the cavalry to reach camp the same day at all."

Gen. R. A. Mackenzie, in charge of chasing Apaches in Arizona, complained to Washington, D.C., that long, Civil War-type wagon trains delayed the ground columns chasing Indians. He asked for mules but was refused by Washington, which told him that the idea had been tried before. Mule trains did not work, he was told, because the mules wore out and their packing did not stay together.

One way or another, Mackenzie got some mules and civilian handlers who knew what they were doing and used them extensively in his next campaign. One of Geronimo's leading chiefs, following his capture, admitted that the Army started being victorious only after it started using mules and became more mobile.

The enduring issue is that in the deserts of the American West or Saddam's Middle East, forage is unavailable to either horses or tanks and getting fuel to the mobility force continues to be crucial. Appropriate research and development priority must be given to the non-glamorous, non-shooting transportation corps. Where, in the scheme of things, does additional heavy rotary wing airlift fit in the current DoD scheme of things? As yet, it doesn't.

The other enduring issue is how to properly assess what is really important to success in the situations one expects to fight and to be sure these get first priority. That proved hard to do after the Civil War and have so far not yet been given proper attention in our own post-Cold War times.

Implications for the Industrial Base

Third World forces need not be poorly armed as long as they have either money, or items to barter (buffalo skins or oil), or political friends. The plains Indians had no industrial base but managed to arm themselves adequately and make their wars costly.

The ability of potential enemies to purchase contemporary arms may dominate US willingness to engage in future contingency wars unless we ourselves focus on how to defeat, with low casualties, enemies with capabilities matching those we brought to the Gulf.

However, contingency warfare is bad for industry and worse for the research and development community. It has never provided enough stability to make it a reasonable investment. Old stocks are used up before new procurement. One example of this after the Civil War was the extensive use of blue flannel shirts and wool long-johns in the heat of the American West. Not until the mid-1880s were special summer uniforms issued.

We will probably see the same thing again. The same pressures that existed from 1865 to 1875 will exist from 1994 to 2004. When one gets right down

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to it, it is hard to prove, given the threats that exist, that we need more airplanes or better ones, more tanks or better ones, more submarines or better ones.

Were one to predict the future of the industrial base from the past, one would be driven to believe that much of it, at least at the military-unique prime contractor level, will most probably go away. If the Civil War parallel is followed, we will be left with subcontractors who make a living selling to commercial markets and only occasionally to the military. The United States will again, as it has between all of its major wars, revert to an arsenal system where the technologies of warfare are guarded and improved by the state, using direct commercial suppliers. ■